



**- CENTROCOT -**

**CENTRO TESSILE COTONIERO E  
ABBIGLIAMENTO S.p.A.**

**LABORATORY TESTS AND SERVICES  
CATALOGUE**

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## THE LABORATORY

Laboratory is the biggest area of Centro Tessile Cotoniero e Abbigliamento S.p.A. and the fulcrum of all technical activities of service and research.

The laboratory is registered on the Album of the highly qualified External Public and Private Laboratories, Law n.46 of 1982, and is authorized to carry out research on behalf of small and medium enterprises.

As a consequence of the high diversification of textile and clothing sector in Italy, test services which were initially the classic technological chemical and dyeing tests, have now been enlarged also to more technical and specialistic sectors. After ecological and protection sector also the Microbiological Textile Laboratory, the Comfort Laboratory, the Laboratory for evaluation of chemical risk, of protection against electromagnetic waves and for measurement of static electricity have been created.



The laboratory is accredited by ACCREDIA, the National Body of Accreditation of Test Laboratories, (registration number 0033). The accreditation certifies the technical skill of the staff, the use of adequate equipment, the impartiality of laboratory operators and of technical remarks issued by laboratory.



On 01st December 2011, Centrocot laboratory obtained accreditation as LAT Calibration Center (nr 226) for measurement of 'spectral reflectance factor' by ACCREDIA (Italian Accreditation Body) - Calibration Laboratories Department. Centrocot is thus authorized to issue LAT Calibration Certificates on spectrophotometers and reference materials for colorimetry.



Thank to one of the most advanced laboratory and to the skill reached in this sector, Centrocot has been notified EEC n.0624 to issue EU Type certificates according to Regulation (EU) 2016/425 abrogating the directive 89/686/EEC for protection garments and gloves against different kind of risk.



Centrocot, as a member of the OEKO-TEX® Association, is the only institute in Italy authorized to issue the STANDARD 100 by OEKO-TEX® certificate; the certificate guarantees that the product doesn't contain human harmful substances.



Centrocot, as a member of the OEKO-TEX® Association, is the only institute in Italy authorized to issue the LEATHER STANDARD by OEKO-TEX® certificate; the certificate guarantees that the leather product doesn't contain human harmful substances.



Centrocot, as a member of the OEKO-TEX® Association, is the only institute in Italy authorized to issue the ECO PASSPORT by OEKO-TEX® certificate; the certificate guarantees that chemical can be used in a sustainable textile production because it doesn't introduce in the process human and environmental harmful substances. The chemical ECO PASSPORT by OEKO-TEX® certified indeed is tested and doesn't contain harmful substances itself.



The laboratory has obtained ministerial qualification to carry out the necessary tests to obtain the Ecolabel, the ecological product label of European Union that in Italy is issued by Ecolabel and Ecoaudit Committee.



Centrocot is Member of the International Testing Association for Applied UV Protection and is the only institute in Italy authorized to issue the label UV Standard 801 which certifies the level of UV protection offered by a fabric.



Centrocot issues the Bioeffective label which indicates the capacity of a textile product to inhibit bacterial growth and to maintain in the time this efficacy estimating at the same time the innocuity for man.

## REGULATIONS

The samples and the materials to be submitted to test have to be accompanied by a written request; non-written orders are not accepted; tests can be carried out only upon agreement with the Customer.

In order to simplify the request, the Customer can make use of the 'ORDER FORM', duly filled in and signed; on the order form the Customer can select whether he prefers to receive the offer or not. However, Centrocot is entitled to send the offer even if it is not required.

Instead of using the ORDER FORM, the Customer can apply to the Secretarial Staff who will inform him about the applicable contractual procedures which better comply with the request.

With regard to analysis of defect, accredited and not-accredited calibrations, voluntary certification and CE certification of Type, the contractual management always provides that the offer is drawn up and accepted.

It is Customer's responsibility to provide all the necessary information for the correct supply of the service: particular attention must be paid to the correct identification of the sample (fiber composition, item code, design code, variation code etc..).

Centrocot laboratory does not submit unchecked test results to the customer.

In case the customer needs to have a result's preview of finished tests, representing only a part of foreseen tests and, due to contractual clauses he cannot split results on different Test Reports, Centrocot can exceptionally issue Partial Test Reports including validated results of finished tests and "test in progress" by uncompleted tests. Once all tests are finished the complete Test Report will be issued, this will have the same identification number of the Partial Test Report, new data and will contain the sentence "completion of Partial Test Report with same number issued on ...".

Centrocot commits to examine the complaints that may occur, to verify them and provide a clear and exhaustive written reply within and not over three month since the receiving of the complaint.

Upon request, it is possible to perform tests not included in the Catalogue according to national and international regulations, methods developed by the Laboratory or upon Customer's indication. The costs of these extra services are defined on the basis of specific offer.

The Test Reports cannot be partly reproduced without the written authorization of Centro Tessile Cotoniero e Abbigliamento S.p.A..

The Test Report refers only to the analysed samples and are exclusively property of the Customer.

Customer is aware that Centro Tessile Cotoniero e Abbigliamento S.p.A. is not responsible for the possible misuse by Customer of the results of the supplied service.

The copies of the Test Reports and the relevant registration documents are kept for 4 years with the exception of those Test Reports containing results used for the EC-Type Examination Certification that are kept together with the registration documents for 10 years. The copies of the EC-Type Examination Certificates and of the LAT Calibration Certificates along with the connected registration documents are kept for 10 years.

The residues of the tested samples will be destroyed at the issue of the final Test Report; with exception of Personal Protective Equipment and Biological tested samples that will be kept for one month. The Customer has the possibility to receive the residues of the tested samples back only by filling the appropriate section of the Test request form or of the Quotation, or through written request. In any case, samples will be destroyed after 8 days from date of issue of the Test Report or after 20 days in case samples are not collected by the Customer.

The Laboratory is accredited by ACCREDIA (accreditation number 0033). The not accredited Tests are indicated by symbol \* in the Catalogue of Services and Tests.

Customers can consult the list of the accredited tests and download the ACCREDIA Accreditation Certificate directly from the website [www.centrocot.it](http://www.centrocot.it) by clicking on ACCREDIA mark.

The accreditation states the technical qualification of the personnel, the use of proper equipments, the impartiality of the personnel entrusted with testing and, in wider terms, the accordance of the organization with the operational and technical requirements as provided in UNI CEI EN ISO/IEC 17025.

The agreements of mutual recognition and/or reciprocity taken by Accredia with similar bodies of other Countries assure the international recognition of the test results provided by accredited laboratories.

## CONFIDENTIALITY

All information that will be brought to our knowledge for the development of the assignment will be treated as confidential and therefore Centro Tessile Cotoniero e Abbigliamento S.p.A. commits to maintain this confidence and not to disclose any information to third parties without Your prior consent and not to use materials or documentation received by You if not for the specific purposes of the assignment.



## **TERMS OF SALE**

### **INVOICING**

Payment of test and services is due through bank transfer 30 days from invoice date end of month. Customer requesting Centrocot's services for the first time must submit their company data and bank references filling the form that can be downloaded from the website [www.centrocot.it](http://www.centrocot.it).

Foreign Customers shall be requested to pay in advance for the performance of Centrocot tests and services.

If any default of payment for invoices previously issued should occur, Centrocot is authorized to suspend all activities till the complete settlement of payments.

### **SUBSCRIPTIONS**

Upon request, Customer has the opportunity to subscribe subscriptions at special rates.

### **APPLICABLE LAW AND JURISDICTION**

Services are subject to Italian law. For any dispute that might arise in regard to the present Agreement, the court of Busto Arsizio shall have exclusive jurisdiction with exclusion of all other alternative or competing courts.



## GENERAL COSTS

| Code  | Description  | Methods |
|-------|--|---------|
| 10140 | Interpretation of results  |         |
| 10150 | Analyst rate   |         |
| 10960 | Technician rate  |         |
| 10160 | Technical remarks  |         |
| 13105 | Ecological technical remarks   |         |
| 10400 | Translation of technical reports and technical remarks into English, French or Chinese |         |
| 10990 | Proficiency Test   |         |
| 10991 | Proficiency Test - Additional equipment  |         |
| 99991 | Reprint of test report   |         |
| 10970 | Travel rate  |         |
| 10980 | Repayment per kilometer (over 30 km from seat)   |         |

## PHYSICAL-MECHANICAL TESTS

### General

| Code    | Description  | Methods                     |
|---------|--|-----------------------------|
| * 10155 | Visual evaluation  |                             |
| * 10151 | Check of the sample and preliminary analysis               |                             |
| * 14000 | Ready-made garments: check of aspect and exterior features |                             |
| * 10153 | Grain check  | Method supplied by customer |
| * 10161 | Summary table of analytical data                           |                             |

### Fibres

| Code    | Description  | Methods  |
|---------|--|--|
| * 13129 | Fibres. Measure of length by of single fibre                                 | ISO 6989:1981 only method A (with a ruler on polished glass plate) |
| * 12130 | Fibres. Measure of single fibres   | UNI 5751:1990 (except paragraphs 4.2 and 7.2)                      |
| * 12131 | Fibres.Length of fibre tuft  | MIP 003:2008 Rev.1   |
| 12140   | Fibres. Linear density. Gravimetric method                                   | UNI EN ISO 1973:1998 (except paragraphs 4.2, 5.2, 8.2 e 10.3)      |
| * 12134 | Fibres man-made. Crimp frequency   | ASTM D 3937-12 (2018) only option 1 (method on single fiber)       |
| * 12149 | Fibres. Linear density (yarn count). Gravimetric method                      | ASTM D 1577-07 (2018) only option A (fiber bundle weighing)        |
| 12150   | Fibres. Length and length distribution of cotton fibres (Comb sorter method) | UNI 10170:1994   |
| * 12180 | Cotton fibres. Micronaire (5 readings)                                       | ASTM D 1448-11   |
| * 12220 | Cotton fibres. Measurement with HVI Spinlab instruments                      | ASTM D 5867-12   |
| * 12222 | Fibres. Number of neps   | ASTM D 5866-12   |
| * 12245 | Cotton fibres. Impurity content.Trash Analyser                               | MIP 025:2008 Rev.1   |
| * 12250 | Fibres. Retraction in water  | ASTM D 2102-02 (2018)  |
| * 12170 | Textiles. Commercial mass  | UNI 9213-4:1990<br>UNI 9213-6:1991                                 |
| * 12171 | Textiles. Commercial Mass  | UNI 9213-3:1989  |

### Threads and yarns

#### General

| Code    | Description   | Methods                                       |
|---------|---|---|
| * 13121 | Threads and yarns. Length and weight of yarn winded on a cone                             | MIP 020:2008 Rev.1                            |
| * 13400 | Threads and yarns. Preparation of tubolar knitted fabric                                  | MIP 015:2008 Rev.1                            |
| 13300   | Fibres. Length and length distribution of cotton fibres (Comb sorter method)              | UNI 10170:1994                                |
| * 13182 | Threads. Entanglement degree. Manual Method   | ASTM D 4724-11 Met. 2                         |
| * 13181 | Texturized thread. Crimping degree  | BISFA 2007 Textured Filament Yarns<br>Cap. 10 |
| * 13290 | Threads and yarns. Coefficient of friction  | ASTM D 3108/D3108M-13                         |
| * 13291 | Threads and yarns. Coefficient of friction  | MIP 024:2008 Rev.1                            |
| * 13130 | Threads. Number of filaments  | MIP 002:2008 Rev.1                            |
| * 13391 | Yarns. Type of spinning   | MIP 011:2008 Rev.1                            |
| * 13310 | Yarns. Appearance. Black table  | ASTM D 2255/D 2255M-09 (2013)                 |
| * 13320 | Yarns. Unevenness of textile strands using capacitance testing equipment (Uster Tester 3) | ASTM D 1425/D1425M-14                         |
| * 13330 | Yarns.Determination of defects. (Classimat)   | MIP 001:2003 Rev.0                            |
| * 13390 | Yarns. Search of knots, breaking points, slubbing   | MIP 018:2008 Rev.1                            |

|         |  |   |
|---------|--|---|
| * 41920 | Yarn score card. Destination to weaving of single or twisted yarns (mass per unit length, tensile strength, single or twisted yarn torsion, unevenness, black table, Classimat, summary table)   | See tests on yarns and Centrocot Yarns Standard<br>Vol. 2° Ortogonali – 1989<br>Vol. 4° Ortogonali ritorti - 1990 |
| * 41921 | Yarn score card. Destination to knitting of single or twisted yarns (mass per unit length, tensile strength, single or twisted yarn torsion, unevenness, black table, coefficient of friction, twist stability/crimping, Classimat, summary table) | See tests on yarns and Centrocot Yarns Standard<br>Vol. 1° Maglieria – 1989<br>Vol. 3° Maglieria ritorti – 1990   |

## Threads and yarns

### Linear density (mass per unit length)

| Code    | Description  | Methods   |
|---------|--|---|
| 13120   | Threads and yarns. Linear density (yarn count)             | UNI EN ISO 2060:1997 only option 1 (test in normal atmosphere)            |
| * 13117 | Threads and yarns. Linear density (yarn count)             | ASTM D 1907-07/D1907M-12 (2018) only option 1 (test in normal atmosphere) |
| * 13119 | Texturized yarns. Linear density (yarn count)              | BISFA 2007 Textured Filament Yarns Cap. 7                                 |
| * 13122 | Elastomeric threads and yarns. Linear density (yarn count) | BISFA 2015 Bare Elastan Cap. 5  |
| * 13118 | Glass fibre threads. Linear density (yarn count)           | BISFA 1977 Textile Glass Filament Yarns Cap.F                             |
| * 13126 | Reinforcement yarns. Linear density                        | ISO 1889:2009 (except Par. 5.2 and 8.3)                                   |

## Threads and yarns

### Tensile strenght

| Code    | Description   | Methods  |
|---------|---|--|
| 13180   | Threads and yarns. Yarns from packages. Tensile strenght and elongation                     | UNI EN ISO 2062:2010 (except methods C and D)          |
| * 13183 | Elastomeric threads and yarns. Tensile strength and elongation                              | BISFA 2015 Bare Elastan Cap. 6                         |
| * 13179 | Glass fibre threads. Tensile strength   | BISFA 1977 Textile Glass Filament Yarns Cap.G          |
| * 13178 | Textile glass filament threads for the reinforcement of plastic materials. Tensile strength | UNI 9411:1989  |
| * 13125 | Textured threads. Tensile strength  | BISFA 2007 Textured Filament Yarns Cap. 8              |
| * 13177 | Carbon fibre. Tensile properties of resin-impregnated yarn                                  | UNI EN ISO 10618:2005 (except Par. 7.3, 10.2 and 10.3) |

## Threads and yarns

### Twist

| Code    | Description   | Methods                                       |
|---------|---|---|
| * 13140 | Textiles. Twist in single yarns                                       | UNI 9069:1988                                 |
| 13141   | Textiles. Twist in single yarns                                       | ISO 17202:2002                                |
| * 13146 | Threads and Yarns Twist. Indirect method for single threads and yarns | ASTM D 1422/D1422M-13                         |
| 13142   | Textiles. Threads and Yarns Twist. Direct method                      | UNI EN ISO 2061:2015                          |
| * 13147 | Threads and Yarns. Twist. Direct method                               | ASTM D1423/D1423M-16                          |
| * 13143 | Texturized yarns. Twist   | BISFA 2007 Textured Filament Yarns Cap. 5     |
| * 13144 | Glass fibre threads. Twist  | BISFA 1977 Textile Glass Filament Yarns Cap.E |



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\* 13380      Yarns.Twist stability/crimping      MIP 004:2008 Rev.1

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## **Threads and yarns**

### **Commercial Mass**

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| <b>Code</b> | <b>Description</b>        | <b>Methods</b>                     |
|-------------|---------------------------|------------------------------------|
| * 13280     | Textiles. Commercial mass | UNI 9213-4:1990<br>UNI 9213-6:1991 |
| * 13283     | Textiles. Commercial mass | UNI 9213-3:1989                    |

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# FABRICS AND READY-MADE GARMENTS – CONSTRUCTION TESTS

## Dimensions and weights

| Code    | Description  | Methods  |
|---------|--|--|
| * 14107 | Ready-made garments. Measurements and weight                   | MIP 019:2008 Rev.1   |
| 14114   | Fabrics. Thickness   | UNI EN ISO 5084:1998 (except points A1 and A2 of appendix) |
| 14104   | Fabrics. Width of fabrics                                      | ASTM D 3774-2018   |
| 14101   | Fabrics. Width of fabrics                                      | ISO 22198:2006 Par. 8.3                                    |
| 14115   | Fabrics. Width of fabrics                                      | UNI EN 1773:1998 Par. 8.3                                  |
| 14102   | Fabrics. Length of fabrics                                     | ISO 22198:2006 Par. 8.2                                    |
| 14118   | Fabrics. Length of fabrics                                     | UNI EN 1773:1998 Par. 8.2                                  |
| 14111   | Fabrics. Mass per unit area and mass per unit length           | UNI 5114:1982  |
| 14123   | Fabrics. Mass per unit area. Small sample method               | UNI EN 12127:1999  |
| 14125   | Fabrics. Mass per unit area and mass per unit length           | ISO 3801:1977<br>ASTM D3776/D3776-09a (2017)               |
| * 14128 | Textile glass. Mass per unit area                              | ISO 3374:2000  |
| * 14609 | Padding. Mass per unit area                                    | UNI 9907:1991  |
| * 14099 | Reinforcement products. Woven fabrics. Determination of width  | ISO 5025:2017 Par. 7.2                                     |
| * 14100 | Reinforcement products. Woven fabrics. Determination of length | ISO 5025:2017 Par. 7.3                                     |

## Interlacings and wavese

| Code  | Description                  | Methods                               |
|-------|------------------------------|---------------------------------------|
| 14112 | Woven fabrics. Basic weaves  | ISO 3572:1976<br>UNI 8099:1980        |
| 14119 | Woven fabrics. Basic weaves  | ISO 7211-1:1984                       |
| 14117 | Knitted fabrics. Interlacing | ISO 8388:1998<br>UNI EN ISO 4921:2005 |

## Linear Density (yarn count) and crimp

| Code    | Description  | Methods   |
|---------|--|---|
| 14110   | Woven fabrics. Linear density (yarn count)                   | UNI 9275:1988   |
| 14105   | Woven fabrics. Linear density (yarn count)                   | ISO 7211-5:1984   |
| 14109   | Knitted fabrics. Linear density (yarn count)                 | BS 5441:1988 Par. from 1 to 5 and Par. 11 or 15<br>UNI EN 14970:2006 Met. B |
| 14702   | Knitted fabrics. Absorbed yarn length (LFA)                  | UNI EN 14970:2006 Met. A<br>BS 5441:1988 Par. from 1 to 5, 9+10             |
| 14116   | Woven fabrics. Crimp   | UNI 9276:1988   |
| 14135   | Woven fabrics. Crimp   | ISO 7211-3:1984   |
| * 14136 | Texturized yarn. Linear density (yarn count)                 | BISFA 2007 Textured Filament Yarns Cap. 7                                   |
| * 14137 | Fabrics. Linear density (yarn count) of a glass fibre thread | BISFA 1977 Textile Glass Filament Yarns Cap.F                               |
| * 14124 | Elastomeric threads and yarns. Linear density (yarn count)   | BISFA 2015 Bare Elastan Cap. 5  |

## Twist of yarns from fabrics

| Code    | Description                     | Methods        |
|---------|---------------------------------|----------------|
| * 14120 | Textiles. Twist in single yarns | UNI 9069:1988  |
| 14103   | Textiles. Twist in single yarns | ISO 17202:2002 |



|         |   |  |
|---------|---|--|
| * 14143 | Textiles. Twist. Indirect method for single threads and yarns | ASTM D 1422/D1422M-13                            |
| 14121   | Textiles. Threads and Yarns Twist. Direct method              | UNI EN ISO 2061:2015                             |
| * 14144 | Fabrics. Thread twist. Direct method                          | ASTM D1423/D1423M-16                             |
| * 14141 | Textiles. Twist in yarn removed from fabric                   | ISO 7211-4:1984                                  |
| * 14142 | Texturized yarns. Twist                                       | BISFA 2007 Textured Filament Yarns<br>Cap. 5     |
| * 14145 | Fabrics. Glass fibre thread twist                             | BISFA 1977 Textile Glass Filament Yarns<br>Cap.E |

## Density per cm

| Code    | Description   | Methods  |
|---------|---|--|
| * 14122 | Fabrics. Number of threads per unit length - Micrometric measurements | MIP 022:2008 Rev.1   |
| 14108   | Knitted fabrics. Numer of wales and courses per unit of length        | UNI EN 14971:2006<br>BS 5441:1988 Par. da 1 a 5, Par. 8 o 13 |
| 14113   | Woven fabrics. Number of threads per unit length                      | UNI EN 1049-2:1996   |
| 14127   | Woven fabrics. Number of threads per unit length                      | ISO 7211-2:1984  |
| * 14138 | Woven fabrics. Number of threads per unit length                      | ASTM D 3775-17   |

# FABRICS AND READY-MADE GARMENTS – PERFORMANCE TESTS

## General

| Code    | Description  | Methods   |
|---------|--|---|
| * 14480 | Fabrics. Recovery from creasing  | UNI EN 22313:1993                                 |
| * 14146 | Fabrics. Recovery from creasing  | ISO 2313:1972                                     |
| * 14720 | Fabrics. Printing of the cloth surface                                   | MIP 031:2008 Rev.1                                |
| * 14335 | Fabrics, Nonwoven fabrics. Flexural rigidity. Bending length test        | UNI 10138:1992 only method 5.1 (manual equipment) |
| * 14271 | Knitted fabrics. Index of damage by needle penetration in existing seams | MIP 036:2008 Rev.1                                |
| * 14272 | Knitted fabrics. Damage by needle penetration in seams                   | MIP 036:2008 Rev.1                                |
| * 14273 | Woven fabrics. Damage by needle penetration in seams                     | MIP 036:2008 Rev.1                                |
| * 14274 | Woven fabrics. Index of damage by needle penetration in existing seams   | MIP 036:2008 Rev.1                                |
| * 14098 | Textile glass. Woven Fabric. Thickness                                   | ISO 4603:1993 + Amd 1-2010 (only pressure 2 kPa)  |

## Tensile strenght

| Code    | Description  | Methods                                 |
|---------|--|---|
| 14220   | Fabrics. Tensile strenght and elongation. Strip method | UNI EN ISO 13934-1:2013                 |
| * 14217 | Fabrics. Tensile strenght and elongation. Strip method | ASTM D 5035-11 (2019)                   |
| * 14234 | Textiles, Accessories. Tensile strength test           | Method required by customer             |
| 14230   | Fabrics. Tensile strenght. Grab method                 | UNI EN ISO 13934-2:2014                 |
| 14231   | Fabrics. Tensile strenght. Grab method                 | ASTM D 5034-09 (2017) (except Par. 9.3) |
| 14266   | Fabrics. Seam tensile strength. Strip method           | UNI EN ISO 13935-1:2014                 |
| 14267   | Textiles. Seam tensile properties. Grab method         | UNI EN ISO 13935-2:2014                 |

## Tensile strenght of yarns from fabrics

| Code    | Description  | Methods                                       |
|---------|--|---|
| 14130   | Threads and yarns. Yarns from packages. Tensile strenght and elongation                    | UNI EN ISO 2062:2010 (except methods C and D) |
| * 14139 | Textured yarns. Tensile strength and elongation  | BISFA 2007 Textured Filament Yarns Cap. 8     |
| * 14131 | Elastomeric threads and yarns. Tensile strength and elongation                             | BISFA 2015 Bare Elastan Cap. 6                |
| * 14147 | Glass fibre threads. Tensile strenght and elongation                                       | BISFA 1977 Textile Glass Filament Yarns Cap.G |
| * 14148 | Terry fabrics. Test method for the determination of the resistance to pile loop extraction | UNI EN 15598:2008                             |

## Tearing strenght

| Code    | Description                                     | Methods  |
|---------|---|--|
| 14240   | Fabrics. Tearing strength. Tear specimen        | UNI EN ISO 13937-2:2002 + EC 1 - 2004<br>ASTM D 2261-13 (2017) |
| 14241   | Fabrics. Tearing strenght. Nail method          | UNI 7275:1974  |
| 14242   | Fabrics. Tearing strenght. Elmendorf method     | UNI EN ISO 13937-1:2002 + EC 1- 2004                           |
| 14243   | Fabrics. Tearing strenght. Double-teared method | UNI EN ISO 13937-4:2002 + EC 1 - 2004                          |
| 14245   | Fabrics. Tearing strenght. Elmendorf method     | ASTM D 1424-09 (2013)  |
| 14252   | Fabrics. Tearing strenght. Wing-shaped method   | UNI EN ISO 13937-3:2002 + EC 1 - 2004                          |
| * 14238 | Fabrics. Tearing strenght. Trapezoid method     | ASTM D5587-15  |
| * 14239 | Fabrics. Tearing strenght. Nail method          | UNE 40413:2002   |

## Seam and Stretch

| Code    | Description  | Methods   |
|---------|--|---|
| 14264   | Textiles. Slippage resistance of yarns at a seam in woven fabrics. Fixed seam opening method | UNI EN ISO 13936-1:2004 + EC 1 - 2006               |
| 14268   | Textiles. Slippage resistance of yarns at a seam. Fixed load method                          | UNI EN ISO 13936-2:2004                             |
| * 14269 | Fabrics. Slippage resistance of fabric yarns in seams. Fixed seam opening method             | Method supplied by customer                         |
| * 14270 | Textiles. Slippage resistance of yarns at a seam in woven fabrics. Fixed seam opening method | ASTM D 1683/D1683M-17                               |
| * 14289 | Fabrics. Slippage resistance of fabric yarns in seams  | TEFO METHOD 55-82:1982                              |
| 14226   | Fabrics. Stretch   | UNI EN 14704-1:2005                                 |
| * 14235 | Fabrics. Stretch   | ASTM D 2594-04 (2016)                               |
| * 14236 | Fabrics. Stretch   | ASTM D 3107-07 (2015) except points 10.5 and 11.1.4 |
| * 14237 | Fabrics. Stretch   | ASTM D 6614-07 (2015)                               |
| * 14244 | Fabrics. Stretch   | ASTM D 4964-12 (2016)                               |
| * 14225 | Fabrics. Stretch   | Method supplied by customer                         |

### Permeability and perforation

| Code    | Description   | Methods  |
|---------|---|--|
| 14320   | Textiles. Permeability to air   | UNI EN ISO 9237:1997 (test areas 5 and 20 cm <sup>2</sup> )    |
| * 14319 | Textiles. Permeability to air   | GOST 12088-77  |
| 14321   | Textiles. Permeability to air   | ASTM D 737-18  |
| * 14322 | Fabrics coated with rubber or plastic. Gas permeability                           | NF G 37-114:2011   |
| 14330   | Fabrics. Test of resistance to water penetration. Increasing hydrostatic pressure | UNI EN ISO 811:2018  |
| 14331   | Fabrics. Test of resistance to water penetration. Increasing hydrostatic pressure | ISO 811:2018   |
| * 14334 | Coated fabrics. Hydrostatic resistance  | ASTM D 751-19 Procedure B                                      |
| * 14336 | Fabrics. Test of resistance to water penetration. Increasing hydrostatic pressure | AATCC 127-2018 option 2  |
| * 14337 | Fabrics. Test of resistance to water penetration. Increasing hydrostatic pressure | JIS L 1092:2009 Method A                                       |
| 14340   | Textiles. Test of resistance to water penetration. Constant pressure test         | UNI 5123:1987  |
| 14300   | Fabrics. Perforation. Ball method (Persoz)  | UNI 5421:1983  |
| 14290   | Fabrics, Nonwoven fabrics. Bursting strength. Pneumatic method                    | UNI EN ISO 13938-2:2001 + EC 1-2004                            |
| * 14291 | Fabrics. Bursting strength. Hydraulic method                                      | UNI EN ISO 13938-1:2001 except point 6.1.3 and 8.5 + EC 1-2004 |
| * 14292 | Fabrics, Nonwoven fabrics. Bursting strength                                      | ASTM D3786/D3786M-18   |

### Spirality and bow and skew

| Code    | Description                                   | Methods                       |
|---------|---|-------------------------------|
| * 14126 | Fabrics. Spirality                            | ASTM D 3882-08 (2016)         |
| * 14709 | Fabrics. Spirality                            | BSI 2819:1990                 |
| * 14133 | Fabrics. Spirality                            | ISO 16322-2:2005 + Cor.1:2007 |
| * 14106 | Garments. Spirality change of knitted fabrics | ISO 16322-1:2005              |
| * 14134 | Garments. Spirality of garments               | ISO 16322-3:2005 + Cor.1:2007 |
| * 14711 | Woven fabrics. Skew and bow                   | UNI EN ISO 13015:2013         |

### Abrasion and pilling

| Code  | Description                    | Methods   |
|-------|--------------------------------|---|
| 14310 | Fabrics. Abrasion (Martindale) | UNI EN ISO 12947-1:2000 + EC 1-2010 + UNI EN ISO 12947-2:2017                         |
| 14315 | Fabrics. Abrasion (Martindale) | UNI EN ISO 12947-1:2000 + EC 1-2010 + UNI EN ISO 12947-4:2000 + EC 1-2010 + EC 2-2010 |

|         |  |  |
|---------|--|--|
| * 14313 | Fabrics. Abrasion (Martindale)                                     | UNI EN ISO 12947-1:2000 + EC 1-2010 +<br>UNI EN ISO 12947-3:2000 + EC 1-2010 |
| 14318   | Hosiery. Abrasion (Martindale)                                     | UNI EN 13770:2003  |
| * 14311 | Fabrics. Abrasion (Martindale)                                     | ASTM D 4966-12 (2016)  |
| * 14312 | Fabrics Abrasion resistance. Taber method                          | ASTM D 3884-09 (2017)  |
| * 14278 | Fabrics. Abrasion resistance. Taber method                         | ASTM D 4685/D4685M-15  |
| * 14316 | Personal protective equipment. Test methods for footwear. Abrasion | UNI EN ISO 20344:2012 Par. 6.12  |
| 14307   | Protective clothing. Abrasion (Martindale)                         | UNI EN 530:2010 Method 1   |
| 14280   | Fabrics. Pilling. Box method                                       | UNI EN ISO 12945-1:2002 + EC 1 - 2004  |
| 14283   | Fabrics. Pilling. Martindale method                                | UNI EN ISO 12945-2:2002 + EC 1 - 2004  |
| * 14284 | Fabrics. Pilling. Martindale method                                | ASTM D 4970/D 4970M-16   |
| * 14279 | Fabrics. Pilling resistance. Random tumble method                  | ASTM D 3512/D3512-16   |
| * 14286 | Fabrics. Snagging  | ICI Test Method 444  |

## Treatments

| Code    | Description   | Methods                     |
|---------|---|-----------------------------|
| 14308   | Protective clothing. Pretreatment by abrasion (Martindale)                                      | UNI EN 530:2010 Met. 2      |
| 16267   | Rubber or plastics coated fabrics. Treatment through repeated bendings. De Mattia method        | UNI EN ISO 7854:1999 Met. A |
| 16261   | Rubber or plastics coated fabrics. Treatment through repeated bendings. Schildknecht method     | UNI EN ISO 7854:1999 Met. B |
| 16263   | Rubber or plastics coated fabrics. Treatment through repeated bendings. Flection/torsion method | UNI EN ISO 7854:1999 Met. C |
| * 16260 | Contamination treatment with solvent, oil or products supplied by customer                      | Method supplied by customer |
| * 14317 | Textiles, Accessories. Abrasion treatment   | Method required by customer |



## FABRICS COATED WITH POLYMERIC MATERIALS

| <b>Code</b> | <b>Description</b>  | <b>Methods</b>   |
|-------------|---|------------------|
| * 16140     | Fabrics coated with polymeric materials. Elastic recovery                   | UNI 4818-24:1992 |
| * 16141     | Fabrics coated with polymeric materials. Percentage elongation under load   | UNI 4818-7:1992  |
| * 16142     | Fabrics coated with polymeric materials. Repeated bendings. Bally method    | UNI 4818-13:1992 |
| * 16170     | Fabrics coated with polymeric materials. Seam resistance                    | UNI 4818-11:1992 |
| * 16190     | Fabrics coated with polymeric materials. Resistance in acetone bath         | UNI 4818-16:1992 |
| * 16210     | Fabrics coated with polymeric materials. Coating colour fastness to rubbing | UNI 4818-20:1992 |
| 16220       | Fabrics coated with polymeric materials. Water vapour transmission rate     | UNI 4818-26:1992 |
| * 16230     | Fabrics coated with polymeric materials. Resistance to hot plate            | UNI 4818-27:1992 |
| * 16240     | Fabrics coated with polymeric materials. Resistance to methyl-ethyl-ketone  | UNI 4818-28:1992 |
| * 16270     | Fabrics coated with polymeric materials. Migrability of coloured substances | UNI 4818-21:1992 |

## RUBBER OR PLASTICS COATED FABRICS

| Code    | Description   | Methods  |
|---------|---|--|
| * 16100 | Rubber or plastics coated fabrics. Length, width and net mass                     | UNI EN ISO 2286-1:2016                             |
| 16110   | Rubber or plastics coated fabrics. Mass per unit area                             | UNI EN ISO 2286-2:2016 (except paragraphs 4 and 5) |
| 16130   | Rubber or plastics coated fabrics. Tensile strength and elongation                | UNI EN ISO 1421:2017                               |
| 16149   | Rubber or plastics coated fabrics. Tearing strength. Trapezoid method             | UNI EN 1875-3:2000                                 |
| 16151   | Rubber or plastics coated fabrics. Tearing strength. Elmendorf method             | UNI EN ISO 4674-2:2001                             |
| 16152   | Rubber or plastics coated fabrics. Tearing strength. Double-teared method         | UNI EN ISO 4674-1:2017 Met. A                      |
| 16153   | Rubber or plastics coated fabrics. Tearing strength. Tear specimen                | UNI EN ISO 4674-1:2017 Met. B                      |
| * 16160 | Rubber or plastics coated fabrics. Coating adhesion                               | UNI EN ISO 2411:2018 (only method 1)               |
| * 16250 | Rubber or plastics coated fabrics. Water resistance at limit hydrostatic pressure | UNI EN 1734:1998                                   |
| * 16257 | Rubber or plastics coated fabrics. Abrasion. Taber method                         | UNI EN ISO 5470-1:2017                             |
| * 16264 | Rubber or plastics coated fabrics. Abrasion (Martindale)                          | UNI EN ISO 5470-2:2004                             |
| 16258   | Rubber or plastics coated fabrics. Repeated bendings. De Mattia method            | UNI EN ISO 7854:1999 Met. A                        |
| 16259   | Rubber or plastics coated fabrics. Repeated bendings. Schildknecht method         | UNI EN ISO 7854:1999 Met. B                        |
| 16262   | Rubber or plastics coated fabrics. Repeated bendings. Flexion/torsion method      | UNI EN ISO 7854:1999 Met. C                        |
| * 16200 | Rubber or plastics coated fabrics. Blocking resistance                            | UNI EN 25978:1996                                  |
| * 16251 | Inflatable play equipment. Tearing strength                                       | UNI EN 14960-1:2019 Appendix E                     |
| * 14369 | Coated fabrics. Water vapour transmission rate. Dish method                       | UNI 9278:1988                                      |

## NONWOVEN FABRICS

| Code    | Description  | Methods  |
|---------|--|--|
| 15105   | Nonwoven fabrics. Mass per unit area   | UNI EN 29073-1:1993  |
| 15104   | Nonwoven fabrics. Mass per unit area   | ISO 9073-1:1989  |
| 15110   | Nonwoven fabrics. Air permeability   | UNI 8279-3:1983 (only test area 20 cm <sup>2</sup> , except point 4.3) |
| 15120   | Nonwoven fabrics. Tensile strenght. Grab method  | UNI 8279-4:1984  |
| * 14333 | Non woven fabrics. Tensile strenght. Grab method   | ISO 9073-18:2007   |
| 15125   | Nonwoven fabrics. Tensile strenght and elongation. Strip method                          | UNI EN 29073-3:1993  |
| 15124   | Nonwoven fabrics. Tensile strenght and elongation. Strip method                          | ISO 9073-3:1989  |
| 15170   | Nonwoven fabrics. Tearing strength. Trapezoid method                                     | UNI EN ISO 9073-4:1999   |
| * 15200 | Nonwoven fabrics. Exposure to artificial weathering                                      | UNI 8279-17:1989   |
| * 15201 | Nonwoven fabrics. Tensile strenght and elongation after artificial weathering exposition | UNI 8279-17:1989 + UNI EN 29073-3:1993                                 |
| * 15141 | Nonwoven fabrics. Absorption time  | UNI EN ISO 9073-6:2004 Par. 4  |
| 15142   | Nonwoven fabrics. Absorption capacity  | UNI EN ISO 9073-6:2004 Par. 5  |
| * 15143 | Nonwoven fabrics. Wetting speed  | UNI EN ISO 9073-6:2004 Par. 6  |
| 15190   | Nonwoven fabrics. Hot dimensional change   | UNI 8279-12:1985   |
| * 15127 | Nonwoven fabrics. Bending lenght (flexural rigidity)                                     | UNI EN ISO 9073-7:2000   |
| * 15128 | Fabrics, Nonwoven fabrics. Flexural rigidity - Bending length test                       | UNI 10138:1992 only method 5.1 (manual equipment)                      |



## YARNS, FABRICS (SPECIFICATIONS)

### Tests on Para-aramid multifilament yarns - UNI EN 12562:2001 specifications

| Code    | Description  | Methods  |
|---------|--|--|
| * 13123 | Para-aramid multifilament yarns. Linear density (yarn count)     | UNI EN ISO 2060:1997 only option 1 (test in normal atmosphere) + UNI EN 12562:2001 + EC 1-2004 |
| * 13184 | Para-aramid multifilament yarns. Tensile strength and elongation | UNI EN ISO 2062:2010 (except methods C and D) + UNI EN 12562:2001 + EC 1-2004                  |
| * 13145 | Para-aramid multifilament yarns. Twist                           | UNI EN ISO 2061:2015 + UNI EN 12562:2001 + EC 1-2004   |

### Upholstery fabrics - UNI EN 14465:2008 specifications

| Code    | Description   | Methods  |
|---------|---|--|
| 14481   | Upholstery fabrics. Tensile strength and elongation. Strip method                   | UNI EN ISO 13934-1:2013 + UNI EN 14465:2008  |
| 14482   | Upholstery fabrics. Fabrics. Tearing strength. Wing-shaped method                   | UNI EN ISO 13937-3:2002 + EC 1 - 2004 + UNI EN 14465:2008                              |
| 14483   | Upholstery fabrics. Pilling (Martindale)  | UNI EN ISO 12945-2:2002 + EC 1 - 2004 + UNI EN 14465:2008                              |
| 14484   | Upholstery fabrics. Slippage resistance of yarns at a seam. Fixed load method       | UNI EN ISO 13936-2:2004 + UNI EN 14465:2008  |
| * 14485 | Upholstery fabrics. Bursting strength   | UNI EN ISO 13938-1:2001 + EC 1 - 2004 + UNI EN 14465:2008                              |
| 14486   | Upholstery fabrics. Abrasion (Martindale). Deterioration of the specimen            | UNI EN ISO 12947-1:2000 + EC 1-2010 + UNI EN ISO 12947-2:2017 + UNI EN 14465:2008      |
| 20231   | Upholstery fabrics. Colour fastness to artificial light: Xenon arc fading lamp test | UNI EN ISO 105-B02:2014 - Exposure cycle A1 + UNI EN 14465:2008                        |
| 20351   | Upholstery fabrics. Colour fastness to rubbing                                      | UNI EN ISO 105-X12:2016 + UNI EN 14465:2008  |
| 20283   | Upholstery fabrics. Colour fastness to water  | UNI EN ISO 105-E01:2013 + UNI EN 14465:2008  |
| 20296   | Upholstery fabrics. Colour fastness to water spotting                               | UNI EN ISO 105-E16:2008 + UNI EN 14465:2008  |
| 20106   | Upholstery fabrics. Colour fastness to domestic and commercial laundering           | UNI EN ISO 105-C06:2010 + UNI EN 14465:2008  |
| 20212   | Upholstery fabrics. Colour fastness to dry cleaning                                 | UNI EN ISO 105-D01:2010 + UNI EN 14465:2008  |
| 25109   | Upholstery fabrics. Dimensional change in domestic wet washing and drying           | UNI EN ISO 6330:2012 + UNI EN ISO 5077:2008 + UNI EN ISO 3759:2011 + UNI EN 14465:2008 |

### Rubber or plastics coated fabrics - ISO 8096:2005 + Cor 1:2005 specifications

| Code    | Description  | Methods  |
|---------|--|--|
| 16271   | Rubber or plastics coated fabrics. Treatment through repeated bendings. Flexion/torsion method | ISO 8096:2005 annex C and D + Cor 1:2005 + UNI EN ISO 7854:1999 Met. C |
| * 16272 | Rubber or plastics coated fabrics. Washing pretreatment  | UNI EN ISO 6330:2012 + ISO 8096:2005 + Cor 1:2005 annex D              |

|         |   |  |
|---------|---|--|
| * 16273 | Rubber or plastics coated fabrics. Accelerated ageing pretreatment  | ISO 1419:2019 Method B (General method) + ISO 8096:2005 + Cor 1:2005 annex D |
| * 16268 | Rubber or plastics coated fabrics. Accelerated ageing pretreatment  | ISO 1419:2019 Method C (Tropical test) + ISO 8096:2005 + Cor 1:2005 annex D  |
| * 16274 | Rubber or plastics coated fabrics. Abrasion (Martindale)  | UNI EN ISO 5470-2:2004 + ISO 8096:2005 annex E + Cor 1:2005                  |
| 16275   | Rubber or plastics coated fabrics. Dry cleaning pretreatment  | UNI EN ISO 105-D01:2010 + ISO 8096:2005 + Cor 1:2005 annex F                 |
| * 16276 | Rubber or plastics coated fabrics. Pretreatment at low temperature  | ISO 8096:2005 + Cor 1:2005 annex G   |
| 16277   | Rubber or plastics coated fabrics. Test of resistance to water penetration. Increasing hydrostatic pressure | UNI EN ISO 811:2018 + ISO 8096:2005 annex C, D, E, F and G + Cor 1:2005      |
| 16269   | Rubber or plastics coated fabrics. Test of resistance to water penetration. Increasing hydrostatic pressure | ISO 811:2018 + ISO 8096:2005 annex C, D, E, F e G + Cor 1:2005               |
| * 16278 | Rubber or plastics coated fabrics. Coating adhesion   | ISO 8096:2005 + Cor 1:2005 annex H   |
| * 16280 | Rubber or plastics coated fabrics. Resistance to adhesion (blocking)  | UNI EN 25978:1996 + ISO 8096:2005 + Cor 1:2005                               |
| 16279   | Rubber or plastic coated fabrics. Surface wetting. Spray test   | UNI EN ISO 4920:2013 + ISO 8096:2005 + Cor 1:2005                            |
| 16281   | Fabrics coated with polymeric materials. Colour fastness to artificial light: Xenon arc fading lamp test    | UNI EN ISO 105-B02:2014 - Exposure cycle A1 + ISO 8096:2005 + Cor 1:2005     |
| * 16282 | Rubber or plastics coated fabrics. Colour fastness to washing   | UNI EN ISO 105-C10:2008 + ISO 8096:2005 + Cor 1:2005                         |
| 16283   | Rubber or plastics coated fabrics. Colour fastness to rubbing: organic solvents                             | UNI EN ISO 105-D02:2016 + ISO 8096:2005 + Cor 1:2005                         |
| 16284   | Fabrics coated with polymeric materials. Colour fastness to rubbing   | UNI EN ISO 105-X12:2016 + ISO 8096:2005 + Cor 1:2005                         |

# LEATHER

## Tests

| Code    | Description   | Methods   |
|---------|---|---|
| * 62399 | Leather. Preparation of chemical test sample  | ISO 4044:2017   |
| 62360   | Leather. pH   | UNI EN ISO 4045:2018  |
| * 62376 | Leather. pH of wet blue   | ASTM D6657-14Ae1  |
| 62369   | Leather. Formaldehyde using liquid chromatography   | UNI EN ISO 17226-1:2019   |
| * 62361 | Leather. Formaldehyde using colorimetric analysis   | UNI EN ISO 17226-2:2019   |
| * 62370 | Leather. Formaldehyde emissions   | UNI EN ISO 17226-3:2008   |
| 62368   | Leather. Extractable metal content  | UNI EN ISO 17072-1:2011   |
| 62367   | Leather. Total metal content  | UNI EN ISO 17072-2:2011 + UNI EN 14602:2012 Point 4.1                               |
| 62363   | Leather. Hexavalent chromium  | UNI EN ISO 17075-1:2017   |
| * 62372 | Leather. Hexavalent chromium after aging  | ISO 10195:2018 + UNI EN ISO 17075-1:2017  |
| * 62380 | Leather. Chromic oxide content by ICP-OES   | UNI EN ISO 5398-4:2019  |
| 62221   | Leather. Aromatic amines derived from azocolorants  | UNI EN ISO 17234-1:2015   |
| 62218   | Leather. 4-aminoazobenzene from azocolorants  | UNI EN ISO 17234-2:2011   |
| 62362   | Leather. Pentachlorophenol and tetrachlorophenols   | UNI EN ISO 17070:2015   |
| * 62400 | Leather. Preservative content in leather (TCMTB, PCMC, OPP, OIT)  | UNI EN ISO 13365:2011   |
| * 62381 | Leather. Alkylphenolethoxylates (direct method)   | ISO 18218-1:2015  |
| * 62382 | Leather. Alkylphenolethoxylates (indirect method)   | ISO 18218-2:2019  |
| * 62371 | Leather. Volatile substances  | UNI EN ISO 4684:2006  |
| * 62383 | Leather. Perfluorinated compounds   | UNI CEN/TS 15968:2010   |
| * 62384 | Leather. Perfluorinated compounds - complete offer  | UNI CEN/TS 15968:2010   |
| * 62385 | Leather. Allergenic/carcinogenic disperse dyestuffs   | DIN 54231:2005  |
| * 62386 | Leather. Carcinogenic dyestuffs   | UNI EN ISO 16373-3:2014   |
| * 62387 | Leather. Short chain chlorinated paraffins C10-C13 (SCCP)   | UNI EN ISO 18219:2015   |
| * 62388 | Leather. Chromatographic analysis (quantitative test)   | Solvent extraction and chromatographic analysis with mass detector (GC/MS or LC/MS) |
| * 62389 | Leather. Polycyclic aromatic hydrocarbons   | UNI CEN ISO/TS 16190:2013   |
| * 62390 | Textiles, Accessories. Solvent residues (N,N-dimethylacetamide, 1-methyl-2-pyrrolidone, dimethylformamide)                  | ISO 19070:2016  |
| 20503   | Leather. Colour fastness to water   | UNI EN ISO 11642:2013   |
| 20502   | Leather. Colour fastness to perspiration  | UNI EN ISO 11641:2013   |
| 20500   | Leather. Colour fastness to cycles of to-and-fro rubbing  | UNI EN ISO 11640:2018   |
| 20501   | Leather. Colour fastness to water spotting  | UNI EN ISO 15700:2000   |
| 20504   | Leather. Colour fastness to migration into plasticized poly(vinyl chloride)   | UNI EN ISO 15701:2015   |
| * 20505 | Textiles. Colour fastness to artificial light: Xenon arc fading lamp test   | UNI EN ISO 105-B02:2014 - Exposure cycle A1   |
| * 20506 | Leather. Colour fastness to rubbing   | UNI EN ISO 105-X12:2016   |
| 20507   | Leather. Colour fastness of small sample to organic solvents  | UNI EN ISO 11643:2009   |
| * 20508 | Leather. Tests for colour fastness. Change in colour with accelerated ageing (by heat alone)                                | UNI EN ISO 17228:2015 (chapter 6)   |
| * 20509 | Leather. Tests for colour fastness. Change in colour with accelerated ageing (by heat and elevated humidity)                | UNI EN ISO 17228:2015 (chapter 7)   |
| * 20510 | Leather. Tests for colour fastness. Change in colour with accelerated ageing (under cyclic temperature/humidity conditions) | UNI EN ISO 17228:2015 (chapter 8)   |
| * 20511 | Leather. Tests for colour fastness. Colour fastness to saliva   | ISO 20701:2017  |
| * 35508 | Leather. Treatments of accelerated ageing (by heat alone)   | UNI EN ISO 17228:2015 (chapter 6)   |

|         |   |                                   |
|---------|---|-----------------------------------|
| * 35509 | Leather. Treatments of accelerated ageing (by heat and elevated humidity)                                       | UNI EN ISO 17228:2015 (chapter 7) |
| * 35510 | Leather. Treatments of accelerated ageing (under cyclic temperature/humidity conditions)                        | UNI EN ISO 17228:2015 (chapter 8) |
| * 14172 | Leather. Determination of the static absorption of water  | UNI EN ISO 2417:2016              |
| * 14173 | Leather. Determination of water vapour permeability   | UNI EN ISO 14268:2012             |
| * 14174 | Leather. Determination of water vapour absorption   | UNI EN ISO 17229:2016             |
| * 14175 | Leather. Dimensional stability. Swelling, dimensional increase, contraction                                     | UNI 8481:2010                     |
| * 14177 | Leather. Dimensional stability. Swelling  | UNI 8481:2010                     |
| * 14178 | Leather. Dimensional stability. Dimensional increase  | UNI 8481:2010                     |
| * 14179 | Leather. Dimensional stability. Contraction   | UNI 8481:2010                     |
| * 14176 | Leather. Shrinkage temperature up to 100 degrees C  | UNI EN ISO 3380:2015              |
| * 14433 | Leather. Determination of water-soluble matter, water-soluble inorganic matter and water soluble organic matter | UNI EN ISO 4098:2006              |
| * 14153 | Leather. Measurement of stitch tear resistance  | UNI EN ISO 23910:2017             |
| * 14154 | Leather. Abrasion resistance. Martindale ball plate method  | UNI EN ISO 17076-2:2011           |
| * 14155 | Leather. Abrasion resistance. Taber method  | UNI EN ISO 17076-1:2012           |
| * 14156 | Leather. Test of adhesion of finish   | UNI EN ISO 11644:2009             |
| * 14157 | Leather. Stitching resistance of flexible leathers  | UNI 10606:2009                    |
| * 14158 | Leather. Determination of distension and strength of grain. Ball burst test method                              | UNI EN ISO 3379:2015              |
| * 14159 | Leather. Water resistance of heavy leathers   | UNI EN ISO 5404:2012              |
| * 14161 | Leather. Thickness  | UNI EN ISO 2589:2016              |
| * 14163 | Leather. Determination of surface coating thickness   | UNI EN ISO 17186:2012             |
| 14162   | Leather. Single edge tear   | UNI EN ISO 3377-1:2012            |
| 14164   | Leather. Double edge tear   | UNI EN ISO 3377-2:2016            |
| * 14165 | Leather. Apparent density   | UNI EN ISO 2420:2017              |
| 14166   | Leather. Tensile strength and percentage extension  | UNI EN ISO 3376:2012              |
| * 14167 | Leather. Resistance to grain cracking and grain crack index   | UNI EN ISO 3378:2005              |
| * 14168 | Leather. Flex resistance. Flexometer method   | UNI EN ISO 5402-1:2017            |
| * 14169 | Leather. Water resistance of flexible leather. Repeated linear compression (penetrometer)                       | UNI EN ISO 5403-1:2012            |
| * 14192 | Leather. Determination of stiffness   | UNI EN ISO 17235:2015             |

# COLOURANTS, PIGMENTS AND AUXILIARIES

## Tests

| Code    | Description  | Methods   |
|---------|--|---|
| * 68369 | Colourants, pigments and auxiliaries. Free and hydrolyzed formaldehyde using liquid chromatography | MIP 135:2014 Rev.0  |
| * 68361 | Auxiliaries. Free formaldehyde   | UNI EN ISO 27587:2009   |
| * 68217 | Auxiliaries. Free formaldehyde   | ISO 9020:2001   |
| * 68011 | Colourants. Soluble metals in hydrochloric acid (As, Ba, Cd, Cr, Hg, Pb, Se, Sb)                   | Resolution of the Council of Europe AP 89 (1)   |
| 62310   | Colourants, pigments and auxiliaries. Total content of heavy metals                                | UNI EN 16711-1:2015   |
| 68117   | Colourants, pigments and auxiliaries. Total Mercury  | UNI EN 16711-1:2015   |
| 68219   | Colourants, pigments and auxiliaries. Aromatic amines derived from azocolourants                   | UNI EN ISO 14362-1:2017 Annex F   |
| * 68216 | Colourants, pigments and auxiliaries. 4-aminoazobenzene from azocolourants                         | UNI EN ISO 14362-3:2017   |
| * 68225 | Colourants, pigments and auxiliaries. Sulphonated aromatic amines                                  | Resolution of the Council of Europe AP 89 (1)   |
| * 68226 | Colourants, pigments and auxiliaries. Unsulphonated aromatic amines                                | Resolution of the Council of Europe AP 89 (1)   |
| * 68220 | Colourants, pigments and auxiliaries. Free aromatic amines   | MIP 138:2014 Rev.0  |
| * 68214 | Colourants, pigments and auxiliaries. Organotin compounds  | MIP 132:2014 Rev.0  |
| * 68222 | Colourants, pigments and auxiliaries. Allergenic disperse dyestuffs                                | DIN 54231:2005  |
| * 68215 | Colourants, pigments and auxiliaries. Chlorinated benzenes and toluenes                            | UNI EN 17137:2019   |
| * 68330 | Colourants, pigments and auxiliaries. Diethanolamine and triethanolamine                           | Solvent extraction and chromatographic analysis with mass detector (LC-MS)                          |
| * 68331 | Colourants, pigments and auxiliaries. Quinoline  | Solvent solubilization and chromatographic analysis with triple quadrupole mass detector (LC/MS/MS) |
| * 68332 | Colourants, pigments and auxiliaries. Styrene  | Quantitative analysis by static headspace coupled with gaschromatograph with mass detector          |
| * 68335 | Binders for paints and varnishes. Monomeric diisocyanates  | UNI EN ISO 10283:2008   |
| * 62234 | Auxiliaries. Epichlorohydrin   | UNI EN 14207:2003   |
| * 68312 | Auxiliaries. Alkylphenoethoxylates (NPEO, OPEO)  | MIP 131:2017 Rev.1  |
| 68313   | Colourants, pigments and auxiliaries. Alkylphenoethoxylates (NPEO, OPEO)                           | ISO 18254-1:2016  |
| * 68229 | Auxiliaries. Alkylphenols (NP, OP)   | MIP 130:2014 Rev.0  |
| * 68308 | Colourants, pigments and auxiliaries. Polychlorinated biphenyls (PCB)                              | US EPA 608 + Resolution of the Council of Europe AP 89 (1)  |
| * 68309 | Textiles, activated carbon. Determination iodine number  | MIP 139:2016 Rev.0  |

## CHILDREN'S GARMENT. SAFETY

### Tests

| Code    | Description  | Methods   |
|---------|--|---|
| 14783   | Children's clothing. Safety specifications for cords and drawstrings   | UNI EN 14682:2015 + EC 1:2015   |
| 14784   | Children's clothing. Safety specifications for cords and drawstrings   | GB/T 22705-2008   |
| * 14785 | Children's clothing. Safety specification for drawstrings  | ASTM F1816-18   |
| 14786   | Children's clothing. Standard safety size for drawstrings  | GB/T 22702-2008   |
| 14779   | Children's clothing. Determination of removal force of attached components   | CPSC 16 CFR 1500.51:2012 (par. F 0-18 months)<br>CPSC 16 CFR 1500.52:2012 (par. F 19-36 months)<br>CPSC 16 CFR 1500.53:2012 (par. F 37-96 months) |
| * 14788 | Children's clothing. Recommendations for the design and manufacture of children's clothing. Mechanical safety                            | PD CEN/TR 16792:2014 Annex B - Grippable components   |
| * 14789 | Children's clothing. Recommendations for the design and manufacture of children's clothing. Mechanical safety                            | PD CEN/TR 16792:2014 Annex H - Small parts  |
| 14780   | Toys and other articles intended for use by children under 3 years of age. Choking, aspiration or ingestion hazard caused by small parts | CPSC 16 CFR 1501 [except 1501.4 (b) (2)]  |
| * 14778 | Toys and other articles intended for use by children under 8 years of age. Sharp point (depth of penetration)                            | CPSC 16 CFR 1500.48:2012  |
| * 14777 | Toys and other articles intended for use by children under 8 years of age. Sharp edge (cutting length)                                   | CPSC 16 CFR 1500.49:2012  |
| * 14776 | Children's clothing. Torque component attached   | CPSC 16 CFR 1500.51:2012 (par. F 0-18 months)<br>CPSC 16 CFR 1500.52:2012 (par. F 19-36 months)<br>CPSC 16 CFR 1500.53:2012 (par. F 37-96 months) |

## TOYS

### Tests

| Code    | Description   | Methods  |
|---------|---|--|
| * 67100 | Toys and other articles intended for use by children under 3 years of age. Migrations of certain elements (Sb, As, Ba, Cd, Cr, Pb, Hg, Se)                                    | UNI EN 71-3:2002 + EC 1-2004 + D.Lgs. n. 54 of 11/04/2011, GU n. 96 of 27/4/2011 |
| 67101   | Toys and other articles intended for use by children under 3 years of age. Migrations of certain elements (Al, Sb, As, Ba, B, Cd, Cr, Co, Cu, Pb, Mn, Hg, Ni, Se, Sr, Sn, Zn) | UNI EN 71-3:2019   |
| 67105   | Toys and other articles intended for use by children under 3 years of age. Trivalent chromium and hexavalent chromium   | UNI EN 71-3:2019   |
| 67214   | Toys and other articles intended for use by children under 3 years of age. Organotin compounds  | UNI EN 71-3:2019   |
| 67225   | Toys and other articles intended for use by children under 3 years of age. Phthalates   | UNI EN 14372:2005 Par. 6.3.2   |
| * 68338 | Child use and care articles. 2,2-bis(4-hydroxyphenyl)propane [Bisphenol A]  | UNI EN 14350-2 Part 5.5  |
| * 67230 | Child use and care articles. N-nitrosamines and N-nitrosatable substances   | UNI EN 12868:2017  |
| * 67001 | Toys. Textiles parts. Flame retardants: PBDE, octa-BDE, tri-o-cresylphosphate, TCEP   | UNI EN 71-10:2006 Par. 8.1.1 + UNI EN 71-11:2006 Par. 5.2                        |
| * 67002 | Toys. Textiles parts. Colourants  | UNI EN 71-10:2006 Par. 8.1.3 + UNI EN 71-11:2006 Par. 5.3                        |
| * 67003 | Toys. Textiles parts. Primary aromatic amines   | UNI EN 71-10:2006 Par. 8.1.4 + UNI EN 71-11:2006 Par. 5.4                        |
| * 67004 | Toys. Plastics. Migration of acrylamide   | UNI EN 71-10:2006 Par. 6 + UNI EN 71-11:2006 Par. 5.5.1                          |
| * 67005 | Toys. Plastics. Migration of phenol and bisphenol A   | UNI EN 71-10:2006 Par. 6 + UNI EN 71-11:2006 Par. 5.5.2                          |
| * 67006 | Toys. Plastics. Migration of formaldehyde   | UNI EN 71-10:2006 Par. 6 + UNI EN 71-11:2006 Par. 5.5.3                          |
| * 67007 | Toys. Plastics. Migration of trichloroethylene and dichloromethane  | UNI EN 71-10:2006 Par. 6 + UNI EN 71-11:2006 Par. 5.5.4                          |
| * 67010 | Toys. Plastics. Migration of tricresylphosphate (isomers) and triphenylphosphate  | UNI EN 71-10:2006 Par. 6 + UNI EN 71-11:2006 Par. 5.8                            |
| 62323   | Toys. Surface coating materials. Migration of certain elements (Sb, As, Ba, Cd, Pb, Hg, Se)   | ASTM F 963-17 sec. 4.3.5.2   |
| 14780   | Toys and other articles intended for use by children under 3 years of age. Choking, aspiration or ingestion hazard caused by small parts                                      | CPSC 16 CFR 1501 [except 1501.4 (b) (2)]   |
| * 14778 | Toys and other articles intended for use by children under 8 years of age. Sharp point (depth of penetration)   | CPSC 16 CFR 1500.48:2012   |
| * 14777 | Toys and other articles intended for use by children under 8 years of age. Sharp edge (cutting length)  | CPSC 16 CFR 1500.49:2012   |



## FOOTWEAR

### Tests

| Code    | Description  | Methods                      |
|---------|--|------------------------------|
| * 62800 | Footwear. Preparation of samples   | UNI EN 14602:2005 Point 4    |
| * 62810 | Footwear. Organotin compounds  | UNI CEN ISO/TS 16179:2012    |
| * 62825 | Footwear. Phthalates   | UNI CEN ISO/TS 16181:2011    |
| * 62826 | Footwear. Dimethylfumarate   | UNI CEN ISO/TS 16186:2012    |
| * 62827 | Footwear. Dimethylformamide  | UNI CEN ISO/TS 16189:2013    |
| * 18000 | Footwear. Uppers, lining and insoles. Tear strength                                | UNI EN ISO 17696:2018        |
| 18001   | Footwear. Uppers, lining and insoles. Abrasion                                     | UNI EN 13520:2006            |
| * 18002 | Footwear. Uppers and lining. Flex resistance                                       | UNI EN 13512:2002            |
| * 18003 | Footwear. Uppers. Resistance to damage on lasting                                  | UNI EN 17693:2006            |
| * 18004 | Footwear. Test method for insoles and insoles. Water absorption and desorption     | UNI EN 12746:2008 - Method A |
| * 14160 | Shoes. Aging test with walkmeter   | Method required by customer  |
| * 20352 | Footwear. Test methods for uppers, linings and insoles. Colour fastness to rubbing | UNI EN ISO 17700:2006        |



# CHEMICAL TESTS

## General

| Code    | Description  | Methods   |
|---------|--|---|
| * 12155 | Textiles. Microscope examination (morphology and structure)  | Microscope evaluation of the surface morphological-structural characteristics (50x-500x)            |
| * 12160 | Textiles. Microscope examination with microphotographs   | Microscope evaluation of the surface morphological-structural characteristics (50x-500x)            |
| * 14463 | Textiles. Apparent diametre  | Microscope evaluation   |
| 12120   | Wool. Fiber diameter with projection microscope method   | UNI 5423:1964   |
| * 12122 | Textiles. Woolen fibres. Diameter. Microscope method   | ISO 137:2015  |
| * 14460 | Textiles. Stereomicroscope examination   | Stereomicroscope evaluation of the surface morphological-structural characteristics                 |
| * 14461 | Textiles. Stereomicroscope examination with macrographs  | Stereomicroscope evaluation of the surface morphological-structural characteristics                 |
| * 14462 | Textiles. Examination with scanning electron microscope (SEM) with micrographs                             | Microscope evaluation of the surface morphological-structural characteristics                       |
| * 12112 | Textiles. Detection of dulling agent in fibres. Microscope method  | Microscope evaluation   |
| * 12300 | Textiles. Maturity of cotton fibres. Microscope method   | ASTM D 1442-06 (2012)   |
| * 35125 | Detection of dead cotton fibres  | ASTM D 1464-12  |
| * 14510 | Textiles and chemical substances. FT-IR identification   | FT-IR Spectrophotometric method   |
| * 12115 | Textiles. Melting point  | UNI EN ISO 3146:2002  |
| * 12110 | Textiles. Examination under Wood lamp  | Visual evaluation in cabinet under black light  |
| 14430   | Textiles. Ash content  | UNI 8047:1980   |
| 13281   | Textiles. Dry content for the chemical and/or physical tests   | UNI 8048:1980   |
| 14490   | Textiles. Cellulose in diluite solution. Limit viscosity index (Method in cupri-ethylene-diamine solution) | UNI 8282:1994 Alternative B   |
| * 14380 | Textiles. Damage research in cellulosic fibres (Sodium hydrate 18%)  | Karl Mahall, 2002. Quality assessment of textiles - Damage detection by microscopy. 2° ed: Springer |
| * 14390 | Textiles. Oxy and hydrocellulose research in cellulosic fibres (Fehling reaction)                          | Karl Mahall, 2002. Quality assessment of textiles - Damage detection by microscopy. 2° ed: Springer |
| * 14450 | Textiles. Iron qualitative detection   | AATCC 94-2017 Par. 11   |
| 14495   | Textiles. Mercerization in cotton (Barium Activity Number)   | AATCC 89-2017   |
| 14211   | Textiles. Identification of residual oxidant substances  | UNI 8276:1981   |
| 14350   | Fabrics. Surface wetting. Spray test   | UNI EN ISO 4920:2013  |
| 14351   | Fabrics. Surface wetting. Spray test   | AATCC 22-2017   |
| 14363   | Fabrics. Resistance to water/alcohol solution test   | AATCC 193-2017  |
| 14362   | Textiles. Oil repellency. Hydrocarbon resistance test  | UNI EN ISO 14419:2010<br>AATCC 118:2013   |
| * 14367 | Textiles. Absorption capacity  | Method required by customer   |
| * 14368 | Textiles. Determination of hygroscopicity  | GOST 3816-81  |
| * 25150 | Textiles. Smoothness appearance of fabrics after repeated home laundering                                  | AATCC 124-2018  |
| * 25154 | Textiles. Smoothness of seams in fabric after repeated home laundering                                     | AATCC 88B-2018  |
| * 25155 | Textiles. Retention of creases in fabrics after repeated home laundering                                   | AATCC 88C-2018  |

|         |   |                                  |
|---------|---|----------------------------------|
| * 25156 | Textiles. Method for assessing appearance of apparel and other textile end products after domestic washing and drying | UNI EN ISO 15487:2010            |
| * 35100 | Textiles. Determination of class of dyestuff. Only cellulosic fibers  | MIP 254:2008 Rev.1               |
| * 14364 | Absorption degree of fabrics  | AATCC 79-2018                    |
| * 14365 | Textiles. Terry towels and terry towels fabrics. Determination of the time of absorption                              | UNI EN 14697:2005 annex B        |
| * 14361 | Textiles. Fabric behaviour after removal of domestic staining   | MIP 253:2008 Rev.1               |
| * 14431 | Textile glass. Combustible matter content   | ISO 1887:2014                    |
| * 14366 | Rubber, vulcanized or thermoplastic. Determination of the effect of the liquids                                       | ISO 1817:2015                    |
| * 12301 | Reinforcements products. Moisture content   | UNI EN ISO 3344:1998             |
| * 14502 | Carbon fibre. Determination of size content   | UNI EN ISO 10548:2006 + EC1-2009 |

## Fibre composition

| Code    | Description   | Methods   |
|---------|---|---|
| 13100   | Textiles. Identification of fibres in textiles  | Reg UE N 1007/2011 + ISO/TR 11827:2012  |
| * 13101 | Textiles. Identification of fibres in textiles: metallic fibres, metalized and charge decaying in general   | Qualitative analysis using Energy Dispersive X-ray spectrometry (XRF)   |
| * 13103 | Textiles. Identification of liberian fibres in textiles. Scanning electron microscope (SEM) examination method  | Microscope evaluation in cross section of the surface characteristics   |
| * 13104 | Textiles. Identification of liberian fibres in textiles. Test method of Bast Fibre Authority  | Microscope evaluation longitudinal and in cross section of the surface characteristics  |
| 14170   | Textiles. Quantitative analysis of binary blends of textile fibres  | Reg UE N 1007/2011, UNI EN ISO 1833:2011 parts 1, 5, 8, 9, 12, 13, 14, 15, 16, 17, 19, 24 (except 2); UNI EN ISO 1833:2013 parts 22, 25, 26; UNI EN ISO 1833:2017 parts 4, 7, 11; UNI EN ISO 1833:2019 parts 3, 6, 10, 18, 20, 21 |
| 14180   | Textiles. Quantitative analysis of ternary blends of textile fibres   | Reg UE N 1007/2011, UNI EN ISO 1833:2011 parts 1, 2, 5, 8, 9, 12, 13, 14, 15, 16, 17, 19, 24; UNI EN ISO 1833:2013 parts 22, 25, 26; UNI EN ISO 1833:2017 parts 4, 7, 11; UNI EN ISO 1833:2019 parts 3, 6, 10, 18, 20, 21         |
| * 14190 | Textiles. Quantitative analysis of blends of four textile fibres  | MIP 258:2008 Rev.0  |
| * 14191 | Textiles. Quantitative analysis of blends of five textile fibres  | MIP 258:2008 Rev.0  |
| * 14210 | Textiles. Quantitative analysis of blends of six textile fibres   | MIP 258:2008 Rev.0  |
| * 14215 | Textiles. Quantitative analysis of blends of seven textile fibres   | MIP 258:2008 Rev.0  |
| * 14151 | Textiles. Quantitative analysis of binary and ternary blends of textile fibres. Microscope method   | MIP 258:2008 Rev.0  |
| * 14150 | Textiles. Quantitative analysis of binary blends of natural/vegetal textile fibres. Microscope method   | ASTM D 629-15   |
| * 14152 | Textiles. Quantitative analysis of binary blends of wool and animal hair. Microscope method   | MIP 258:2008 Rev.0  |
| * 13172 | Speciality fibres and sheep's wool. Qualitative - quantitative compositions   | IWTO-TM-58:2000   |
| * 13173 | Speciality fibres and sheep's wool. Qualitative - quantitative composition  | ISO 17751:2007  |
| * 13174 | Textiles. Qualitative and quantitative proteomic analysis of some animal hair fibres - Part 1: Peptide detection using LC-ESI-MS with protein reduction | ISO 20418-1:2018  |
| * 13175 | Textiles. Qualitative and quantitative proteomic analysis of some animal hair fibres  | ISO 20418-1:2018  |
| * 13102 | Textiles. Identification of fibres in textiles  | AATCC 20-2018 + 16 C.F.R. Part 303  |
| * 14149 | Textiles. Quantitative analysis of blends of textile fibres   | AATCC 20-2018 + 16 C.F.R. Part 303  |

## Textiles, finished products. Composition labelling

| Code    | Description  | Methods                                   |
|---------|--|---|
| * 13110 | Textiles, finished products. Total weight and components | MIP 132:2014 Rev.0                        |
| * 13200 | Fabrics. Composition labelling                           | Reg UE N 1007/2011 + ISO/TR<br>11827:2012 |
| * 13201 | Ready-made garments. Composition labelling               | Reg UE N 1007/2011 + ISO/TR<br>11827:2012 |
| * 13202 | Hoisery. Composition labelling                           | Reg UE N 1007/2011 + ISO/TR<br>11827:2012 |

## Determination of non-fibrous materials

| Code    | Description  | Methods                       |
|---------|--|-------------------------------|
| * 13412 | Textiles. Qualitative detection of sizes                                 | MIP 229:2018 Rev.2            |
| * 12230 | Textiles. Honey dew in cotton. "Orcina" method                           | MIP 261:2008 Rev.1            |
| * 14420 | Textiles. Removal of non-fibre materials added to textiles               | UNI 8046:1980                 |
| * 14421 | Textiles. Removal of non-fibrous materials added to textiles             | UNI EN ISO 1833-1:2011        |
| * 14422 | Textiles. Quantitative analysis of non-fibre materials added to textiles | UNI 8046-1980 + UNI 8048-1980 |
| 14500   | Textiles. Extractable substances with organic solvents                   | UNI 9273:1988                 |
| * 13360 | Wool. Dichloromethane or ether extract                                   | UNI 8476:1983                 |
| * 12261 | Textiles. Extractable content of textiles                                | AATCC 97-2013                 |
| * 14501 | Wool. Determination of dichloromethane soluble matter in combed sliver   | ISO 3074:2014                 |
| 14410   | Fabrics. Content of size in cotton, flax and hemp fabrics                | UNI 5119:1966                 |

## Colour fastness

| Code    | Description  | Methods  |
|---------|--|--|
| 20230   | Textiles. Colour fastness to artificial light: Xenon arc fading lamp test                                    | UNI EN ISO 105-B02:2014 - Exposure cycle A1        |
| * 20233 | Textiles. Colour fastness to artificial light: Xenon arc fading lamp test                                    | UNI EN ISO 105-B02:2014 - Exposure cycle A2        |
| * 20234 | Textiles. Colour fastness to artificial light: Xenon arc fading lamp test                                    | UNI EN ISO 105-B02:2014 - Exposure cycle A3        |
| * 20261 | Textiles. Colour fastness to artificial light: Xenon arc fading lamp test                                    | Method required by customer                        |
| * 20264 | Textiles. Colour fastness and ageing to artificial light at high temperatures - Xenon arc fading lamp test   | UNI EN ISO 105-B06:2004 - Exposure conditions n. 3 |
| * 20265 | Textiles. Colour fastness and ageing to artificial light at high temperatures - Xenon arc fading lamp test   | VDA 75202:2001 Method 2 - Exp. A (FAKRA Method)    |
| * 20262 | Textiles. Colour fastness to artificial light with solution of perspiration                                  | UNI EN ISO 105-B07:2009                            |
| * 20263 | Textiles. Colour fastness to artificial light with saline solution   | Method required by customer                        |
| 20260   | Textiles. Colour fastness to artificial weathering (Xenon arc fading lamp test)                              | UNI EN ISO 105-B04:2000                            |
| * 20259 | Textiles. Colour fastness to artificial weathering (Xenon arc fading lamp test)                              | Method required by customer                        |
| 20100   | Textiles. Colour fastness to hand washing  | UNI 10994:2002                                     |
| 20110   | Textiles. Colour fastness to washing with soap or with soap and soda   | UNI EN ISO 105-C10:2008                            |
| 20011   | Textiles. Colour fastness to domestic and commercial laundering  | UNI EN ISO 105-C06:2010                            |
| 20105   | Textiles. Colorfastness to laundering: Accelerated   | AATCC 61-2013 Test N.1A, Test N.2A                 |
| 20115   | Textiles. Colour fastness to domestic and commercial laundering using a bleach activator at low temperature  | UNI EN ISO 105-C08:2010                            |
| 20120   | Textiles. Colour fastness to domestic and commercial laundering - with a bleach activator at low temperature | UNI EN ISO 105-C09:2008                            |
| * 20471 | Textiles. Colour fastness to enzymatic washing   | MIP 204:2018 Rev.3                                 |

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|---------|---|--|
| * 20460 | Textiles. Colour fastness to simulated stone wash                                     | MIP 204:2018 Rev.3   |
| * 20470 | Textiles. Colour fastness to stone bleach   | MIP 204:2018 Rev.3   |
| * 20000 | Textiles. Colour fastness to not-solved washing soap accumulations                    | MIP 204:2018 Rev.3   |
| 20150   | Textiles. Colour fastness to bleaching: Hypochlorite                                  | UNI EN 20105-N01:1997  |
| * 20151 | Textiles. Colorfastness to sodium hypochlorite bleach in home laundering              | AATCC 188-2017   |
| 20161   | Textiles. Colour fastness to bleaching: Peroxide                                      | UNI EN ISO 105-N02:1997  |
| * 20162 | Textiles. Colour fastness to bleaching  | AATCC 101-2013   |
| 20310   | Textiles. Colour fastness to chlorinated water (swimming-pool water)                  | UNI EN ISO 105-E03:2010  |
| * 20311 | Textiles. Colorfastness to water: Chlorinate pool                                     | AATCC 162-2011 option 1  |
| 20210   | Textiles. Colour fastness to dry cleaning   | UNI EN ISO 105-D01:2010  |
| 20211   | Textiles. Colour fastness to dry cleaning   | AATCC 132-2013   |
| 20390   | Textiles. Colour fastness to organic solvents   | UNI EN ISO 105-X05:1999  |
| 20280   | Textiles. Colour fastness to water  | UNI EN ISO 105-E01:2013  |
| 20285   | Textiles. Colour fastness to water  | AATCC 107-2013   |
| * 20279 | Textiles, Accessories. Colour fastness. Test under specific condition                 | MIP 204:2018 Rev.3   |
| * 20284 | Textiles. Colour fastness to water  | Method required by customer  |
| 20300   | Textiles. Colour fastness to sea water  | UNI EN ISO 105-E02:2013  |
| 20315   | Textiles. Colour fastness to water: sea   | AATCC 106-2013   |
| 20290   | Textiles. Colour fastness to water spotting   | UNI EN ISO 105-E07:2010  |
| * 20291 | Textiles. Colour fastness to water spotting   | AATCC 104-2014   |
| 20295   | Textiles. Colour fastness to water spotting (uphostery fabrics)                       | UNI EN ISO 105-E16:2008  |
| * 20297 | Textiles. Colour fastness to solvent spotting: perchloroethylene                      | AATCC TM 157-2016  |
| 20320   | Textiles. Colour fastness to perspiration   | UNI EN ISO 105-E04:2013  |
| 20325   | Textiles. Colour fastness to perspiration   | AATCC 15:2013  |
| * 20330 | Textiles. Colour fastness to artificial saliva  | DIN 53160-1:2010   |
| * 20331 | Textiles. Colour fastness to perspiration   | DIN 53160-2:2010   |
| 20400   | Textiles. Colour fastness to spotting: Acid   | UNI EN ISO 105-E05:2010 + UNI EN ISO 105-E07:2010                  |
| 20410   | Textiles. Colour fastness to spotting: Alkali   | UNI EN ISO 105-E06:2006 + UNI EN ISO105-E07:2010                   |
| 20480   | Textiles. Assessment of migration of textile colours into polyvinyl chloride coatings | UNI EN ISO 105-X10:2008  |
| * 20450 | Textiles. Colour fastness to oxidizers  | MIP 235:2018 Rev.3   |
| * 20451 | Textiles. Colour fastness to reducers   | MIP 235:2018 Rev.3   |
| * 20281 | Textiles. Colour fastness to hot water  | UNI EN ISO 105-E08:1998  |
| * 20430 | Textiles. Colour fastness to steaming at atmospheric pressure                         | UNI EN ISO 105-E11:1998  |
| 20420   | Textiles. Colour fastness to mercerizing  | UNI EN ISO 105-X04:1999  |
| * 20440 | Textiles. Colour fastness to soda boiling   | UNI EN ISO 105-X06:1999  |
| * 20490 | Textiles. Colour fastness to cross-dyeing on wool                                     | UNI EN ISO 105-X07:1999  |
| 20350   | Textiles. Colour fastness to rubbing  | UNI EN ISO 105-X12:2016  |
| 20355   | Textiles. Colour fastness to crocking   | AATCC TM 8-2016  |
| 20380   | Textiles. Colour fastness to rubbing with organic solvents                            | UNI EN ISO 105-D02:2016  |
| 20205   | Textiles. Colour fastness to dry heat   | UNI EN ISO 105-P01:1997  |
| * 20206 | Textiles. Colour fastness to dry heat   | AATCC 117-2013   |
| 20170   | Textiles. Colour fastness to hot pressing   | UNI EN ISO 105-X11:1998  |
| 20200   | Textiles. Colour fastness to hot pressing   | UNI EN ISO 105-X11:1998  |
| * 20048 | Textiles. Colour fastness to ozone in the atmosphere                                  | UNI EN ISO 105-G03:1999. At relative humidity not greater than 65% |
| * 20049 | Textiles. Colorfastness to ozone in the atmosphere under low humidities               | AATCC TM 109-2016  |
| * 20050 | Textiles. Colour fastness to nitrogen oxides  | UNI EN ISO 105-G01:2016  |
| 20051   | Textiles. Colour fastness. Assessment of the potential to phenolic yellowing          | UNI EN ISO 105-X18:2008  |

|         |   |                             |
|---------|---|-----------------------------|
| * 20286 | Textiles. Colour fastness to artificial urine | Method required by customer |
|---------|---|-----------------------------|

## Dimensional changes

| Code    | Description  | Methods   |
|---------|--|---|
| 25100   | Textiles. Dimensional changes in cold-water immersion  | UNI 9294-5:1988   |
| 25110   | Textiles. Dimensional change in domestic wet washing and drying                                | UNI EN ISO 3759:2011+ UNI EN ISO 5077:2008 + UNI EN ISO 6330:2012   |
| 25113   | Fabrics. Dimensional changes after home laundering   | AATCC 135-2018  |
| 25114   | Garments. Dimensional changes after home laundering  | AATCC 150-2018  |
| * 25115 | Textiles. Skewness change in fabric and garment twist resulting from automatic home laundering | AATCC 179-2017  |
| 25160   | Textiles. Dimensional change in dry cleaning   | UNI EN ISO 3175-2:2018 + UNI EN ISO 3759:2011 + UNI EN ISO 5077:2008                                      |
| 25162   | Textiles. Dimensional changes on dry cleaning in perchloroethylene: machine method             | AATCC TM 158-2016   |
| 25117   | Textiles. Dimensional change in industrial washing and finishing                               | UNI EN ISO 15797:2018 Tab. 4<br>Procedure A (tumble drying) + UNI EN ISO 3759:2011 + UNI EN ISO 5077:2008 |
| * 25118 | Textiles. Dimensional change in industrial washing and finishing                               | UNI EN ISO 15797:2018 Tab. 4<br>Procedure B (tunnel drying) + UNI EN ISO 3759:2011 + UNI EN ISO 5077:2008 |
| * 25180 | Fabrics. Dimensional change in free-steam  | UNI 9294-4:1988 + UNI EN ISO 3759:2011 + UNI EN ISO 5077:2008   |
| * 25181 | Fabrics. Dimensional change in steam pressing. Hoffman press method                            | DIN 53894-2:2018  |
| * 25183 | Fabrics. Dimensional change in steam pressing. Hoffman press method.                           | Method required by customer   |
| * 25200 | Fabrics and garments. Dimensional change in tumbler drying                                     | UNI EN ISO 6330:2012 Appendix P + UNI EN ISO 3759:2011 + UNI EN ISO 5077:2008                             |
| * 25182 | Fabrics and garments. Dimensional change in ironing  | MIP 242:2016 Rev.1  |
| * 25190 | Fabrics, threads and yarns. Dimensional change in oven (hot air oven)                          | MIP 242:2016 Rev.1  |
| * 25111 | Threads and yarns. Dimensional change in washing   | MIP 242:2016 Rev.1  |
| * 25161 | Threads and yarns. Dimensional change to boiling   | MIP 242:2016 Rev.1  |
| * 25163 | Textiles. Industrial sewing threads made wholly or partly from synthetic fibres                | UNI EN 12590:2002 Annex B Method A or B + EC 2006   |

## Instrumental colorimetry

| Code    | Description   | Methods   |
|---------|---|---|
| 35210   | Textiles. Measurement of surface colour   | UNI EN ISO 105-J01:2001                           |
| 35220   | Textiles. Calculation of colour differences                                     | UNI EN ISO 105-J03:2009                           |
| * 35170 | Textiles. Instrumental assessment of relative whiteness                         | UNI EN ISO 105-J02:2001 + UNI EN ISO 105-J01:2001 |
| * 35231 | Textiles. Instrumental assessment of the degree of staining of adjacent fabrics | UNI EN ISO 105-A04:2001                           |
| * 13401 | Fabrics. Assembling of specimen for the preparation of "manichette"             | UNI 9270:1988 Appendix A                          |

## Care labelling

| Code  | Description   | Methods                 |
|-------|---|-------------------------|
| 20011 | Textiles. Colour fastness to domestic and commercial laundering   | UNI EN ISO 105-C06:2010 |
| 20115 | Textiles. Colour fastness to domestic and commercial laundering using a bleach activator at low temperature | UNI EN ISO 105-C08:2010 |

|         |  |  |
|---------|--|--|
| 20120   | Textiles. Colour fastness to domestic and commercial laundering - with a bleach activator at low temperature | UNI EN ISO 105-C09:2008  |
| 20150   | Textiles. Colour fastness to bleaching: Hypochlorite   | UNI EN 20105-N01:1997  |
| 20200   | Textiles. Colour fastness to hot pressing  | UNI EN ISO 105-X11:1998  |
| 20210   | Textiles. Colour fastness to dry cleaning  | UNI EN ISO 105-D01:2010  |
| 25110   | Textiles. Dimensional change in domestic wet washing and drying  | UNI EN ISO 3759:2011+ UNI EN ISO 5077:2008 + UNI EN ISO 6330:2012    |
| 25160   | Textiles. Dimensional change in dry cleaning   | UNI EN ISO 3175-2:2018 + UNI EN ISO 3759:2011 + UNI EN ISO 5077:2008 |
| * 25150 | Textiles. Smoothness appearance of fabrics after repeated home laundering                                    | AATCC 124-2018   |

## Chemical Treatments

| Code    | Description  | Methods   |
|---------|--|---|
| 35155   | Textiles. Domestic washing and drying for textile testing                  | UNI EN ISO 6330:2012  |
| 35174   | Textiles. Domestic washing and drying for textile testing                  | UNI EN ISO 6330:2012  |
| 35168   | Textiles. Domestic washing and drying for textile testing                  | UNI EN ISO 6330:2012  |
| 35175   | Textiles. Domestic washing and drying for textile testing                  | UNI EN ISO 6330:2012  |
| 35176   | Textiles. Domestic washing and drying for textile testing                  | UNI EN ISO 6330:2012  |
| 35169   | Textiles. Domestic washing and drying for textile testing                  | UNI EN ISO 6330:2012  |
| 35173   | Textiles. Domestic washing and drying for textile testing                  | UNI EN ISO 6330:2012  |
| * 35184 | Textiles. Domestic washing and drying for textile testing                  | AATCC 135-2018  |
| * 35185 | Textiles. Domestic washing and drying for textile testing                  | AATCC 135-2018  |
| 35156   | Textiles. Dry cleaning   | UNI EN ISO 3175-2:2018                                      |
| 35177   | Textiles. Dry cleaning   | UNI EN ISO 3175-2:2018                                      |
| 35178   | Textiles. Dry cleaning   | UNI EN ISO 3175-2:2018                                      |
| 35179   | Textiles. Dry cleaning   | UNI EN ISO 3175-2:2018                                      |
| 35180   | Textiles. Dry cleaning   | UNI EN ISO 3175-2:2018                                      |
| 35181   | Textiles. Dry cleaning   | UNI EN ISO 3175-2:2018                                      |
| * 35186 | Textiles. Dry cleaning   | AATCC TM 158-2016   |
| * 35187 | Textiles. Dry cleaning   | AATCC TM 158-2016   |
| 35194   | Textiles. Industrial washing and finishing procedures for testing workwear | UNI EN ISO 15797:2018 Tab. 4<br>Procedure A (tumble drying) |
| * 35195 | Textiles. Industrial washing and finishing procedures for testing workwear | UNI EN ISO 15797:2018 Tab. 4<br>Procedure B (tunnel drying) |
| * 35161 | Textiles. Industrial wet washing   | Method required by customer                                 |
| * 35193 | Textiles. Industrial dry washing   | Method required by customer                                 |
| * 25153 | Textiles. Washing in cold water for 200 continuous hours                   | Method required by customer                                 |
| * 35151 | Textiles. Hand washing with soap and rubbing                               | MIP 277:2018 Rev.3  |
| * 35152 | Textiles. Treatment with solvents  | MIP 277:2018 Rev.3  |
| * 35153 | Textiles. Treatment in chlorinated water                                   | MIP 277:2018 Rev.3  |
| * 35154 | Textiles. Treatment in sea water   | MIP 277:2018 Rev.3  |
| * 35172 | Textiles. Treatment in water   | Method required by customer                                 |
| * 35182 | Textiles. Treatment with cleaning products                                 | Method required by customer                                 |
| * 35167 | Textiles. Treatment by immersion in alkaline solution                      | Method required by customer                                 |
| * 35183 | Textiles, Accessories. Treatment by immersion in acid solution             | Method required by customer                                 |
| * 35171 | Textiles. Treatment in perspiration solution                               | Method required by customer                                 |
| * 35142 | Textiles. Treatment with concentrated oxydant solutions                    | MIP 277:2018 Rev.3  |
| * 35159 | Textiles. Heat treatment   | MIP 277:2018 Rev.3  |
| * 35149 | Textiles. Dry heat treatment with oxydant solutions.                       | MIP 277:2018 Rev.3  |
| * 35158 | Textiles. Steaming treatment   | MIP 277:2018 Rev.3  |

|         |   |   |
|---------|---|---|
| * 14740 | Plastics. Determination of the effects of exposure to damp heat (change in dimensions and appearance) | UNI EN ISO 4611:2011 (only 4.2.1 Damp heat) |
| * 14750 | Rubber or plastics coated fabrics. Accelerated ageing tests. Environmental ageing                     | UNI EN 12280-3:2003                         |
| * 14760 | Rubber or plastics coated fabrics. Accelerated ageing tests. Heat ageing                              | UNI EN 12280-1:2000 (only method 1)         |
| * 14761 | Textiles. Ageing at low temperature   | Method required by customer                 |
| * 35157 | Textiles, Leather, others materials. Ageing to artificial light with Xenon arc fading lamp            | Method required by customer                 |
| * 35163 | Textiles. Ageing to artificial light at high temperature (FAKRA method)                               | VDA 75202:2001                              |
| * 35162 | Textiles, Leather, others materials. Ageing to weathering   | Method required by customer                 |
| * 35165 | Plastics. Methods of exposure to laboratory light sources. Part 2: Xenon-arc lamps                    | UNI EN ISO 4892-2:2013                      |
| * 35143 | Textiles. Exposure to nitrogen oxides   | MIP 283:2018 Rev.3                          |
| * 35147 | Textiles. Selective elimination of textile fibres   | MIP 257:2012 Rev.2                          |
| * 35148 | Textiles. Selective elimination of resins and coating   | UNI EN ISO 1833-1:2011 Annex A              |
| * 35188 | Footwear. Metallic accessories. Corrosion resistance  | UNI EN ISO 22775:2005 Method 2              |
| * 35190 | Textiles. Treatment with nitrogen oxides  | MIP 277:2018 Rev.3                          |
| * 35191 | Textiles. Treatment to ozone in the atmosphere under low humidities                                   | MIP 277:2018 Rev.3                          |
| * 35192 | Accessories. Corrosion resistance. Corrosion test with synthetic sweat                                | NF S 80-772:2010 (only 4.2.3)               |
| * 14741 | Textiles, Accessories. Treatment to temperature and humidity variations                               | Method required by customer                 |
| * 14742 | Rubber or plastics-coated fabrics. Accelerated-ageing tests   | ISO 1419:2019 Method B (General method)     |
| * 14743 | Rubber or plastics-coated fabrics. Accelerated-ageing tests   | ISO 1419:2019 Method C (Tropical test)      |

## Dyeing treatments

| Code    | Description                                       | Methods            |
|---------|---|--------------------|
| * 35145 | Textiles. Enzyme desizing                         | MIP 203:2018 Rev.3 |
| * 35150 | Textiles. Scouring                                | MIP 203:2018 Rev.3 |
| * 35160 | Textiles. Bleaching                               | MIP 203:2018 Rev.3 |
| * 35141 | Textiles. Discharge of original dye               | MIP 203:2018 Rev.3 |
| * 35121 | Textiles. Dyeing with acid dyes                   | MIP 205:2018 Rev.3 |
| * 35123 | Textiles. Dyeing with cationic dyes               | MIP 205:2018 Rev.3 |
| * 35111 | Textiles. Dyeing with direct dyes                 | MIP 205:2018 Rev.3 |
| * 35122 | Textiles. Dyeing with disperse dyes               | MIP 205:2018 Rev.3 |
| * 35120 | Textiles. Dyeing with reactive dyes               | MIP 205:2018 Rev.3 |
| * 35124 | Textiles. Preparation and dyeing of aramid fibres | MIP 247:2018 Rev.4 |
| * 35146 | Textiles. Soaping                                 | MIP 205:2018 Rev.3 |
| * 35140 | Textiles. Stripping treatment                     | MIP 203:2018 Rev.3 |



## MATERIALS. THERMAL CHARACTERIZATION

| <b>Code</b> | <b>Description</b>   | <b>Methods</b>                                    |
|-------------|--|---|
| * 14511     | Plastics. Differential scanning calorimetry. Enthalpy and temperature of melting         | UNI EN ISO 11357-3:2018                           |
| * 14512     | Plastics. Differential scanning calorimetry. Enthalpy and temperature of crystallization | UNI EN ISO 11357-3:2018                           |
| * 14513     | Plastics. Differential scanning calorimetry. Glass transition temperature                | UNI EN ISO 11357-2:2014                           |
| * 14514     | Plastics. Thermogravimetry. Mass variation and temperature of decomposition              | UNI EN ISO 11358-1:2014                           |
| * 14515     | Plastics. Differential scanning calorimetry  | UNI EN ISO 11357-2:2014 + UNI EN ISO 11357-3:2018 |
| * 14516     | Textiles containing phase change materials (PCM). Heatstorage and release capacity       | UNI EN ISO 11357-1:2016 + UNI EN ISO 11357-3:2018 |
| * 70612     | Materials. Resistance to Thermal Transmission  | ASTM E1530-11(2016)                               |



## WATER AND INDUSTRIAL WASTEWATER

### Wastewater, superficial water, underground water, drinking water and liquid wastes

| Code    | Description  | Methods  |
|---------|--|--|
| * 80104 | Wastewater, superficial water, underground water, drinking water. Temperature  | APAT IRSA-CNR - Manual and Guidelines 29:2003 - Method 2100                          |
| * 80105 | Water and industrial wastewater. Colour  | APAT IRSA-CNR - Manual and Guidelines 29:2003 - Method 2020/B                        |
| 80120   | Wastewaters, superficial waters. Ammoniacal nitrogen   | APAT CNR IRSA 4030 A2 Man 29 2003  |
| 80195   | Underground water, drinking water. Ammonia Nitrogen  | APAT CNR IRSA 4030 A1 Man. 29 2003   |
| * 80475 | Wastewater, superficial water, underground water, drinking water. Sedimented solids  | APAT IRSA-CNR - Manual and Guidelines 29:2003 - Method 2090/C                        |
| * 80100 | Water and industrial wastewater. pH  | APAT IRSA-CNR - Manual and Guidelines 29:2003 - Method 2060                          |
| * 80263 | Superficial water, ground water and drinking water. Total hardness   | APAT IRSA-CNR - Manual and Guidelines 29:2003 - Method 2040 A                        |
| * 80264 | Natural water (industrial water and drinking water). Total hardness  | APAT IRSA-CNR - Manual and Guidelines 29:2003 - Method 2040 B                        |
| * 80111 | Wastewater, superficial water, underground water, drinking water. Conductivity   | APAT IRSA-CNR - Manual and Guidelines 29:2003 - Method 2030                          |
| 80310   | Wastewaters, superficial waters, groundwaters, drinking waters. Phosphorus, Total phosphorus   | APAT CNR IRSA 4110 A2 Man.29 2003  |
| 80130   | Wastewaters, superficial waters, groundwaters, drinking waters. Nitrous nitrogen, Nitrites   | APAT CNR IRSA 4050 Man 29 2003   |
| * 80140 | Water and industrial wastewater. Nitrate nitrogen  | APAT IRSA-CNR - Manual and Guidelines 29:2003 - Method 4040/A1                       |
| 80141   | Wastewaters, superficial waters, groundwaters, drinking waters. Sulphides  | APHA Standard Methods for Examination of Water and Wastewater ed 23rd 2017 4500 S2-D |
| * 80110 | Water and industrial wastewater. Chemical oxygen demand  | APAT IRSA-CNR - Manuale e Linee Guida 29:2003 - Metodo 5130<br>ISO 15705:2002        |
| * 80115 | Water and industrial wastewater. Biochemical oxygen demand   | APAT IRSA-CNR - Manual and Guidelines 29:2003 - Method 5120/B1                       |
| * 80116 | Water and industrial wastewater. Total organic carbon (TOC)  | APAT IRSA-CNR - Manual and Guidelines 29:2003 - Method 5040                          |
| * 80117 | Water quality. Determination of adsorbable organic halogens (AOX)  | ISO 9562:2004  |
| * 80118 | Water quality. Determination of selected alkylphenols. Part 1: Method for non-filtered samples using liquid-liquid extraction and gas chromatography with mass selective detection | ISO 18857-1:2005   |
| * 80119 | Wastewater. Determination PFOS/PFOA  | MIP 139:2015 Rev.0   |
| * 80121 | Water and industrial wastewater. Perfluorinated compounds - complete offer   | MIP 139:2015 Rev.0   |
| * 80220 | Water and industrial wastewater. Cadmium   | APAT IRSA-CNR - Manual and Guidelines 29:2003 - Method 3020                          |
| * 80360 | Water and industrial wastewater. Cobalt  | APAT IRSA-CNR - Manual and Guidelines 29:2003 - Method 3020                          |
| 80190   | Wastewaters, superficial waters. Chromium (VI)   | APAT CNR IRSA 3150 C Man 29 2003   |
| * 80200 | Water and industrial wastewater. Total chromium  | APAT IRSA-CNR - Manual and Guidelines 29:2003 - Method 3020                          |
| * 80350 | Water and industrial wastewater. Mercury   | APAT IRSA-CNR - Manual and Guidelines 29:2003 - Method 3200-A1                       |
| * 80240 | Water and industrial wastewater. Nickel  | APAT IRSA-CNR - Manual and Guidelines 29:2003 - Method 3020                          |

|         |   |   |
|---------|---|---|
| * 80250 | Water and industrial wastewater. Lead   | APAT IRSA-CNR - Manual and Guidelines 29:2003 - Method 3020   |
| * 80260 | Water and industrial wastewater. Copper   | APAT IRSA-CNR - Manual and Guidelines 29:2003 - Method 3020   |
| * 80261 | Wastewater, superficial water, ground water and drinking water. Calcium   | APAT IRSA-CNR - Manual and Guidelines 29:2003 - Method 3010 B + APAT IRSA-CNR - Manual and Guidelines 29:2003 - Method 3020 |
| * 80262 | Wastewater, superficial water, ground water and drinking water. Magnesium   | APAT IRSA-CNR - Manual and Guidelines 29:2003 - Method 3010 B + APAT IRSA-CNR - Manual and Guidelines 29:2003 - Method 3020 |
| * 80150 | Wastewater, superficial water, underground water, drinking water. Total Nitrogen                                  | UNI 11658:2016  |
| * 80171 | Wastewater, superficial water, underground water, drinking water. Alkylphenol                                     | ISO 18857-1:2005  |
| * 80112 | Wastewater, superficial water, underground water, drinking water. Alkylphenol Etoxylates (APEO)                   | ISO 18857-2:2009  |
| * 80450 | Wastewater, superficial water, underground water, drinking water. Total hydrocarbon                               | ISO 9377-2:2002 + EPA 5021A 2014 + EPA 8260D 2018   |
| * 80460 | Wastewater, superficial water, underground water, drinking water. Oil and Grease                                  | ASTM D7678-17   |
| 80199   | Wastewater, superficial water, underground water, drinking water. Grease and Oils                                 | APAT CNR IRSA 5160 A1 Man. 29 2003  |
| 80470   | Wastewaters, superficial waters, groundwaters, drinking waters. Total suspended solids (total suspended material) | UNI EN 872:2005   |
| * 80106 | Wastewater, superficial water, underground water, drinking water. Polycyclic aromatic hydrocarbon                 | APAT CNR IRSA 5060 Man.29 2003  |
| * 80107 | Wastewater and superficial water. Metals, total   | UNI EN ISO 15587-2:2002 + UNI EN ISO 11885:2009   |
| 80201   | Wastewater, superficial water, underground water, drinking water. Metals, total                                   | UNI EN ISO 15587-2:2002 + UNI EN ISO 17294-2:2016   |
| * 80174 | Underground water, drinking water. Metals, total (ICP-OES)  | UNI EN ISO 11885:2009   |
| 80176   | Underground water, drinking water. Metals, total (ICP-MS)   | UNI EN ISO 17294-2:2016   |
| * 80108 | Wastewater, superficial water, underground water, drinking water. Sulfite   | UNI EN ISO 10304-3:2000   |
| * 80109 | Wastewater, superficial water, underground water, drinking water. Anions  | UNI EN ISO 10304-1:2009   |
| * 80180 | Wastewater, superficial water, underground water, drinking water. Phenols   | APAT CNR IRSA 5070B Man.29 2003   |
| * 80170 | Wastewater, superficial water, underground water, drinking water. Cyanide   | EPA 9014:2014   |
| * 80320 | Wastewater, superficial water, underground water, drinking water. Chromium VI                                     | EPA 7199:1996   |
| * 80375 | Wastewater, superficial water, underground water, drinking water. Glycols   | EPA 3510C 1996 + EPA 8270E 2018   |
| * 80113 | Wastewater, superficial water, underground water, drinking water. Chlorinated paraffins                           | EPA 3510C 1996 + EPA 8270E 2018   |
| * 80230 | Wastewater, superficial water. Mercury  | UNI EN ISO 15587-2:2002 + UNI EN ISO 17294-2:2016   |
| * 80114 | Wastewater, superficial water. Volatile organic compound (VOC)  | EPA 5021A 2014 + EPA 8260D 2018   |
| * 80122 | Wastewater, superficial water, underground water, drinking water. Chlorophenol                                    | EPA 3510C 1996 + EPA 8270E 2018   |
| * 80123 | Wastewater, superficial water, underground water, drinking water. Organotin compounds                             | UNI EN ISO 17353:2006   |
| * 80124 | Wastewater, superficial water, underground water, drinking water. Dyes-Azo (forming restricted amines)            | EPA 8270E 2018 (Ref. ISO 14362-1:2017)  |
| * 80125 | Wastewater, superficial water, underground water, drinking water. Dyes - Disperse (Sensitizing)                   | EPA 3510C 1996 + EPA 8321B 2007   |
| * 80126 | Wastewater, superficial water, underground water, drinking water. Dyes - Carcinogenic                             | EPA 3510C 1996 + EPA 8321B 2007   |
| * 80127 | Wastewater, superficial water, underground water, drinking water. Phtalates                                       | EPA 3510C 1996 + EPA 8270E 2018   |
| * 80128 | Wastewater, superficial water, underground water, drinking water. Perfluorinated Chemicals                        | EPA/600/R-08/092 METHOD 537   |

|         |   |   |
|---------|---|---|
| * 80129 | Wastewater, superficial water, underground water, drinking water. Chlorinated benzenes and toluenes           | EPA 3510C 1996 + EPA 8270E 2018   |
| * 80131 | Wastewater, superficial water, underground water, drinking water. Brominated and Chlorinated Flame retardants | Internal Method (Ref. UNI EN 71-10:2006 Par. 8.1.1 + UNI EN 71-11:2006 Par. 5.2)      |
| * 80152 | Wastewater, superficial water, underground water, drinking water. Colour                                      | UNI EN ISO 7887:2012  |
| 80153   | Wastewater, superficial water, underground water, drinking water. pH  | UNI EN ISO 10523:2012   |
| * 80154 | Wastewater, superficial water, underground water, drinking water. Phosphorous, Total                          | UNI EN ISO 15587-2:2002 + UNI EN ISO 11885:2009                                       |
| 80156   | Wastewaters, superficial waters, groundwaters, drinking waters. COD (Chemical Oxygen Demand)                  | ISO 15705:2002  |
| * 80157 | Wastewater, superficial water, underground water, liquid wastes. Biochemical Oxygen Demand (BOD5)             | APHA Standard Methods for the examination of water and wastewater, ed 23rd 2017 5210D |
| * 80158 | Wastewater, superficial water. Total hardness (from calculation)  | UNI EN ISO 15587-2:2002 + UNI EN ISO 11885:2009                                       |
| * 80159 | Underground water, drinking water. Total hardness (from calculation)  | UNI EN ISO 11885:2009   |
| * 80161 | Wastewater, superficial water, underground water, drinking water. Phenols                                     | APAT CNR IRSA 5070A2 Man.29 2003  |
| * 80166 | Wastewater, superficial water, underground water, drinking water. Formamide                                   | EPA 5021A 2014 + EPA 8260D 2018   |
| * 80376 | Underground water, drinking water. Volatile organic compounds (VOC)   | EPA 5021A:2014 + EPA 8260D:2018   |
| * 80377 | Wastewaters, superficial waters, groundwaters, drinking waters. Hydrocarbon oil index                         | ISO 9377-2:2002   |

## Special Offer

| Code    | Description   | Methods  |
|---------|---|--|
| * 80343 | Water and industrial waste water. Chemical Test<br>Natural water (industrial water and drinking water). Total hardness<br><br>Water and industrial wastewater. Cadmium<br><br>Water and industrial wastewater. Lead<br><br>Water and industrial wastewater. Mercury<br><br>Wastewaters, superficial waters, groundwaters, drinking waters. Nitrous nitrogen, Nitrites<br>Water and industrial wastewater. Nitrate nitrogen<br><br>Wastewaters, superficial waters. Ammoniacal nitrogen<br>Water and industrial wastewater. pH<br><br>Wastewater, superficial water, underground water, drinking water. Conductivity | APAT IRSA-CNR - Manual and Guidelines 29:2003 - Method 2040 B<br><br>APAT IRSA-CNR - Manual and Guidelines 29:2003 - Method 3020<br><br>APAT IRSA-CNR - Manual and Guidelines 29:2003 - Method 3020<br><br>APAT IRSA-CNR - Manual and Guidelines 29:2003 - Method 3200-A1<br><br>APAT CNR IRSA 4050 Man 29 2003<br><br>APAT IRSA-CNR - Manual and Guidelines 29:2003 - Method 4040/A1<br><br>APAT CNR IRSA 4030 A2 Man 29 2003<br><br>APAT IRSA-CNR - Manual and Guidelines 29:2003 - Method 2060<br><br>APAT IRSA-CNR - Manual and Guidelines 29:2003 - Method 2030 |
| * 63550 | Water and industrial wastewater. Special quotation DETOX  | Cfr. methods of the single substances  |
| * 80233 | Water and industrial wastewater. Conventional parameters ZDHC in accordance with Appendix A, Tables 1A and 1B Wastewater Guidelines Version 1.1 - 2019  | Wastewater Guidelines Version 1.1 - 2019   |
| * 80234 | Water and industrial wastewater. MRS� parameters ZDHC in accordance with Appendix A, Tables 2A-2N Wastewater Guidelines Version 1.1 - 2019  | Wastewater Guidelines Version 1.1 - 2019   |

## SOILS, WASTES

### Soils, wastes, sludges, sediments

| Code    | Description   | Methods   |
|---------|---|---|
| * 80132 | Soils, wastes, sludges, sediments. Metals, total                                      | UNI EN 13657:2004 + UNI EN ISO 11885:2009                                       |
| 80319   | Soils, wastes, sludges, sediments. Metals, total                                      | UNI EN 13657:2004 + UNI EN ISO 17294-2:2016                                     |
| 80202   | Muds, wastes. Total metals in eluate from leaching test                               | UNI 10802:2013 (App. A p.A.2) + UNI EN 12457-2:2004 + UNI EN ISO 17294-2:2016   |
| 80133   | Soils, wastes, sludges, sediments. Chromium VI  | CNR IRSA 16 Q 64 Vol 3 1986   |
| * 80134 | Soils, wastes, sludges, sediments. Alkylphenol  | EPA 3550C 2007 + EPA 8270E 2018   |
| * 80135 | Soils, wastes, sludges, sediments. Alkylphenol Etoxylates (APEO)                      | EPA 3550C 2007 + EPA 8321B 2007   |
| * 80136 | Soils, wastes, sludges, sediments. Chlorobenzenes and Chlorotoluenes                  | EPA 3550C 2007 + EPA 8270E 2018   |
| * 80137 | Soils, wastes, sludges, sediments. Chlorophenols                                      | EPA 3550C 2007 + EPA 8270E 2018   |
| * 80138 | Soils, wastes, sludges, sediments. Dyes-Azo (forming restricted amines)               | EPA 8270E 2018 (Ref. ISO 14362-1:2017)  |
| * 80139 | Soils, wastes, sludges, sediments. Dyes - Disperse (Sensitizing)                      | EPA 3550C 2007 + EPA 8321B 2007   |
| * 80142 | Soils, wastes, sludges, sediments. Dyes - Carcinogenic                                | EPA 3550C 2007 + EPA 8321B 2007   |
| * 80143 | Soils, wastes, sludges, sediments. Dyes - Brominated and Chlorinated flame retardants | EPA 3550C 2007 + EPA 8270E 2018   |
| * 80144 | Soils, wastes, sludges, sediments. Glycols  | EPA 3550C 2007 + EPA 8270E 2018   |
| * 80145 | Soils, wastes, sludges, sediments. Halogenated Solvents                               | EPA 5021A 2014 + EPA 8260D 2018   |
| * 80146 | Soils, wastes, sludges, sediments. Organotin Compounds                                | ISO 23161:2009  |
| * 80147 | Soils, wastes, sludges, sediments. Perfluorinated Chemicals                           | ASTM D7968-14   |
| * 80148 | Soils, wastes, sludges, sediments. Phtalates  | EPA 3550C 2007 + EPA 8270E 2018   |
| * 80149 | Soils, wastes, sludges, sediments. Polycyclic aromatic hydrocarbon                    | EPA 3545A 2007 + EPA 8270E 2018   |
| * 80151 | Soils, wastes, sludges, sediments. Volatile organic compounds (VOC)                   | EPA 5021A 2014 + EPA 8260D 2018   |
| * 80162 | Soils. Total Hydrocarbon C10-C40 (C12-C40, C>12)                                      | ISO 16703:2004  |
| * 80163 | Wastes. Total Hydrocarbon C10-C40 (C12-C40, C>12), Mineral oil C10-C40                | UNI EN 14039:2005   |
| * 80164 | Soils, sludges, wastes. Light Hydrocarbon C<10 (C<12)                                 | EPA 5021A 2014 + EPA 8260D 2018   |
| 80209   | Wastes, sludges. pH in eluate from leaching test                                      | UNI 10802:2013 (App. A Point A.2) + UNI EN 12457-2:2004 + UNI EN ISO 10523:2012 |
| * 80221 | Soils, wastes, sludges, sediments. Residue at 105°C                                   | CNR IRSA 2 Q. 64 Vol 2 1984   |
| * 80222 | Soils, wastes, sludges, sediments. Fixed Solids at 600°C                              | CNR IRSA 2 Q. 64 Vol 2 1984   |
| * 80223 | Soils, wastes, sludges, sediments. Volatile Solids at 600°C                           | CNR IRSA 2 Q. 64 Vol 2 1984   |
| * 80323 | Soils. Humidity   | DM 13/09/1999 GU n°248 21/10/1999 Met.II.2                                      |
| * 80324 | Soils. Rock fragments or skeleton   | DM 13/09/1999 GU n°248 21/10/1999 Met.II.1                                      |
| * 80219 | Soils, wastes, sludges, sediments. Asbestos in bulk materials                         | EPA600/R-93/116   |
| * 80318 | Soils, wastes, sludges, sediments. Asbestos in bulk materials (SEM)                   | DM 06/09/1994 GU n. 288 10/12/1994 Annex 1B                                     |
| * 80378 | Muds, wastes. Anions in eluates from leaching test in water                           | UNI 10802:2013 (App. A p.A.2) + UNI EN 12457-2:2004 + UNI EN ISO 10304-3:2000   |
| * 80218 | Waste, sludge, soil, sediment. PCB  | EPA 3545A 2007 + EPA 8270E 2018   |

### Special Offer

| Code    | Description  | Methods   |
|---------|--|---|
| * 80351 | Wastes. Classification and Characterization - Analytical Protocol for non-hazardous waste (Residual at 105°C, Fixed solids at 600°C, Al, As, B, Ba, Cd, Co, Cr, Cu, Hg, Mn, Ni, Pb, Sb, Se, Sn, V, Zn, Mineral Oils C10-C40)   | D.Lgs 3 april 2006, n. 152 Annex D to Fourth Part   |
| * 80352 | Wastes. Classification and Characterization - Analytical Protocol for hazardous or non-hazardous waste with specular code (Residual at 105°C, Fixed solids at 600°C, Al, As, B, Ba, Cd, Co, Cr, Cu, Hg, Mn, Ni, Pb, Sb, Se, Sn, V, Zn, Mineral Oils C10-C40, PAH, Volatile organic compound and solvent) | D.Lgs 3 april 2006, n. 152 Annex D to Fourth Part   |
| * 80355 | Wastes, sludge, soils, sediments. Eluate from leaching test in water for wastes recovery   | Ministerial Decree of 5 February 1998, modified by Ministerial Decree of 5 April 2006, n. 186 - Annex 3 |
| * 80356 | Wastes, sludge, soils, sediments. Eluate from leaching test in water for landfilling   | Ministerial Decree 27 September 2010  |
| * 80208 | Soils, wastes, sludges, sediments. Compliance testing for admissibility in landfills   | DM 27/09/2010 Table 2   |
| * 80353 | Soils, sediments. Analytical protocol for excavated earth and rocks: Italian D.P.R. 120/2017 minimum set   | D.P.R. 120/2017   |
| * 80354 | Soils, sediments. Analytical protocol for excavated earth and rocks: Italian D.P.R. 120/2017 complete set  | D.P.R. 120/2017   |
| * 80235 | Sludges and wastes. Specific parameters for sewage sludge in accordance with Appendix A, Table 3 Wastewater Guidelines Version 1.1 - 2019  | Wastewater Guidelines Version 1.1 - 2019  |



## WORKPLACE AIR

### Tests

| Code    | Description                                 | Methods                |
|---------|---|------------------------|
| * 80502 | Workplace Air. Particulate, respirable dust | UNICHIM Method 2010/06 |
| * 80501 | Workplace Air. Particulate, inalable dust   | UNICHIM Method 1998/13 |
| * 80519 | Workplace Air. Glycols                      | NIOSH 2549             |
| * 80515 | Workplace Air. Aminoethanol compounds       | NIOSH 3509             |
| * 80505 | Workplace Air. Soluble metals               | ASTM D7035-16          |
| * 80508 | Workplace Air. Metals, total                | NIOSH 7034             |
| * 80518 | Workplace Air. Hexavalent Chromium          | NIOSH 7600             |
| * 80503 | Workplace Air. Oil mist, mineral            | NIOSH 5026             |
| * 80513 | Workplace Air. Acids, volatile inorganic    | OSHA ID126             |
| * 80504 | Workplace Air. Organic vapours              | OSHA ID07 2017         |
| * 80516 | Workplace Air. Carbon monoxide              | OSHA ID 210 1991       |

## ACCESSORIES AND PARTICULAR MATERIALS

### Hosiery

| Code    | Description                                 | Methods        |
|---------|---|----------------|
| * 17100 | Graduated compression hosiery per size      | BS 661210:2018 |
| * 17101 | Graduated compression hosiery knee per size | BS 661210:2018 |

### Zippers

| Code    | Description  | Methods  |
|---------|--|--|
| 14257   | Open-end zippers. Resistance of the chain in the bottom stop system to crosswise tensile strength    | NF G 91-005 1984 part 4.7                                  |
| 14258   | Closed-end zippers. Resistance of the bottom stop to slider action to crosswise tensile strength     | NF G 91-005 1984 part 4.6                                  |
| 14259   | Zippers. Resistance of the top stops or bridge stop to slider action                                 | NF G 91-005 1984 part 4.5                                  |
| 14260   | Zippers. Resistance of chain to crosswise/lateral tensile strength                                   | NF G 91-005 1984 part 4.2                                  |
| 14261   | Zippers. Maximum force to displace the slider on the zipper while opening and closing                | NF G 91-005 1984 part 4.9                                  |
| 14262   | Zippers. Resistance of crosswise of blocking system of slider on the slide to tensile strength       | NF G 91-005 1984 part 4.4                                  |
| * 14294 | Zippers. Resistance to pull of tensile strength  | NF G 91-005 1984 part 4.3                                  |
| * 14253 | Closed-end zippers. Resistance of chain in the bottom stop   | ASTM D 2061-07(2013) (parts from 1 to 8 and 19.3)          |
| * 14254 | Closed-end zippers. Resistance of the bottom stop to slider action to crosswise tensile strength     | ASTM D 2061-07(2013) (parts from 1 to 8 and 19.4)          |
| * 14255 | Closed-end zippers. Resistance of the top stops  | ASTM D 2061-07(2013) (parts from 1 to 8 and 19.1)          |
| * 14256 | Closed-end zippers. Resistance of the bridge stop to slider action to crosswise tensile strength     | ASTM D 2061-07(2013) (parts from 1 to 8 and 19.5)          |
| * 14285 | Zippers. Resistance of chain to crosswise/lateral tensile strength                                   | ASTM D 2061-07(2013) (parts from 1 to 8 and 10.1)          |
| * 14287 | Zippers. Resistance of single elements to crosswise tensile strength                                 | ASTM D 2061-07(2013) (parts from 1 to 8 and 10.2)          |
| * 14288 | Closed-end zippers. Resistance of the bottom stop  | ASTM D 2061-07(2013) (parts from 1 to 8 and 19.2)          |
| * 14293 | Zippers. Resistance of crosswise of blocking system of slider on the slide to tensile strength       | ASTM D 2061-07(2013) (parts from 1 to 8 and from 92 to 99) |
| * 14295 | Open-end zippers. Longitudinal tensile strength of the separable pin of bottom stop                  | ASTM D 2061-07(2013) (parts from 1 to 8 and 27.1)          |
| * 14296 | Open-end zippers. Resistance of the chain in the bottom stop system to crosswise tensile strength    | ASTM D 2061-07(2013) (parts from 1 to 8 and 27.3)          |
| * 14297 | Zippers. Resistance to pull of tensile strength  | ASTM D 2061-07(2013) (parts from 1 to 8 and from 72 to 80) |
| * 14762 | Zippers. Change in length after washing  | NF G 91-010 1979   |
| * 14800 | Zippers. Strength of puller attachment   | UNI EN 16732:2016 Annex B                                  |
| * 14801 | Closed-end zippers. Resistance to transversal strength of the bottom-stop system                     | UNI EN 16732:2016 Annex C                                  |
| * 14802 | Zippers. Resistance of top stop or slider body to transversal strength                               | UNI EN 16732:2016 Annex D                                  |
| * 14803 | Zippers. Resistance of chain to transversal/lateral strength   | UNI EN 16732:2016 Annex G                                  |
| * 14804 | Open-end zippers. Resistance of bottom-stop system to tensile strength                               | UNI EN 16732:2016 Annex H                                  |
| * 14805 | Zippers. Resistance to pull of tensile strength  | UNI EN 16732:2016 Annex I                                  |
| * 14806 | Open-end zippers. Resistance of top stop to movement of slider on single stringer through the puller | UNI EN 16732:2016 Annex J                                  |

### Touch and close fasteners

| Code    | Description   | Methods           |
|---------|---|-------------------|
| 14221   | Touch and close fasteners. Overall and effective widths of tapes and the effective width of closure | UNI EN 12240:1998 |
| * 14222 | Touch and close fasteners. Longitudinal shear strength  | UNI EN 13780:2003 |
| * 14223 | Touch and close fasteners. Peel strength  | UNI EN 12242:2000 |

### Elastic tapes

| Code    | Description            | Methods               |
|---------|------------------------|-----------------------|
| * 14228 | Fabrics. Stretch       | ASTM D 4964-12 (2016) |
| * 14218 | Elastic tapes. Stretch | UNI EN 14704-3:2007   |

### Buttons

| Code    | Description   | Methods               |
|---------|---|-----------------------|
| * 14770 | Plastic buttons. Impact resistance                      | ASTM D5171-15         |
| * 14771 | Snap fasteners. Resistance to unsnapping                | ASTM D 4846-96 (2016) |
| * 14782 | Snap fasteners. Holding strength of prong-ring attached | ASTM D7142-05 (2016)  |

### Feathers and downs

| Code    | Description  | Methods  |
|---------|--|--|
| * 14200 | Feathers and downs. Quantitative composition. Manual method  | UNI EN 12131:2018 + UNI EN 1885:2018   |
| * 14201 | Feathers and downs. Qualitative and quantitative composition   | UNI EN 12131:2018 + UNI EN 1885:2018   |
| * 14206 | Feathers and downs. Qualitative and quantitative composition   | ASTM D4524-86 (Reapproved 2012)  |
| * 14202 | Feathers and downs. Composition labelling (for components and species)   | UNI EN 12934:2001 + UNI EN 1885:2018   |
| * 14207 | Feathers and downs. Composition labelling (for components)   | UNI EN 12934:2001  |
| * 14203 | Feathers. Feather frailty (manual method)  | UNI 9212-7:1988  |
| * 14205 | Feather and down. Specification for feather and down filled bedding artiche - Walz-formula (density per cm, yarn count, weaves, composition) | UNI EN 13186:2005 + UNI EN 1049-2:1996 + UNI 9275:1988 + UNI 8099:1980 + AATCC Method 20-2007 + ASTM D276-00a + Dir CE 121/2008 14/01/2009 GU EC L 19 23/01/2009 + Dir CE 121/2009 14/09/2009 GU CE L 242/13 14/09/2009 Dir CE 73/1996 16/12/1996 GU CE L32 3/02/1997 + Dir CE 2/2006 6/01/2006 GU CE L5/10 10/01/2006 + Dir CE 4/2007 2/02/2007 GU L28/14 3/02/2007 + Dir CE 122/2009 14/09/2009 GU CE L242/14 15/09/2009 UNI EN ISO 1833:2011 parts 1, 5, 8, 9, 12, 13, 14, 15, 16, 17, 19, 24 (except 2); UNI EN ISO 1833:2013 parts 22, 25, 26; UNI EN ISO 1833:2017 parts 4, 7, 11; UNI EN ISO 1833:2019 parts 3, 6, 10, 18, 20, 21 |
| 14325   | Feathers and downs. Loss of feathers and downs   | UNI EN 12132-1:2000  |
| * 14326 | Feathers and downs. Loss of feathers and downs   | GB/T 14272-2011 Appendix E   |
| 14623   | Feathers and downs. Turbidity of the aqueous extract   | UNI EN 1164:2000   |
| 14621   | Feathers and downs. Oxygen index number  | UNI EN 1162:1998   |
| 14624   | Feathers and downs. Oil and fat content  | UNI EN 1163:1998   |



|         |  |                           |
|---------|--|---------------------------|
| * 14625 | Feathers and downs. Water soluble chlorides  | UNI EN 1165:1998          |
| * 62473 | Feather filling materials. pH of aqueous extract   | UNI 9212-9:1987           |
| * 62474 | Feathers and downs. Abnormal odour   | UNI 9212-8:2003           |
| 90300   | Feathers and downs. Mesophil aerobic bacteric count selective method and count agar plate method | UNI EN 1884:2000 par. 6.4 |
| * 90310 | Feathers and downs. Quantitative determination of Faecal streptococci count                      | UNI EN 1884:2000 par. 6.5 |

## Fishing nets

| Code    | Description   | Methods                   |
|---------|---|---------------------------|
| * 14471 | Fishing nets. Linear density (count) Skein method                                 | UNI 9279:1988             |
| * 14472 | Fishing nets. Tensile strength. Methods for fishing of knitted piece with knot    | UNI 8022:1979 + A157:1985 |
| * 14473 | Fishing nets. Tensile strength. Methods for fishing of knitted piece without knot | UNI 8022-2:1985           |
| * 14474 | Fishing nets. Breaking force of knotted threads                                   | UNI EN ISO 1805:2007      |
| * 14475 | Fishing nets. Tensile strength of threads   | UNI EN ISO 1805:2007      |
| * 14476 | Fishing nets. Thread elongation   | UNI 8878:1986             |
| * 14477 | Fishing nets. Linear density (yarn count). Threads from fabric                    | UNI 8747:1986             |

## Agricultural nets

| Code    | Description  | Methods       |
|---------|--|---------------|
| * 13124 | Agricultural nets. Linear density (yarn count). Skein method       | UNI 9735:1991 |
| * 14341 | Agricultural nets. Mass per unit area                              | UNI 9401:1989 |
| * 14342 | Agricultural nets. Number of threads per unit of length            | UNI 9403:1989 |
| * 14343 | Agricultural nets. Tensile strenght and elongation                 | UNI 9405:1989 |
| * 14344 | Agricultural nets. Length and width                                | UNI 9404:1989 |
| * 14345 | Agricultural nets. Linear density (yarn count). Yarns from fabrics | UNI 9402:1989 |

## NON-ACTIVE MEDICAL DEVICES

### Absorbent cotton gauzes and absorbent cotton and viscose gauzes - UNI EN 14079:2004 specifications

| Code    | Description  | Methods                      |
|---------|--|------------------------------|
| 14466   | Non-active medical devices. Tensile strenght                               | UNI EN 14079:2004 point 5.8  |
| 14464   | Non-active medical devices. Number of threads per unit of lenght           | UNI EN 14079:2004 point 5.6  |
| 14465   | Non-active medical devices. Mass per unit area and mass per unit of lenght | UNI EN 14079:2004 point 5.7  |
| 41111   | Non-active medical devices. Identification of foreign fibres               | UNI EN 14079:2004 point 5.4  |
| 41135   | Non-active medical devices. Immersion time                                 | UNI EN 14079:2004 point 5.9  |
| 41145   | Non-active medical devices. Acidity and alkalinity                         | UNI EN 14079:2004 point 5.3  |
| 41146   | Non-active medical devices. Tensioactive substances                        | UNI EN 14079:2004 point 5.11 |
| 41540   | Non-active medical devices. Starch and dextrines                           | UNI EN 14079:2004 point 5.13 |
| 41143   | Non-active medical devices. Fluorescence                                   | UNI EN 14079:2004 point 5.5  |
| * 41144 | Non-active medical devices. Extractable dyes                               | UNI EN 14079:2004 point 5.14 |
| 41150   | Non-active medical devices. Water soluble substances                       | UNI EN 14079:2004 point 5.12 |
| 41160   | Non-active medical devices. Ether soluble substances                       | UNI EN 14079:2004 point 5.10 |
| 41190   | Non-active medical devices. Loss on drying                                 | UNI EN 14079:2004 point 5.15 |
| 41200   | Non-active medical devices. Sulphuric ashes                                | UNI EN 14079:2004 point 5.16 |

### Medical compresses

| Code    | Description  | Methods                    |
|---------|--|----------------------------|
| * 41301 | Medical compresses. Absorption rate  | UNI EN 1644-2:2000 Annex B |
| * 41302 | Medical compresses. Resistance of constitutive parts                                   | UNI EN 1644-2:2000 Annex C |
| * 41303 | Medical compresses. Bursting resistance  | UNI EN 1644-2:2000 Annex D |
| * 41306 | Medical nonwoven compresses. Determination of substances soluble in non-polar solvents | UNI EN 1644-1:1997 Annex G |
| * 41307 | Medical compresses. Water soluble substances   | UNI EN 1644-1:1997 Annex D |
| * 41308 | Medical compresses. Fluorescence   | UNI EN 1644-1:1997 Annex E |
| * 41309 | Medical compresses. pH determination   | UNI EN 1644-1:1997 Annex F |

### Surgical drapes and gowns and clean air suits, used as medical devices for patients, clinical staff and equipment. UNI EN 13795-1:2019 and UNI EN 13795-2:2019

| Code    | Description   | Methods   |
|---------|---|---|
| 90119   | Surgical drapes and gowns. Penetration by biologically contaminated powders                         | UNI EN ISO 22612:2005 + EC 1-2011 + UNI EN 13795-1:2019   |
| 90124   | Surgical drapes and gowns. Wet bacterial penetration  | UNI EN ISO 22610:2006 + UNI EN 13795-1:2019               |
| * 90194 | Surgical drapes and gowns. Evaluation of cleanliness - microbial. Stomaching method                 | UNI EN ISO 11737-1:2018 + UNI EN 13795-1:2019             |
| * 90136 | Surgical drapes and gowns. Lint and other particles generation in the dry state (linting)           | UNI EN ISO 9073-10:2005 + UNI EN 13795-1:2019             |
| 90290   | Surgical drapes and gowns. Test of resistance to water penetration. Increasing hydrostatic pressure | UNI EN ISO 811:2018 + UNI EN 13795-1:2019                 |
| * 90281 | Surgical drapes and gowns. Bursting Strength  | UNI EN ISO 13938-1:2001 + EC 1-2004 + UNI EN 13795-1:2019 |
| 90125   | Surgical drapes and gowns. Tensile Strenght. Strip method   | UNI EN 29073-3:1993 + UNI EN 13795-1:2019                 |
| * 90133 | Textile fabric and nonwoven. Sliding of liquid on an inclined plane. Run-off                        | UNI EN ISO 9073-11:2005 + UNI EN 13795-1:2019             |



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|---------|---|---|
| * 90126 | Clean air suits. Penetration by biologically contaminated powders               | UNI EN ISO 22612:2005 + EC 1-2011 +<br>UNI EN 13795-2:2019    |
| * 90127 | Clean air suits. Evaluation of cleanliness - microbial. Stomaching method       | UNI EN ISO 11737-1:2018 + UNI EN<br>13795-2:2019              |
| * 90128 | Clean air suits. Lint and other particles generation in the dry state (linting) | UNI EN ISO 9073-10:2005 + UNI EN<br>13795-2:2019              |
| * 90129 | Clean air suits. Bursting Strength  | UNI EN ISO 13938-1:2001 + EC 1- 2004<br>+ UNI EN 13795-2:2019 |
| * 90137 | Clean air suits. Tensile Strenght. Strip method                                 | UNI EN 29073-3:1993 + UNI EN<br>13795-2:2019                  |

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## STANDARD 100 by OEKO-TEX®

### General costs

| Code  | Description   | Methods |
|-------|---|---------|
| 60000 | Certificate issuing   |         |
| 60001 | Certificate duplicate   |         |
| 60002 | Certificate renewal   |         |
| 60003 | Excerpt Certificate   |         |
| 60900 | Translation of the certificate into English or French or German or Spanish language |         |
| 60004 | Test report editing   |         |
| 60948 | Audit STANDARD 100 by OEKO-TEX®   |         |
| 60947 | Re-Audit STANDARD 100 by OEKO-TEX®  |         |
| 60951 | Evaluation of technical documentation and preparation of test planning              |         |

### Tests

| Code  | Description  | Methods  |
|-------|--|--|
| 60470 | Textiles, Accessories. pH of aqueous extract   | OEKO-TEX® Standard 201 M-1 2006 + UNI EN ISO 3071:2006   |
| 60411 | Textiles, Accessories. Free and hydrolized formaldehyde. Aqueous extraction method   | OEKO-TEX® Standard 201 M-8 2017 + JIS L 1041:2011  |
| 60101 | Textiles, Accessories. Heavy metals in aqueous extracts  | OEKO-TEX® Standard 201 M-10 & ML-10 2019   |
| 60011 | Textiles, Accessories. Heavy metals in liquid extracts on dyed products. (Sb, As, Pb, Cd, Cr tot, Co, Cu, Ni, Hg, Ba, Se) + (Zn, Mn for Appendix VI)                     | OEKO-TEX® Standard 201 M-10 & ML-10 2019   |
| 60012 | Textiles, Accessories. Heavy metals in liquid extracts on Class I metallic accessories (Sb, As, Pb, Cd, Cr tot, Co, Ni, Hg, Ba, Se) + (Zn, Mn for Appendix VI)           | OEKO-TEX® Standard 201 M-10 & ML-10 2019   |
| 60013 | Textiles, Accessories. Heavy metals in liquid extracts on Class II, III, IV metallic accessories (Sb, As, Pb, Cd, Cr tot, Co, Ni, Hg, Ba, Se) + (Zn, Mn for Appendix VI) | OEKO-TEX® Standard 201 M-10 & ML-10 2019   |
| 60105 | Textiles, Accessories. Hexavalent chromium   | OEKO-TEX® Standard 201 M-10 & ML-10 2019 + OEKO-TEX® Standard 201 M-12 2017 + DIN 38405:1987 Part 24                                 |
| 60111 | Textiles, Accessories. Nickel released in perspiration solution after simulation of wear and corrosion   | OEKO-TEX® Standard 201 M-10 & ML-10 2019 + OEKO-TEX® Standard 201 M-20 2017 + UNI EN 12472:1998 (withdrawn)                          |
| 60116 | Textiles, Accessories. Total lead and cadmium  | OEKO-TEX® Standard 201 M-21 & ML-21 2017   |
| 60117 | Textiles, Accessories. Total heavy metals  | OEKO-TEX® Standard 201 M-21 & ML-21 2017   |
| 60200 | Textiles, Accessories. Polar and unpolar pesticides (included Glyphosate)  | OEKO-TEX® Standard 201 M-6-A & ML-6-A 2017 + OEKO-TEX® Standard 201 M-6-B & ML-6-B 2017 + OEKO-TEX® Standard 201 M-6-C & ML-6-C 2019 |
| 60210 | Textiles, Accessories. Phenols (chlorinated and OPP) and phenol  | OEKO-TEX® Standard 201 M-7 2019  |
| 60213 | Textiles, Accessories. Polycyclic aromatic hydrocarbons  | OEKO-TEX® Standard 201 M-23 & ML-23 2018   |
| 60214 | Textiles, Accessories. Organotin compounds   | OEKO-TEX® Standard 201 M-17 2016 & ML-17 2017  |



|         |   |   |
|---------|---|---|
| 60215   | Textiles, Accessories. Chlorinated benzenes and toluenes  | OEKO-TEX® Standard 201 M-2 & ML-2 2017  |
| 60219   | Textiles, Accessories. Aromatic amines derived from azocolorants (without extraction) and aniline                         | OEKO-TEX® Standard 201 M-3 2019 + UNI EN ISO 14362-1:2017                           |
| 60216   | Textiles, Accessories. 4-aminoazobenzene from azocolorants  | OEKO-TEX® Standard 201 M-19 2018 + UNI EN ISO 14362-3:2017                          |
| 60220   | Textiles, Accessories. Aromatic amines derived from azocolorants (with extraction) and aniline                            | OEKO-TEX® Standard 201 M-3 2019 + UNI EN ISO 14362-1:2017                           |
| 60217   | Textiles, Accessories. 4-aminoazobenzene from azocolorants accessible by extracting the fibres                            | OEKO-TEX® Standard 201 M-19 2018 + UNI EN ISO 14362-3:2017                          |
| * 60224 | Textiles, Accessories. Chinolin   | STANDARD 100 by OEKO-TEX® - Testing Methods 01/2019                                 |
| * 60222 | Textiles, Accessories. Allergenic/carcinogenic disperse dyestuffs   | OEKO-TEX® Standard 201 M-4-B & ML-4-B 2017  |
| 60225   | Textiles, Accessories. Phthalates (plasticizers) and bisphenol A  | OEKO-TEX® Standard 201 M-18 & ML-18 2018  |
| * 60233 | Textiles, Accessories. Dimethylfumarate   | OEKO-TEX® Standard 201 M-27 & ML-27 2017  |
| 60230   | Textiles, Accessories. Volatile substances and formaldehyde   | OEKO-TEX® Standard 201 M-14 & ML-14 2017 + OEKO-TEX® Standard 201 M-15 & ML-15 2017 |
| 60231   | Textiles, Accessories. Volatile substances  | OEKO-TEX® Standard 201 M-14 & ML-14 2017  |
| 60229   | Textiles, Accessories. Formaldehyde emission  | OEKO-TEX® Standard 201 M-15 & ML-15 2017  |
| 60232   | Textiles, Accessories. Perfluorinated compounds   | OEKO-TEX® Standard 201 M-22 & ML-22 2017  |
| * 60331 | Textiles. Chlorinated paraffins (SCCP + MCCP). Screening test   | OEKO-TEX® Standard 201 M-24 & ML-24 2017  |
| * 60332 | Textiles. Chlorinated paraffins (SCCP + MCCP). Without screening  | OEKO-TEX® Standard 201 M-24 & ML-24 2017  |
| 60334   | Textiles, Accessories. Surfactant, wetting agent residues. Alkylphenols and Alkylphenoethoxylates (NP, OP, NPEO and OPEO) | OEKO-TEX® Standard 201 M-25 & ML-25 2018  |
| * 60335 | Textiles, Accessories. Solvent residues   | OEKO-TEX® Standard 201 M-26 & ML-26 2019  |
| 60280   | Textiles, Accessories. Colour fastness to water   | OEKO-TEX® Standard 201 M-9-C 2017 + UNI EN ISO 105-E01:2013                         |
| 60320   | Textiles, Accessories. Colour fastness to perspiration  | OEKO-TEX® Standard 201 M-9-B 2017 + UNI EN ISO 105-E04:2013                         |
| 60321   | Textiles, Accessories. Colour fastness to saliva and perspiration   | OEKO-TEX® Standard 201 M-9-A 2017   |
| 60351   | Textiles, Accessories. Colour fastness to dry rubbing   | OEKO-TEX® Standard 201 M-9-D 2017 + UNI EN ISO 105-X12:2016                         |
| 60240   | Textiles, Accessories. Determination of odour   | OEKO-TEX® Standard 201 M-16 & ML-16 2017 + SNV 195651:1968                          |
| 60250   | Textiles, Accessories. Odour test   | STANDARD 100 by OEKO-TEX® - Testing Methods 01/2016                                 |
| * 60253 | Textiles, Accessories. Determination of UV-stabilizers  | OEKO-TEX® Standard 201 M-28 & ML-28 2017  |
| * 60251 | Textiles. Identification of fibres in textiles: natural and man-made  | Qualitative analysis using optical microscopy and FT-IR spectrometry                |



|         |  |   |
|---------|--|---|
| * 60252 | Metal accessories. Elemental composition   | Qualitative analysis using Energy Dispersive X-ray spectrometry (XRF) |
| * 60254 | Textiles, Accessories. Flame retardants - Part A and B: Brominated and phosphorated flame retardants | OEKO-TEX® Standard 201 M-30A & ML-30A 2017 + M-30B & ML-30B 2017      |
| * 60255 | Textiles, Accessories. VOC's and Kresole. Chlorinated solvents                                       | OEKO-TEX® Standard 201 M-31 2017 & ML-31 2018                         |
| 60256   | Textile. GMO Screening   | OEKO-TEX® Standard 201 M-33 2018                                      |
| * 60257 | Textiles, Accessories. ADCA (azodicarboxamid)  | OEKO-TEX® Standard 201 M-35 2019                                      |
| * 60258 | Textiles, Accessories. Siloxane  | STANDARD 100 by OEKO-TEX® - Testing Methods 01/2019                   |
| * 60259 | Textiles, Accessories. N-nitrosamine   | STANDARD 100 by OEKO-TEX® - Testing Methods 01/2019                   |

# LEATHER STANDARD by OEKO-TEX®

## General costs

| Code  | Description   | Methods |
|-------|---|---------|
| 63690 | Certificate issuing   |         |
| 63691 | Certificate duplicate   |         |
| 63692 | Excerpt Certificate   |         |
| 63693 | Certificate renewal   |         |
| 63694 | Translation of the certificate into English or French or German or Spanish language |         |
| 63695 | Test report editing   |         |
| 63696 | Evaluation of technical documentation and preparation of test planning              |         |
| 63697 | Audit LEATHER STANDARD by OEKO-TEX®   |         |
| 63698 | Re-Audit LEATHER STANDARD by OEKO-TEX®  |         |

## Tests

| Code    | Description   | Methods   |
|---------|---|---|
| * 63605 | Leather. Dry mass determination   | OEKO-TEX® Standard 201 ML-0 2017  |
| 63670   | Leather. pH of aqueous extract  | OEKO-TEX® Standard 201 ML-1 2017  |
| * 63615 | Leather. Chlorinated benzenes and toluenes  | OEKO-TEX® Standard 201 M-2 & ML-2 2017  |
| 63621   | Leather. Aromatic amines derived from azocolorants  | OEKO-TEX® Standard 201 ML-3 2017 + UNI EN ISO 17234-1:2015                              |
| 63618   | Leather. 4-aminoazobenzene from azocolorants  | OEKO-TEX® Standard 201 ML-3 2017 + UNI EN ISO 17234-2:2015                              |
| * 63623 | Leather. Chinolin   | LEATHER STANDARD by OEKO-TEX® - Testing Procedures 01/2019                              |
| * 63622 | Leather. Allergenic/carcinogenic disperse dyestuffs                                       | OEKO-TEX® Standard 201 M-4-B & ML-4-B 2017  |
| * 63600 | Leather. Polar and unpolar pesticides   | OEKO-TEX® Standard 201 M-6-A & ML-6-A 2017 + OEKO-TEX® Standard 201 M-6-B & ML-6-B 2017 |
| * 63662 | Leather. Phenols (chlorinated) and phenol   | OEKO-TEX® Standard 201 ML-7 2018  |
| 63669   | Leather. Formaldehyde   | OEKO-TEX® Standard 201 ML-8 2017 + UNI EN ISO 17226-1:2019                              |
| * 63601 | Leather. Colour fastness to saliva  | OEKO-TEX® Standard 201 ML-9-A 2017 + ISO 20701:2017                                     |
| * 63602 | Leather. Colour fastness to perspiration  | OEKO-TEX® Standard 201 ML-9-B 2017 + UNI EN ISO 11641:2013                              |
| * 63603 | Leather. Colour fastness to water   | OEKO-TEX® Standard 201 ML-9-C 2017 + UNI EN ISO 11642:2013                              |
| * 63604 | Leather. Colour fastness to rubbing   | OEKO-TEX® Standard 201 ML-9-D 2017 + UNI EN ISO 11640:2018                              |
| * 63668 | Leather. Heavy metals in liquid extracts (Sb, As, Pb, Cd, Cr tot, Co, Cu, Ni, Hg, Ba, Se) | OEKO-TEX® Standard 201 M-10 & ML-10 2019  |
| * 63606 | Leather. Heavy metals in aqueous extracts   | OEKO-TEX® Standard 201 M-10 & ML-10 2019  |
| 63663   | Leather. Hexavalent chromium (before and after heat aging)                                | OEKO-TEX® Standard 201 ML-12 2017   |
| * 63631 | Leather. Volatile substances  | OEKO-TEX® Standard 201 M-14 & ML-14 2017  |



|         |   |   |
|---------|---|---|
| * 63629 | Leather. Formaldehyde emission  | OEKO-TEX® Standard 201 M-15 & ML-15 2017  |
| * 63630 | Leather. Volatile substances and formaldehyde   | OEKO-TEX® Standard 201 M-14 & ML-14 2017 + OEKO-TEX® Standard 201 M-15 & ML-15 2017 |
| * 63640 | Leather. Determination of odour   | OEKO-TEX® Standard 201 M-16 & ML-16 2017 + SNV 195651:1968                          |
| * 63650 | Leather. Odour test   | LEATHER STANDARD by OEKO-TEX® - Testing Procedures 01/2017                          |
| * 63614 | Leather. Organotin compounds  | OEKO-TEX® Standard 201 M-17 2016 & ML-17 2017                                       |
| * 63625 | Leather. Phthalates (plasticizers) and bisphenol A  | OEKO-TEX® Standard 201 M-18 & ML-18 2018  |
| * 63667 | Leather. Total heavy metals   | OEKO-TEX® Standard 201 M-21 & ML-21 2017  |
| * 63661 | Leather. Total heavy metals   | OEKO-TEX® Standard 201 M-21 & ML-21 2017  |
| * 63632 | Leather. Perfluorinated compounds   | OEKO-TEX® Standard 201 M-22 & ML-22 2017  |
| * 63613 | Leather. Polycyclic aromatic hydrocarbons   | OEKO-TEX® Standard 201 M-23 & ML-23 2018  |
| * 63686 | Leather. Short chain chlorinated paraffins. Without screening   | OEKO-TEX® Standard 201 M-24 & ML-24 2017  |
| * 63687 | Leather. Short chain chlorinated paraffins. Screening test  | OEKO-TEX® Standard 201 M-24 & ML-24 2017  |
| * 63634 | Leather. Surfactant, wetting agent residues. Alkylphenols and Alkylphenoethoxylates (NP, OP, NPEO and OPEO) | OEKO-TEX® Standard 201 M-25 & ML-25 2018  |
| * 63633 | Leather. Dimethylfumarate   | OEKO-TEX® Standard 201 M-27 & ML-27 2017  |
| * 63653 | Leather. UV Stabilizers   | OEKO-TEX® Standard 201 M-28 & ML-28 2017  |
| * 63610 | Leather. Preservative agents  | OEKO-TEX® Standard 201 ML-29 2017   |
| * 63635 | Leather. Solvent residues (NMP)   | OEKO-TEX® Standard 201 ML-32 2017   |
| * 63636 | Leather. Solvent residues   | OEKO-TEX® Standard 201 M-26 & ML-26 2019  |
| * 63637 | Leather. ADCA (azodicarboxamid)   | LEATHER STANDARD by OEKO-TEX® - Testing Procedures 01/2019                          |
| * 63638 | Leather. N-nitrosamine  | LEATHER STANDARD by OEKO-TEX® - Testing Procedures 01/2019                          |
| * 63639 | Leather. Siloxane   | LEATHER STANDARD by OEKO-TEX® - Testing Procedures 01/2019                          |



# ECO PASSPORT by OEKO-TEX®

APPLICABLE TO COLOURANTS, PIGMENTS AND AUXILIARIES

## General costs

| Code  | Description   | Methods |
|-------|---|---------|
| 63500 | Certificate issuing   |         |
| 63501 | Certificate duplicate   |         |
| 63502 | Certificate renewal   |         |
| 63503 | Excerpt Certificate   |         |
| 63504 | Translation of the certificate into English or French or German or Spanish language |         |
| 63505 | Test report editing   |         |
| 63529 | Audit ECO PASSPORT by OEKO-TEX®   |         |
| 63530 | Re-Audit ECO PASSPORT by OEKO-TEX®  |         |
| 63506 | Evaluation of technical documentation and preparation of test planning              |         |

## Tests

| Code    | Description  | Methods                                 |
|---------|--|---|
| 63507   | Colourants and auxiliaries. Aromatic amines derived from azocolourants   | ECO PASSPORT Method M-EP-1 2019         |
| * 63522 | Colourants, pigments and auxiliaries. 4-aminoazobenzene from azocolourants   | ECO PASSPORT Method M-EP-2 2016         |
| * 63527 | Colourants, pigments and auxiliaries. Chinolin   | ECO PASSPORT Testing Methods<br>01/2019 |
| * 63508 | Colourants, pigments and auxiliaries. Determination of banned disperse dyes  | ECO PASSPORT Method M-EP-2 2016         |
| * 63509 | Colourants, pigments and auxiliaries. Chlorinated benzenes and toluenes  | ECO PASSPORT Method M-EP-3 2016         |
| * 63510 | Colourants, pigments and auxiliaries. Phenols (chlorinated and OPP)  | ECO PASSPORT Method M-EP-4 2019         |
| * 63511 | Colourants, pigments and auxiliaries. Organotin compounds  | ECO PASSPORT Method M-EP-5 2016         |
| * 63512 | Colourants, pigments and auxiliaries. Phthalates (plasticizers)  | ECO PASSPORT Method M-EP-6 2019         |
| * 63513 | Colourants, pigments and auxiliaries. Polycyclic aromatic hydrocarbons   | ECO PASSPORT Method M-EP-7 2019         |
| 63514   | Colourants and auxiliaries. Surfactant, wetting agent residues. Alkylphenols and Alkylphenoethoxylates (NP, OP, NPEO and OPEO) | ECO PASSPORT Method M-EP-8 2019         |
| * 63515 | Colourants, pigments and auxiliaries. Solvent residues   | ECO PASSPORT Method M-EP-9 2016         |
| * 63516 | Colourants, pigments and auxiliaries. Perfluorinated compounds   | ECO PASSPORT Method M-EP-10 2019        |
| * 63523 | Colourants, pigments and auxiliaries. Chlorinated paraffins (SCCP + MCCP). Screening test                                      | ECO PASSPORT Method M-EP-11 2016        |
| * 63517 | Colourants, pigments and auxiliaries. Chlorinated paraffins (SCCP + MCCP)  | ECO PASSPORT Method M-EP-11 2016        |
| 63518   | Colourants and auxiliaries. Formaldehyde   | ECO PASSPORT Method M-EP-12 2019        |
| * 63519 | Colourants, pigments and auxiliaries. Heavy metals (Sb, As, Pb, Cd, Cr tot, Co, Cu, Ni, Hg, Ag, Ba, Fe, Mn, Se, Sn, Zn)        | ECO PASSPORT Method M-EP-13 2019        |
| * 63520 | Colourants, pigments and auxiliaries. Hexavalent chromium  | ECO PASSPORT Internal Method 2016       |
| * 63521 | Colourants, pigments and auxiliaries. Dimethylfumarate   | ECO PASSPORT Internal Method 2016       |
| * 63524 | Colourants, pigments and auxiliaries. Determination of UV-stabilizers  | ECO PASSPORT Internal Method 2016       |
| * 63525 | Colourants, pigments and auxiliaries. VOC's and Kresole. Chlorinated solvents  | ECO PASSPORT Internal Method 2018       |
| * 63526 | Colourants, pigments and auxiliaries. ADCA (azodicarboxamid)   | ECO PASSPORT Testing Methods<br>01/2019 |
| * 63528 | Colourants, pigments and auxiliaries. Siloxane   | ECO PASSPORT Testing Methods<br>01/2019 |
| * 63531 | Colourants, pigments and auxiliaries. Flame retardants - Part A and B: Brominated and phosphorated flame retardants            | ECO PASSPORT Internal Method 2018       |

## ECOLABEL LABEL

### General costs

| Code  | Description   | Methods |
|-------|---|---------|
| 61951 | Evaluation of technical documentation and preparation of test planning      |         |
| 61952 | Preparation of technical documentation to be produced to the Competent Body |         |

### Tests

| Code    | Description  | Methods  |
|---------|--|--|
| 61412   | Textiles. Free and hydrolized formaldehyde. Aqueous extraction method                            | UNI EN ISO 14184-1:2011  |
| * 61302 | Textiles. Organophosphoric compounds   | US EPA 8141B 2007 + US EPA 3540C 1996                              |
| * 61303 | Cotton and other natural cellulosic seed fibers. Chlorinated pesticides and herbicides           | US EPA 8081B 2007 + US EPA 8151A 1996                              |
| * 61305 | Cotton and other natural cellulosic seed fibers. Semivolatile organic compounds                  | US EPA 8270 D 2007   |
| * 61301 | Speciality fibres and sheep's wool. Organochlorinated, organophosphorus and pyrethroid compounds | IWTO Draft Test Method 59:2009                                     |
| * 61212 | Textiles. Chlorophenols  | Commission Decision 2009/567/CE                                    |
| * 61307 | Textiles. Polychlorinated biphenyls (PCB's)  | Commission Decision 2009/567/CE                                    |
| * 61214 | Textiles, Accessories. Tin organic compounds   | Commission Decision 2009/567/CE                                    |
| 61219   | Textiles, Accessories. Aromatic amines derived from azo colorants                                | UNI EN ISO 14362-1:2017  |
| 61216   | Textiles, Accessories. 4-aminoazobenzene from azocolorants                                       | UNI EN ISO 14362-3:2017  |
| 61320   | Textiles. Colour fastness to perspiration  | UNI EN ISO 105-E04:2013  |
| 61350   | Textiles. Colour fastness to rubbing   | UNI EN ISO 105-X12:2016  |
| 61011   | Textiles. Colour fastness to domestic and commercial laundering                                  | UNI EN ISO 105-C06:2010  |
| 61230   | Textiles. Colour fastness to artificial light: Xenon arc fading lamp test                        | UNI EN ISO 105-B02:2014 - Exposure cycle A1                        |
| 61110   | Textiles. Dimensional change in domestic wet washing and drying                                  | UNI EN ISO 6330:2012 + UNI EN ISO 5077:2008 + UNI EN ISO 3759:2011 |
| * 61313 | Waste water. Chemical oxygen demand  | ISO 6060:1989  |
| * 61312 | Waste water. pH  | APAT IRSA-CNR – Manual and Guidelines 29:2003 – Method 2060        |
| * 61314 | Waste water. Temperature   | APAT IRSA-CNR – Manual and Guidelines 29:2003 – Method 2100        |

## ECOLOGICAL TESTS

### Tests

| Code    | Description   | Methods   |
|---------|---|---|
| 62470   | Textiles. pH of aqueous extract   | UNI EN ISO 3071:2006  |
| 62471   | Textiles. pH of aqueous extract   | AATCC 81-2016   |
| 62412   | Textiles. Free and hydrolized formaldehyde. Aqueous extraction method   | UNI EN ISO 14184-1:2011   |
| 62413   | Textiles. Free and hydrolized formaldehyde. Aqueous extraction method   | JIS L 1041:2011   |
| 62414   | Textiles. Released formaldehyde. Vapour absorption method   | UNI EN ISO 14184-2:2011   |
| 62417   | Textiles. Released formaldehyde. Vapour absorption method   | AATCC 112-2014  |
| * 62416 | Wood-based panels. Formaldehyde release. Flask method   | UNI EN 717-3:1997   |
| * 62263 | Coated textiles, plastic materials. Formaldehyde  | VDA 275-1994  |
| * 62455 | Metal products. Qualitative test of nickel by direct and prolonged contact with the skin                                    | BS PD CR 12471:2002   |
| 62111   | Metal accessories. Release of nickel after simulation of wear and corrosion   | UNI EN 12472:2009 + UNI EN 1811:2015  |
| 62114   | Metal accessories. Release of nickel  | UNI EN 1811:2015  |
| * 62119 | Accessories. Release of nickel  | UNI EN 16128:2015   |
| 62101   | Textiles, Accessories. Extractable heavy metals (As, Cd, Co, Cr, Cu, Hg, Ni, Pb, Sb) in liquid extracts (hydrochloric acid) | DIN 54233-2:2014  |
| 62123   | Textiles, Accessories. Extractable heavy metals (As, Cd, Co, Cr, Cu, Hg, Ni, Pb, Sb) in liquid extracts (acid perspiration) | UNI EN 16711-2:2015   |
| 62124   | Textiles, Accessories. Extractable heavy metals (As, Cd, Co, Cr, Cu, Hg, Ni, Pb, Sb) in liquid extracts (saliva)            | DIN 54233-4:2014  |
| * 62105 | Textiles, Accessories. Chromium hexavalent  | DIN 38405-24:1987   |
| 62315   | Textiles, Accessories. Total heavy metals   | UNI EN 16711-1:2015   |
| 62117   | Textiles, Accessories. Total mercury  | UNI EN 16711-1:2015   |
| 62121   | Textiles, Accessories. Chemical elements. X-ray fluorescence spectrometry   | ASTM F2617-15   |
| * 62311 | Plastics. Cadmium Wet decomposition method  | UNI EN 1122:2002 Met. B   |
| * 69010 | Plastics. Polymers of Ethylene and Ethylene-Vinyl Acetate (EVA) Copolymers. Butylated Hydroxy Toluene (BHT)                 | ASTM D4275-17   |
| * 68336 | Plastics. Monomeric diisocyanates   | UNI EN ISO 10283:2008   |
| * 68337 | Plastics. Free diisocyanates  | UNI EN 13130-8:2005   |
| * 62201 | Chromatographic analysis  | Solvent extraction and chromatographic analysis with mass detector (GC/MS or LC/MS) |
| * 62330 | Textiles, Accessories. Alkylphenols (NP, OP)  | ISO 21084:2019  |
| * 62312 | Textiles, Accessories. Alkylphenoethoxylates (NPEO, OPEO)   | MIP 131:2017 Rev.1  |
| 62325   | Textiles, Accessories. Alkylphenoethoxylates (NPEO, OPEO)   | ISO 18254-1:2016  |
| * 62200 | Textiles. Polar and non polar pesticides  | STANDARD 100 by OEKO-TEX® - Testing Methods 01/2016                                 |
| * 62301 | Speciality fibres and sheep's wool. Organochlorinated, organophosphorus and pyrethroid compounds                            | IWTO Draft Test Method 59:2009  |
| * 62307 | Textiles. Polychlorinated biphenyls (PCB's)   | US EPA 8082A 2007   |
| * 62211 | Textiles, Accessories. Orthophenylphenol (OPP)  | STANDARD 100 by OEKO-TEX® - Testing Methods 01/2016                                 |
| 62209   | Textiles, Accessories. Pentachlorophenols   | BVL B 82.02-8 - 2001  |
| 62210   | Textiles, Accessories. Trichlorophenols, tetrachlorophenols and pentachlorophenol (TriCP, TeCP and PCP)                     | BVL B 82.02-8 - 2001  |
| 62208   | Textiles, Accessories. Tetrachlorophenols and pentachlorophenol (TeCP and PCP)  | UNI 11057:2003  |
| 62213   | Textiles, Accessories. Polycyclic aromatic hydrocarbons   | AfPS GS 2014:01   |
| * 62214 | Textiles, Accessories. Tin organic compounds  | MIP 132:2014 Rev.0  |
| 62235   | Textiles, Accessories. Chlorinated benzenes and toluenes  | DIN 54232:2010  |

|         |  |  |
|---------|--|--|
| * 62215 | Textiles, Accessories. Chlorinated benzenes and toluenes   | STANDARD 100 by OEKO-TEX® - Testing Methods 01/2016                        |
| * 62331 | Textiles, Accessories. Chlorinated benzenes and toluenes   | UNI EN 17137:2019  |
| 62219   | Textiles, Accessories. Aromatic amines derived from azocolorants   | UNI EN ISO 14362-1:2017  |
| 62229   | Textiles, Accessories. Aromatic amines derived from azocolorants (without extraction)                        | UNI EN ISO 14362-1:2017  |
| 62216   | Textiles, Accessories. 4-aminoazobenzene from azocolorants   | UNI EN ISO 14362-3:2017  |
| 62220   | Textiles, Accessories. Aromatic amines derived from azocolorants (with extraction)                           | UNI EN ISO 14362-1:2017  |
| 62217   | Textiles, Accessories. 4-aminoazobenzene from azocolorants accessible by extracting the fibres               | UNI EN ISO 14362-3:2017  |
| * 62237 | Textiles, Accessories. Free aromatic amines  | MIP 138:2014 Rev.0   |
| * 62222 | Textiles, Accessories. Allergenic/carcinogenic disperse dyestuffs  | DIN 54231:2005   |
| * 62223 | Textiles, Accessories. Carcinogenic dyestuffs  | UNI EN ISO 16373-3:2014  |
| * 62224 | Textiles, Accessories. Navy Blue (CAS Nr 118685-33-9)  | MIP 141:2014 Rev.0   |
| 62225   | Textiles, Accessories. Phthalates  | UNI EN ISO 14389:2014  |
| * 62227 | Textiles. Benzyl benzoate  | UNI EN ISO 14389:2014  |
| 62230   | Textiles, Accessories. Volatile compounds and formaldehyde   | OEKO-TEX® Standard 201 M-14 2011 + OEKO-TEX® Standard 201 M-15 2011        |
| 62231   | Textiles, Accessories. Volatile compounds  | OEKO-TEX® Standard 201 M-14 2011   |
| * 62202 | Textiles, Accessories. Volatile organic compounds (qualitative analysis)                                     | MIP 137:2014 Rev.0   |
| * 62203 | Textiles, Accessories. Volatile organic compounds (quantitative analysis)                                    | MIP 137:2014 Rev.0   |
| 62251   | Building products, Furnishing products. Emission of volatile organic compounds. Emission test chamber method | UNI EN ISO 16000-9:2006 + ISO 16000-6:2011                                 |
| 62252   | Building products, Furnishing products. Emission of formaldehyde. Emission test chamber method               | UNI EN ISO 16000-9:2006 + ISO 16000-3:2011                                 |
| * 62260 | Coated textiles, plastic materials. Volatile compounds   | VDA 278 2011   |
| * 62261 | Coated textiles, plastic materials. Fogging  | VDA 278 2011   |
| * 62228 | Coated textiles, plastic materials. Vinyl chloride monomer   | UNI EN ISO 6401:2009   |
| * 62236 | Coated textiles, plastic materials. Vinyl chloride monomer   | BVL B 80.32-1:2019   |
| * 62302 | Textiles. Organophosphoric compounds   | US EPA 8141B 2007 + US EPA 3540C 1996                                      |
| * 62303 | Cotton and other natural cellulosic seed fibers. Chlorinated pesticides and herbicides                       | US EPA 8081B 2007 + US EPA 8151A 1996                                      |
| 62232   | Textiles, Accessories. Perfluorinated compounds  | UNI CEN/TS 15968:2010  |
| 62238   | Textiles, Accessories. Perfluorinated compounds - complete offer   | UNI CEN/TS 15968:2010  |
| * 62233 | Textiles. Dimethyl fumarate  | UNI CEN ISO/TS 16186:2012  |
| * 62401 | Textiles. Permethrin   | US EPA 608.2   |
| * 62402 | Plastics and rubber parts. Drometrizole  | Solvent extraction and chromatographic analysis with mass detector (LC/MS) |
| * 62403 | Accessories and plastic materials. Acetophenone Azine  | MIP 143:2015 Rev.0   |
| * 62404 | Accessories and plastic materials. Acetophenone Azine: migration into acid perspiration solution             | MIP 144:2015 Rev.0   |
| * 62405 | Accessories and plastic materials. Acetophenone Azine: migration into alkaline perspiration solution         | MIP 145:2015 Rev.0   |
| * 62406 | Colophony and its markers  | MIP 147:2017 Rev.0   |
| 62240   | Textiles, Accessories. Determination of odour  | SNV 195651:1968  |
| 62250   | Textiles, Accessories. Odour test  | STANDARD 100 by OEKO-TEX® - Testing Methods 01/2016                        |
| * 62262 | Coated textiles, plastic materials. Fogging  | VDA 270-2018   |
| * 63551 | Textiles, Accessories. Special quotation DETOX   | Cfr. methods of the single substances                                      |

|         |   |   |
|---------|---|---|
| * 62207 | Chromatographic analysis (qualitative test)                                     | Solvent extraction and chromatographic analysis with mass detector (GC/MS or LC/MS) |
| * 62239 | Chromatographic analysis (quantitative test)                                    | Solvent extraction and chromatographic analysis with mass detector (GC/MS or LC/MS) |
| * 62241 | Cosmetic products. Hexamidine   | Solvent extraction and chromatographic analysis                                     |
| * 62242 | Textiles, Accessories. Paraphenylene diamine (PPD)                              | MIP 155:2018 Rev.0  |
| * 62243 | Silicone. Peroxide substances: dicumyl peroxide                                 | MIP 156:2018 Rev. 0   |
| * 62264 | Plastics. Ash content   | UNI EN ISO 3451-5:2003  |
| * 62265 | Textiles. Determination of certain flame retardants Brominated flame retardants | UNI EN ISO 17881-1:2016   |
| * 62266 | Textiles. Determination of certain flame retardants Phosphorus flame retardants | UNI EN ISO 17881-2:2016   |

## Special offer

| Code    | Description   | Methods   |
|---------|---|---|
| * 66010 | Special for all textiles materials: conformity to point 43 of Annex XVII of the Regulation 1907/2006 (REACH)<br>Textiles. pH of aqueous extract<br>Textiles. Free and hydrolized formaldehyde. Aqueous extraction method<br>Textiles, Accessories. Aromatic amines derived from azocolorants<br>Textiles, Accessories. Aromatic amines derived from azocolorants (with extraction)<br>Textiles, Accessories. 4-aminoazobenzene from azocolorants  | UNI EN ISO 3071:2006<br>UNI EN ISO 14184-1:2011<br>UNI EN ISO 14362-1:2017<br>UNI EN ISO 14362-1:2017<br>UNI EN ISO 14362-3:2017  |
| * 66011 | Special for all textile materials, plastisol printed or coated: conformity to point 23, 43, 51, 52 of Annex XVII of the Regulation 1907/2006 (REACH)<br>Textiles. pH of aqueous extract<br>Textiles. Free and hydrolized formaldehyde. Aqueous extraction method<br>Textiles, Accessories. Aromatic amines derived from azocolorants<br>Textiles, Accessories. Aromatic amines derived from azocolorants (with extraction)<br>Textiles, Accessories. 4-aminoazobenzene from azocolorants<br>Textiles, Accessories. Total heavy metals<br>Textiles, Accessories. Phthalates<br>Textiles, Accessories. Polycyclic aromatic hydrocarbons | UNI EN ISO 3071:2006<br>UNI EN ISO 14184-1:2011<br>UNI EN ISO 14362-1:2017<br>UNI EN ISO 14362-1:2017<br>UNI EN ISO 14362-3:2017<br>UNI EN 16711-1:2015<br>UNI EN ISO 14389:2014<br>AfPS GS 2014:01 |
| * 66012 | Special for all dyed materials with disperse dyestuffs: conformity to point 43 of Annex XVII of the Regulation 1907/2006 (REACH)<br>Textiles. pH of aqueous extract<br>Textiles. Free and hydrolized formaldehyde. Aqueous extraction method<br>Textiles, Accessories. Aromatic amines derived from azocolorants<br>Textiles, Accessories. Aromatic amines derived from azocolorants (with extraction)<br>Textiles, Accessories. 4-aminoazobenzene from azocolorants<br>Textiles, Accessories. Allergenic/carcinogenic disperse dyestuffs   | UNI EN ISO 3071:2006<br>UNI EN ISO 14184-1:2011<br>UNI EN ISO 14362-1:2017<br>UNI EN ISO 14362-1:2017<br>UNI EN ISO 14362-3:2017<br>DIN 54231:2005  |
| * 66013 | Special for metallic and non metallic accessories, possibly coated: conformity to point 27 of Annex XVII of the Regulation 1907/2006 (REACH) and to CPSIA and to 16 CFR 1303 (US market)<br>Metal accessories. Release of nickel after simulation of wear and corrosion<br>Metal accessories. Release of nickel<br>Metal accessories for child. Total lead<br>Non metal products for child. Total lead  | UNI EN 12472:2009 + UNI EN 1811:2015<br>UNI EN 1811:2015<br>CPSC-CH-E1001-08.3 November 2012<br>CPSC-CH-E1002-08.3 November 2012 + ASTM F2617-08 + ASTM F2853-10(2015) + 16 C.F.R. Part 1303:2008   |

Surface-coating materials. Lead

16 C.F.R. Part 1303:2008 +  
CPSC-CH-E1003-09.1 February 2011

|         |  |   |
|---------|--|---|
| * 66014 | Special for textiles materials and for metallic and non metallic accessories: conformity to Annex XVII of the Regulation 1907/2006 (REACH). Articles with one color components<br>Textiles, Accessories. Aromatic amines derived from azocolorants<br>Textiles, Accessories. 4-aminoazobenzene from azocolorants<br>Textiles, Accessories. Total heavy metals<br>Textiles, Accessories. Phthalates<br>Textiles, Accessories. Polycyclic aromatic hydrocarbons<br>Textiles, Accessories. Allergenic/carcinogenic disperse dyestuffs<br>Textiles, Accessories. Alkylphenols (NP, OP)<br>Textiles, Accessories. Alkylphenoethoxylates (NPEO, OPEO)  | UNI EN ISO 14362-1:2017<br>UNI EN ISO 14362-3:2017<br>UNI EN 16711-1:2015<br>UNI EN ISO 14389:2014<br>AfPS GS 2014:01<br>DIN 54231:2005<br>ISO 21084:2019<br>MIP 131:2017 Rev.1   |
| * 66015 | Special for textiles materials and for metallic and non metallic accessories with leather components: conformity to Annex XVII of the Regulation 1907/2006 (REACH). Articles with two shades of color<br>Textiles, Accessories. Aromatic amines derived from azocolorants<br>Textiles, Accessories. 4-aminoazobenzene from azocolorants<br>Textiles, Accessories. Total heavy metals<br>Textiles, Accessories. Phthalates<br>Textiles, Accessories. Polycyclic aromatic hydrocarbons<br>Textiles, Accessories. Allergenic/carcinogenic disperse dyestuffs<br>Textiles, Accessories. Alkylphenols (NP, OP)<br>Textiles, Accessories. Alkylphenoethoxylates (NPEO, OPEO)<br>Leather. Hexavalent chromium<br>Leather. Aromatic amines derived from azocolorants | UNI EN ISO 14362-1:2017<br>UNI EN ISO 14362-3:2017<br>UNI EN 16711-1:2015<br>UNI EN ISO 14389:2014<br>AfPS GS 2014:01<br>DIN 54231:2005<br>ISO 21084:2019<br>MIP 131:2017 Rev.1<br>UNI EN ISO 17075-1:2017<br>UNI EN ISO 17234-1:2015 |
| * 66016 | Special for textiles materials and for metallic and non metallic accessories: conformity to Annex XVII of the Regulation 1907/2006 (REACH). Articles with three color components<br>Textiles, Accessories. Aromatic amines derived from azocolorants<br>Textiles, Accessories. 4-aminoazobenzene from azocolorants<br>Textiles, Accessories. Total heavy metals<br>Textiles, Accessories. Phthalates<br>Textiles, Accessories. Polycyclic aromatic hydrocarbons<br>Textiles, Accessories. Allergenic/carcinogenic disperse dyestuffs<br>Textiles, Accessories. Alkylphenols (NP, OP)<br>Textiles, Accessories. Alkylphenoethoxylates (NPEO, OPEO)  | UNI EN ISO 14362-1:2017<br>UNI EN ISO 14362-3:2017<br>UNI EN 16711-1:2015<br>UNI EN ISO 14389:2014<br>AfPS GS 2014:01<br>DIN 54231:2005<br>ISO 21084:2019<br>MIP 131:2017 Rev.1   |
| * 66017 | Special for textiles materials and for metallic and non metallic accessories: conformity to Annex XVII of the Regulation 1907/2006 (REACH). Articles with four color components<br>Textiles, Accessories. Aromatic amines derived from azocolorants<br>Textiles, Accessories. 4-aminoazobenzene from azocolorants<br>Textiles, Accessories. Total heavy metals<br>Textiles, Accessories. Phthalates<br>Textiles, Accessories. Polycyclic aromatic hydrocarbons<br>Textiles, Accessories. Allergenic/carcinogenic disperse dyestuffs<br>Textiles, Accessories. Alkylphenols (NP, OP)<br>Textiles, Accessories. Alkylphenoethoxylates (NPEO, OPEO)   | UNI EN ISO 14362-1:2017<br>UNI EN ISO 14362-3:2017<br>UNI EN 16711-1:2015<br>UNI EN ISO 14389:2014<br>AfPS GS 2014:01<br>DIN 54231:2005<br>ISO 21084:2019<br>MIP 131:2017 Rev.1   |
| * 66018 | Special for textiles materials and for metallic and non metallic accessories: conformity to Annex XVII of the Regulation 1907/2006 (REACH). Articles with five color components<br>Textiles, Accessories. Aromatic amines derived from azocolorants<br>Textiles, Accessories. 4-aminoazobenzene from azocolorants<br>Textiles, Accessories. Total heavy metals   | UNI EN ISO 14362-1:2017<br>UNI EN ISO 14362-3:2017<br>UNI EN 16711-1:2015   |



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|---------|--|-----------------------|
|         | Textiles, Accessories. Phthalates  | UNI EN ISO 14389:2014 |
|         | Textiles, Accessories. Polycyclic aromatic hydrocarbons                                | AfPS GS 2014:01       |
|         | Textiles, Accessories. Allergenic/carcinogenic disperse dyestuffs                      | DIN 54231:2005        |
|         | Textiles, Accessories. Alkylphenols (NP, OP)   | ISO 21084:2019        |
|         | Textiles, Accessories. Alkylphenoethoxylates (NPEO, OPEO)                              | MIP 131:2017 Rev.1    |
| * 66100 | Special for textiles articles and accessories: conformity to the Candidate List (SVHC) | MIP 146:2015 Rev.0    |
| * 66019 | Textiles and accessories: special for minima environmental standards (CAM)             |                       |

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## USA. Tests to verify products' and accessories' conformity.

The enactment of the Consumer Product Safety Improvement Act (CPSIA - PL110-314) has set off an high outcome on the North American market and on whom there operates. This law defines rules and limits that interest several professionals working in the textile sector, from the producer to the importer. Centrocot proposes itself as a valid partner to firms both in the application of the norm, that is still under revision by the American commission (CPSC), and in the selection and execution of the chosen tests.

Here below there is a list of the principal ones.

**Ecological tests:** they include the determination of the content of lead and phthalates in textiles products and accessories intended primarily for children 12 years of age or younger, and the determination of antimony, arsenic, barium, cadmium, chromium, lead, mercury and selenium in toys. Test methods correspond to what has been specified by the CPSC and requested in the technical norms (CPSIA-PL 110-314 and 16 CFR 1303).

**Flammability tests:** such tests reveal the flame resistance of products in order to decrease the risk of severe injuries. In particular the standard 16 CFR 1610 is intended to fabrics for children and adults apparel, while the standards 16 CFR 1615 and 1616 to fabrics and clothing designed for children sleepwear.

### Tests

| Code    | Description  | Methods   |
|---------|--|---|
| 62314   | Surface-coating materials. Lead  | 16 C.F.R. Part 1303:2008 + CPSC-CH-E1003-09.1 February 2011   |
| * 62316 | Textiles, Accessories. Total lead  | CPSC-CH-E1002-08.3 November 2012 + P.L.110-314 Sec. 101(a) + ASTM F2617-08 + ASTM F2853-10(2015)  |
| 62317   | Metal accessories for child. Total lead  | CPSC-CH-E1001-08.3 November 2012  |
| 62319   | Non metal products for child. Total lead   | CPSC-CH-E1002-08.3 November 2012 + ASTM F2617-08 + ASTM F2853-10(2015) + 16 C.F.R. Part 1303:2008   |
| 62323   | Toys. Surface coating materials. Migration of certain elements (Sb, As, Ba, Cd, Pb, Hg, Se)  | ASTM F 963-17 sec. 4.3.5.2  |
| 62318   | Surface coating materials. Migration of certain elements (Sb, As, Ba, Cd, Pb, Hg, Se)  | ASTM F 963-17 sec. 4.3.5.1(2)   |
| * 62122 | Surface coating materials, Accessories. Total lead with X-ray fluorescence spectrometry  | 16 C.F.R. Part 1303 + ASTM F2853-10(2015)   |
| * 62118 | Metal products. Extractable cadmium  | CPSC-CH-E1004-11 February 03, 2011  |
| 62226   | Children's toys and child care articles. Phthalates  | CPSC-CH-C1001-09.4:2018   |
| 14779   | Children's clothing. Determination of removal force of attached components   | CPSC 16 CFR 1500.51:2012 (par. F 0-18 months)<br>CPSC 16 CFR 1500.52:2012 (par. F 19-36 months)<br>CPSC 16 CFR 1500.53:2012 (par. F 37-96 months) |
| * 14785 | Children's clothing. Safety specification for drawstrings  | ASTM F1816-18   |
| 14780   | Toys and other articles intended for use by children under 3 years of age. Choking, aspiration or ingestion hazard caused by small parts | CPSC 16 CFR 1501 [except 1501.4 (b) (2)]  |
| * 14778 | Toys and other articles intended for use by children under 8 years of age. Sharp point (depth of penetration)                            | CPSC 16 CFR 1500.48:2012  |
| * 14777 | Toys and other articles intended for use by children under 8 years of age. Sharp edge (cutting length)                                   | CPSC 16 CFR 1500.49:2012  |
| * 14770 | Plastic buttons. Impact resistance   | ASTM D5171-15   |
| * 13102 | Textiles. Identification of fibres in textiles   | AATCC 20-2018 + 16 C.F.R. Part 303  |
| * 14149 | Textiles. Quantitative analysis of blends of textile fibres  | AATCC 20-2018 + 16 C.F.R. Part 303  |
| 14125   | Fabrics. Mass per unit area and mass per unit length   | ISO 3801:1977<br>ASTM D3776/D3776-09a (2017)  |
| 70414   | Textiles. Flammability   | CPSC 16 C.F.R. Part 1610:2008 + AATCC 124-2009  |



|         |   |  |
|---------|---|--|
| * 70418 | Textiles and accessories for children's sleepwear. Sizes and ergonomic requirements | CPSC 16 CFR Part 1615:2008 par. 1615.1; 1615.2<br>CPSC 16 CFR Part 1616:2008 par. 1615.1; 1615.2   |
| 70413   | Textiles and accessories for children's sleepwear. Flammability                     | CPSC 16 CFR Part 1615:2008 (except par 1615.5; par 1615.31; par 1615.32; par 1615.35; par 1615.36; par 1615.62; par 1615.63; par 1615.64)<br>CPSC 16 CFR Part 1616:2008 (except par 1616.6; par 1616.31; par 1616.32; par 1616.35; par 1616.36; par 1616.61; par 1616.62; par 1616.63; par 1616.64; par 1616.65)                                   |
| 70419   | Textiles and accessories for children's sleepwear. Flammability after wet washing   | CPSC 16 CFR Part 1615:2008 (except par 1615.5; par 1615.31; par 1615.32; par 1615.35; par 1615.36; par 1615.62; par 1615.63; par 1615.64) + AATCC 124-2009<br>CPSC 16 CFR Part 1616:2008 (except par 1616.6; par 1616.31; par 1616.32; par 1616.35; par 1616.36; par 1616.61; par 1616.62; par 1616.63; par 1616.64; par 1616.65) + AATCC 124-2009 |

### Proposition 65. Textiles. Test selection

| Code    | Description   | Methods   |
|---------|---|---|
| * 62206 | Plastics. Migration of acrylamide   | UNI EN 71-10:2006 Par. 6 + UNI EN 71-11:2006 Par. 5.5.1                     |
| * 62324 | Textiles, Accessories. Total heavy metals (As, Cd, Hg, Pb)                      | UNI EN 16711-1:2015   |
| * 62204 | Textiles, Accessories. Volatile organic compounds (Benzene, Methylene chloride) | MIP 137:2014 Rev. 0   |
| * 62205 | Textiles, Accessories. Tris(1,3-dichloro-2-propyl)phosphate [TDCPP]             | ASTM F2617-08e1 + UNI EN 71-10:2006 Par. 8.1.1 + UNI EN 71-11:2006 Par. 5.2 |
| 62412   | Textiles. Free and hydrolized formaldehyde. Aqueous extraction method           | UNI EN ISO 14184-1:2011   |
| 62226   | Children's toys and child care articles. Phthalates                             | CPSC-CH-C1001-09.4:2018   |

## CHINA. GB 18401. Tests to verify conformity

In order to support entrepreneurs exporting on the Chinese market, Centrocot presents its offer for the performance of tests to verify conformity of textile products to Chinese standard GB 18401-2010 "National General Safety Technical Code for Textile Products". Service can be offered according to 3 different modalities:

- 1) Performance of GB18401 tests according to Chinese methods in Centrocot. If samples are conform to Chinese market's requirements, they are then sent to a Chinese notified body (Beijing Custom Textile Laboratory), that will issue GB18401 certificate.
- 2) Performance of GB18401 tests according to Chinese methods in Centrocot. In this case, no certification is issued by a Chinese notified body : tests have the important aim of verifying the conformity to the requirements.
- 3) GB 18401 certification is directly issued by a Chinese notified body. In this case, cost includes: sending of samples to China, test performance, certificate issuing, mailing of original certificate, mediation and consultancy service of Centrocot.

### General costs

| Code  | Description   | Methods |
|-------|---|---------|
| 65200 | Issuing of certificate by a Chinese notified body                     |         |
| 65201 | Issuing of certificate by a Chinese notified body. Additional samples |         |

### Tests

| Code  | Description   | Methods                          |
|-------|---|----------------------------------|
| 65001 | Textiles. pH of aqueous extract   | GB/T 7573-2009                   |
| 65002 | Textiles. Aromatic amines derived from azo-colorants (without extraction) | GB/T 17592-2011 (except Annex B) |
| 65004 | Textiles. Aromatic amines derived from azo-colorants (with extraction)    | GB/T 17592-2011                  |
| 65003 | Textiles. 4-aminoazobenzene   | GB/T 23344-2009                  |
| 65006 | Textiles. Free and hydrolyzed formaldehyde. Aqueous extraction method     | GB/T 2912.1-2009                 |
| 65007 | Textiles. Colour fastness to water  | GB/T 5713-2013                   |
| 65008 | Textiles. Colour fastness to rubbing                                      | GB/T 3920-2008                   |
| 65009 | Textiles. Colour fastness to perspiration                                 | GB/T 3922-2013                   |
| 65010 | Textiles. Odour test  | GB 18401-2010                    |
| 65011 | Textiles. Colour fastness to saliva                                       | BG/T 18886-2019                  |

## China GB 31701. Safety for infants and children textile products

In order to assist those entrepreneurs exporting into Chinese market, Centrocot presents its own offer to perform tests intended to ensure the compliance with the compulsory Chinese Standard GB 31701 - "Safety Technical Code for Infants and Children Textile Products". The GB 31701-2015 Standard came into force on 1st June 2016 and establishes the safety requirements of textile products for infants and children up to 14 years of age. The articles manufactured before 1st June 2016, in compliance with the requirements of that period, can be sold in China not later than 31st May 2018.

The Standard specifies that the products have to satisfy not only safety requirements but also have to comply with the compulsory Standard GB 18401, whose tests are described in the specific Section of the Catalogue.

In case of padding, it is required to perform the tests provided by GB/T 17685 Down and Feathers.

### Tests

| Code    | Description  | Methods                |
|---------|--|------------------------|
| * 65053 | Infants and children's clothing. Colour fastness to rubbing                      | GB/T 3920-2008         |
| * 65054 | Infants and children's clothing. Total lead and cadmium                          | GB/T 30157-2013        |
| * 65055 | Infants and children's clothing. Phthalates                                      | GB/T 20388-2016        |
| * 65056 | Infants and children's clothing. Burning behaviour - 45° test. Flame spread rate | GB/T 14644-2014        |
| * 65048 | Infants and children's clothing. Domestic washing and drying for textile testing | GB 31701-2015 Annex A  |
| * 65049 | Infants and children's clothing. Removal force of attached components            | GB 31701-2015 Par. 4.4 |
| * 65050 | Infants and children's clothing. Sharp point (depth of penetration)              | GB/T 31702-2015        |
| * 65051 | Infants and children's clothing. Sharp edge (cutting length)                     | GB/T 31702-2015        |
| * 65052 | Infants and children's clothing. Safety specifications for cords and drawstrings | GB/T 22705-2008        |

## CHINA. Other mandatory national standards (GB 28480, GB 20400, GB 25038, GB 25036)

Besides the best-known GB 18401, in China there are other mandatory national standards issued in order to protect consumers' health. Centrocot presents its offer for the performance to verify compliance with key regulations regarding jewelry (also in precious metals) and metal accessories; items and components in leather; footwear for adults and children.

### GB 28480 "Adornment for children and adults - Chemical requirements"

| Code    | Description   | Methods                         |
|---------|---|---------------------------------|
| * 65073 | Adornments. Baneful elements                            | GB/T 28021-2011 + GB 28480-2012 |
| * 65074 | Adornments. Release of nickel                           | GB/T 19719-2005 + GB 28480-2012 |
| * 65075 | Adornments. Simulation of wear and corrosion on coating | GB/T 28485-2012 + GB 28480-2012 |
| * 65076 | Adornments. Chromium hexavalent                         | GB/T 28019-2011 + GB 28480-2012 |

### GB 20400 "Leather and Fur. Limit of harmful matter"

| Code    | Description   | Methods         |
|---------|---|-----------------|
| * 65250 | Footwear. Textiles. Free and hydrolyzed formaldehyde. Aqueous extraction method | GB/T 19941-2005 |
| * 65251 | Footwear. Textiles. Banned azo colourants                                       | GB/T 19942-2005 |

### GB 25038 "Rubber shoes healthy and safe specification"

| Code    | Description   | Methods                           |
|---------|---|-----------------------------------|
| * 65100 | Footwear. Textiles. pH of aqueous extract   | GB/T 7573-2009 + GB 25038-2010    |
| * 65101 | Footwear. Textiles. Free and hydrolyzed formaldehyde. Aqueous extraction method   | GB/T 2912.1-2009 + GB 25038-2010  |
| * 65102 | Footwear. Textiles. Banned azo colourants   | GB/T 17592-2011 + GB 25038-2010   |
| * 65103 | Footwear. Textiles. Pentachlorophenol and 2,3,5,6-tetrachlorophenol               | GB/T 18414.1-2006 + GB 25038-2010 |
| * 65104 | Footwear. Textiles. Extractable metals in acid perspiration solution (Pb, Cd, As) | GB/T 17593.2-2007 + GB 25038-2010 |
| * 65105 | Footwear. Rubber parts. N-nitrosamine   | GB/T 24153-2009 + GB 25038-2010   |
| * 65106 | Footwear. Colour fastness to rubbing  | QB/T 2882-2007 + GB 25038-2010    |

### GB 25036 "Children's canvas rubber footwear shoes"

| Code    | Description   | Methods                           |
|---------|---|-----------------------------------|
| * 65150 | Footwear. Textiles. pH of aqueous extract   | GB/T 7573-2009 + GB 25036-2010    |
| * 65151 | Footwear. Textiles. Free and hydrolyzed formaldehyde. Aqueous extraction method   | GB/T 2912.1-2009 + GB 25036-2010  |
| * 65152 | Footwear. Textiles. Banned azo colourants   | GB/T 17592-2011 + GB 25036-2010   |
| * 65153 | Footwear. Textiles. Pentachlorophenol and 2,3,5,6-tetrachlorophenol               | GB/T 18414.1-2006 + GB 25036-2010 |
| * 65154 | Footwear. Textiles. Extractable metals in acid perspiration solution (Pb, Cd, As) | GB/T 17593.2-2007 + GB 25036-2010 |
| * 65155 | Footwear. Rubber parts. N-nitrosamine   | GB/T 24153-2009 + GB 25036-2010   |
| * 65156 | Footwear. Colour fastness to rubbing  | QB/T 2882-2007 + GB 25036-2010    |

## CHINA. Other tests performed according to Chinese methods

Complementing the tests included in standard GB18401, Centrocot can carry out the main tests for the evaluation of the general, performance and ecological characteristics of the textiles according to the modalities provided by Chinese standards. Among these, fiber composition is of great interest, as it is one of the compulsory requirements often subjected to controls. Hereunder, a selection of the main tests.

### Tests

| Code    | Description  | Methods  |
|---------|--|--|
| 65012   | Textiles. Released formaldehyde. Vapour absorption method  | GB/T 2912.2-2009   |
| * 65225 | Toys and other articles intended for use by children. Phthalates   | GB/T 22048-2015  |
| 65019   | Textiles. Identification of fibers in textiles   | FZ/T 01057.1-2007 + FZ/T 01057.3-2007 + FZ/T 01057.4-2007 + FZ/T 01057.8-2012 + GB/T 29862-2013 + GB/T 4146.1-2009 + GB/T 11951-2018 |
| 65020   | Textiles. Quantitative analysis of binary blends of textile fibers                                       | GB/T 2910.1-2009 + GB/T 2910-2009 parts from 3 to 22 (except 2)  |
| 65021   | Textiles. Quantitative analysis of ternary blends of textile fibres                                      | GB/T 2910.2-2009 + BG/T 2910-2009 parts from 1 to 22   |
| 65023   | Speciality fibres and sheep's wool. Quantitative composition   | GB/T 14593-2008  |
| 65029   | Textiles. Colour fastness to domestic and commercial laundering  | GB/T 12490-2014  |
| * 65045 | Textiles. Colour fastness to washing with soap or soap and soda  | GB/T 3921-2008   |
| 65030   | Textiles. Colour fastness to dry cleaning  | GB/T 5711-2015   |
| * 65047 | Textiles. Colour fastness to sea water   | GB/T 5714-1997   |
| * 65046 | Textiles. Colour fastness to chlorinated water (swimming-pool water)                                     | GB/T 8433-2013   |
| 65031   | Textiles. Dimensional change in domestic wet washing and drying  | GB/T 8628-2013 + GB/T 8629-2017 + GB/T 8630-2013   |
| 65032   | Textiles. Dimensional change in dry cleaning   | GB/T 19981.2-2014 + GB/T 8628-2013 + GB/T 8630-2013  |
| 65033   | Textile. Colour fastness to artificial light: Xenon arc fading lamp test                                 | GB/T 8427-2008   |
| 65034   | Textiles. Colour fastness to bleaching: Hypochlorite   | GB/T 7069-1997   |
| 65035   | Textiles. Colour fastness to domestic and commercial laundering using a low temperature bleach activator | GB/T 23343-2009  |
| 65036   | Textiles. Colour fastness to hot pressing  | GB/T 6152-1997   |
| 65037   | Textiles. Pilling. Box method  | GB/T 4802.3-2008   |
| 65038   | Textiles. Pilling. Martindale method   | GB/T 4802.2-2008   |
| 65039   | Textiles. Tearing strength. Elmendorf method   | GB/T 3917.1-2009   |
| 65040   | Textiles. Tensile strength and elongation. Strip method  | GB/T 3923.1-2013   |
| 65041   | Textiles. Resistance of yarns at a seam in woven fabrics. Fixed seam opening method                      | GB/T 13772.1-2008  |
| 65042   | Textiles. Slippage resistance of yarns at a seam. Fixed load method                                      | GB/T 13772.2-2018  |
| * 65043 | Fabrics. Tearing strength. Tear specimen   | GB/T 3917.2-2009   |
| * 65044 | Fabrics. Pilling. Circular locus method  | GB/T 4802.1-2008   |

## REACh. SVCH and Candidate List. Tests to verify products and accessories

Centrocot presents its offer for the determination of the SVHC "Substances of Very High Concern", included in the "Candidate List" updated on 17th December 2014, contextually to the new European regulation REACh "Registration, Evaluation, Authorisation and Restriction of Chemicals", entered into force on June the 1st, 2007.

The chemical substances in the SVHC list have been evaluated and classified as carcinogenic of category 1 and 2, mutagenic and toxic to reproduction, persistent, bioaccumulative and toxic (PBT), very persistent and very bioaccumulative (vPvB).

Some of these substances have a real use in the textile sector, while other no.

However Centrocot has considered to offer a complete array of tests, whose selection will be made regarding to the different type of articles and security level the clients ask.

Most of the analytical methods for the determination of the substances have been implemented by the Research Laboratory staff of Centrocot.

### Tests

| Code    | Description  | Methods   |
|---------|--|---|
| * 64100 | Heavy metals. Total content  | UNI EN 16711-1:2015   |
| * 64200 | Carcinogenic aromatic amines   | Solvent extraction and chromatographic analysis with mass detector (LC/MS)    |
| * 64202 | 4-aminoazobenzene  | UNI EN ISO 14362-3:2017   |
| * 64223 | Carcinogenic dyestuffs   | Solvent extraction and chromatographic analysis with mass detector (LC/MS)    |
| * 64001 | Polycyclic aromatic hydrocarbons   | AfPS GS 2014:01   |
| * 64219 | Musk Xylene  | Solvent extraction and chromatographic analysis with mass detector (GC-MS)    |
| * 64010 | Acrylamide   | Solvent extraction and chromatographic analysis with mass detector (LC-MS/MS) |
| * 64225 | Phthalates   | UNI EN ISO 14389:2014<br>CPSC-CH-C1001-09.3                                   |
| * 64005 | Tris(2-chloroethyl)phosphate   | Solvent extraction and chromatographic analysis with mass detector (GC-MS)    |
| * 64002 | Hexabromocyclododecane (HBCDD), Decabromodiphenyl ether (DecaBDE)  | Solvent extraction and chromatographic analysis with mass detector (GC-MS)    |
| * 64103 | Aluminosilicate and/or Zirconia Aluminosilicate Refractory Ceramic Fibres  | Microscope evaluation of the surface morphological-structural characteristics |
| * 64004 | Short chain chlorinated paraffins C10-C13 (SCCP)   | Solvent extraction and chromatographic analysis with mass detector (GC-MS)    |
| * 64201 | Trichloroethylene, 2-methoxyethanol, 2-ethoxyethanol   | Solvent extraction and chromatographic analysis with mass detector (GC-MS)    |
| * 64335 | N,N-dimethylacetamide, 1-methyl-2-pyrrolidone, dimethylformamide   | OEKO-TEX® Standard 201 M-26 2015  |
| * 64350 | bis[4-(dimethylamino)phenyl] methanone (Michler's ketone)<br>bis[4-(dimethylamino)phenyl] methane (Michler's base) | Solvent extraction and chromatographic analysis with mass detector (LC)       |
| * 64351 | Bis(tributyltin)oxide (TBTO), Dibutyltin dichloride (DBTC)   | MIP 132:2014 Rev. 0   |
| * 64353 | Perfluorinated compound  | UNI CEN/TS 15968:2010   |
| * 64330 | Alkylphenols   | MIP 130:2014 Rev. 0   |
| * 64312 | Alkylphenoethoxylates  | MIP 131:2017 Rev.1  |
| * 64301 | Pesticides   | OEKO-TEX® Standard 201 M-6-A 2016 +<br>OEKO-TEX® Standard 201 M-6-B 2015      |

# FOOD CONTACT CRITERIA

## Tests

| Code    | Description  | Methods  |
|---------|--|--|
| * 64011 | Materials and articles in contact with foodstuffs. Plastics. Overall migration into olive oil by total immersion         | UNI EN 1186-1:2003 + UNI EN 1186-2:2003  |
| 64012   | Materials and articles in contact with foodstuffs. Overall migration into aqueous food simulants by total immersion      | Reg. CE 1935/2004 GUCE L. 338 del 13/11/2004 + Reg. (EU) n. 10/2011 GUUE L 12 of 15/01/2011 + Reg. (EU) 2016/1416 + DM 21/03/1973 GU n° 104 20/04/1973 Annex IV Part 1 + UNI EN 1186-1:2003 + UNI EN 1186-3:2003   |
| * 64013 | Materials and articles in contact with foodstuffs. Plastics. Overall migration into olive oil by cell                    | UNI EN 1186-1:2003 + UNI EN 1186-4:2003  |
| * 64014 | Materials and articles in contact with foodstuffs. Plastics. Overall migration into aqueous food simulants by cell       | UNI EN 1186-1:2003 + UNI EN 1186-5:2003  |
| * 64043 | Materials in contact with foodstuffs. Overall migration into aqueous food simulants (simulant A)                         | Reg. CE 1935/2004 GUCE L 338 of 13/11/04 + DM 21/03/1973 GU n° 104   |
| * 64044 | Materials in contact with foodstuffs. Overall migration into alcohol food simulants (simulant C)                         | Reg. CE 1935/2004 GUCE L 338 of 13/11/04 + DM 21/03/1973 GU n° 104   |
| * 64041 | Materials and articles in contact with foodstuffs. Plastics. Overall migration at high temperatures                      | UNI EN 1186-1:2003 + UNI EN 1186-13:2003   |
| * 64042 | Materials and articles in contact with foodstuffs. Plastics. Specific migration in simulant E                            | MIP 136:2013 Rev. 0  |
| * 64040 | Materials and articles in contact with foodstuffs. Plastics. Specific migration of primary aromatic amines               | Regulation (EU) No. 10/2011  |
| 64015   | Materials and articles in contact with foodstuffs. Terephthalic acid in food simulants                                   | DM of 21/3/73 S.O. GU n° 104 of 20/04/73 + DM 220 of 26/04/93 S.O. GU n° 162 of 13/07/93 + Annex of Decree 338 of 22/07/98 GU n° 228 of 30/09/98 + DM n° 174 24/09/2008 SO GU n° 261 07/11/2008 + DM 299 of 22/12/05 GU n° 37 of 14/02/06 + DM n° 735 28/10/1994 GU n° 1 02/01/1995 + Reg. (EU) n. 10/2011 GUUE L 12 of 15/01/2011 + Reg. (EU) 2016/1416 + UNI EN 13130-1:2005 + UNI EN 13130-2:2005 |
| * 64016 | Materials and articles in contact with foodstuffs. Plastics. Acrylonitrile in food and food simulants                    | UNI EN 13130-1:2005 + UNI EN 13130-3:2005  |
| * 64017 | Materials and articles in contact with foodstuffs. Plastics. 1,3-butadiene in plastics                                   | UNI EN 13130-1:2005 + UNI EN 13130-4:2005  |
| * 64018 | Materials and articles in contact with foodstuffs. Plastics. 1,3-butadiene in food simulants                             | UNI EN 13130-1:2005 + UNI CEN/TS 13130-15:2006   |
| * 64019 | Materials and articles in contact with foodstuffs. Plastics. Vinylidene chloride in food simulants                       | UNI EN 13130-1:2005 + UNI EN 13130-5:2005  |
| * 64020 | Materials and articles in contact with foodstuffs. Plastics. Vinylidene chloride in plastics                             | UNI EN 13130-1:2005 + UNI EN 13130-6:2005  |
| * 64021 | Materials and articles in contact with foodstuffs. Plastics. Monoethylene glycol and diethylene glycol in food simulants | UNI EN 13130-1:2005 + UNI EN 13130-7:2005  |
| * 64022 | Materials and articles in contact with foodstuffs. Plastics. Isocyanates in plastics                                     | UNI EN 13130-1:2005 + UNI EN 13130-8:2005  |

|         |  |   |
|---------|--|---|
| * 64023 | Materials and articles in contact with foodstuffs. Plastics. Acetic acid, vinyl ester in food simulants  | UNI EN 13130-1:2005 + UNI CEN/TS 13130-9:2006   |
| * 64024 | Materials and articles in contact with foodstuffs. Plastics. Acrylamide in food simulants  | UNI EN 13130-1:2005 + UNI CEN/TS 13130-10:2006  |
| * 64025 | Materials and articles in contact with foodstuffs. Plastics. 11-aminoundecanoic acid in food simulants   | UNI EN 13130-1:2005 + UNI CEN/TS 13130-11:2006  |
| * 64026 | Material and articles in contact with foodstuffs. Plastics. 1,3-benzenedimethanamine in food simulants   | UNI EN 13130-1:2005 + UNI CEN/TS 13130-12:2006  |
| 64027   | Materials and articles in contact with foodstuffs. 2,2-bis(4-hydroxyphenyl)propane (Bisphenol A) in food simulants   | DM of 21/3/73 S.O. GU n° 104 of 20/04/73 + DM 220 of 26/04/93 S.O. GU n° 162 of 13/07/93 + Annex of Decree 338 of 22/07/98 GU n° 228 of 30/09/98 + DM n° 174 24/09/2008 SO GU n° 261 07/11/2008 + DM 299 of 22/12/05 GU n° 37 of 14/02/06 + DM n° 735 28/10/1994 GU n° 1 02/01/1995 + Reg. (EU) n. 10/2011 GUUE L 12 of 15/01/2011 + Reg. (EU) 2016/1416 + UNI EN 13130-1:2005 + UNI CEN/TS 13130-13:2006 |
| * 64028 | Materials and articles in contact with foodstuffs. Plastics. 3,3-bis(3-methyl-4-hydroxyphenyl)-2-indoline in food simulants  | UNI EN 13130-1:2005 + UNI CEN/TS 13130-14:2006  |
| * 64029 | Materials and articles in contact with foodstuffs. Plastics. Caprolactam and caprolactam salt in food simulants  | UNI EN 13130-1:2005 + UNI CEN/TS 13130-16:2006  |
| * 64030 | Materials and articles in contact with foodstuffs. Plastics. Carbonyl chloride in plastics   | UNI EN 13130-1:2005 + UNI CEN/TS 13130-17:2006  |
| * 64031 | Materiali ed articoli in contatto con gli alimenti. Materie plastiche. 1,2-diidrossibenzene, 1,3-diidrossibenzene, 1,4-diidrossibenzene, 4,4'-diidrossibenzofenone e 4,4'-diidrossibifenile nei simulanti alimentari | UNI EN 13130-1:2005 + UNI CEN/TS 13130-18:2006  |
| * 64032 | Materials and articles in contact with foodstuffs. Plastics. Dimethylaminoethanol in food simulants  | UNI EN 13130-1:2005 + UNI CEN/TS 13130-19:2006  |
| * 64033 | Materials and articles in contact with foodstuffs. Plastics. Epichlorohydrin in plastics   | UNI EN 13130-1:2005 + UNI CEN/TS 13130-20:2006  |
| * 64034 | Materials and articles in contact with foodstuffs. Plastics. Ethylenediamine and hexamethylenediamine in food simulants  | UNI EN 13130-1:2005 + UNI CEN/TS 13130-21:2006  |
| * 64035 | Materials and articles in contact with foodstuffs. Plastics. Ethylene oxide and propylene oxide in plastics  | UNI EN 13130-1:2005 + UNI CEN/TS 13130-22:2006  |
| 64036   | Materials and articles in contact with foodstuffs. Formaldehyde and hexamethylenetetramine in food simulants   | DM of 21/3/73 S.O. GU n° 104 of 20/04/73 + DM 220 of 26/04/93 S.O. GU n° 162 of 13/07/93 + Annex of Decree 338 of 22/07/98 GU n° 228 of 30/09/98 + DM n° 174 24/09/2008 SO GU n° 261 07/11/2008 + DM 299 of 22/12/05 GU n° 37 of 14/02/06 + DM n° 735 28/10/1994 GU n° 1 02/01/1995 + Reg. (EU) n. 10/2011 GUUE L 12 of 15/01/2011 + Reg. (EU) 2016/1416 + UNI EN 13130-1:2005 + UNI CEN/TS 13130-23:2006 |



|         |   |   |
|---------|---|---|
| 64037   | Materials and articles in contact with foodstuffs. Maleic acid and maleic anhydride in food simulants                               | DM of 21/3/73 S.O. GU n° 104 of 20/04/73 + DM 220 of 26/04/93 S.O. GU n° 162 of 13/07/93 + Annex of Decree 338 of 22/07/98 GU n° 228 of 30/09/98 + DM n° 174 24/09/2008 SO GU n° 261 07/11/2008 + DM 299 of 22/12/05 GU n° 37 of 14/02/06 + DM n° 735 28/10/1994 GU n° 1 02/01/1995 + Reg. (EU) n. 10/2011 GUUE L 12 of 15/01/2011 + Reg. (EU) 2016/1416 + UNI EN 13130-1:2005 + CEN/TS 13130-24:2005 |
| * 64038 | Materials and articles in contact with foodstuffs. Plastics.4-methyl-1-pentene in food simulants                                    | UNI EN 13130-1:2005 + UNI CEN/TS 13130-25:2006  |
| * 64039 | Materials and articles in contact with foodstuffs. Plastics. 1-octene and tetrahydrofuran in food simulants                         | UNI EN 13130-1:2005 + UNI CEN/TS 13130-26:2006  |
| * 64045 | Material in contact with foodstuffs. Overall migration into olive oil (simulant D)  | Reg. CE 1935/2004 GU CE L 338 of 13/11/04 + DM 21/03/1973 GU n. 104   |
| * 64046 | Material in contact with foodstuffs. Overall migration into acid simulants (simulant B)   | Reg. CE 1935/2004 GU CE L 338 of 13/11/04 + DM 21/03/1973 GU n. 104   |
| 64051   | Materials and articles in contact with foodstuff. Substitute test for overall migration using test media iso-octane and 95% ethanol | Reg. (EU) n. 10/2011 GUUE L 12 of 15/01/2011 + Reg. (EU) 2016/1416 + UNI EN 1186-1:2003 + UNI EN 1186-3:2003 + UNI EN 1186-7:2003 + UNI EN 1186-9:2003 + UNI EN 1186-14:2003  |
| 64053   | Materials and articles in contact with foodstuffs. Overall migration into aqueous food simulants by article filling                 | Reg. CE 1935/2004 GUCE L. 338 del 13/11/2004 + Reg. (EU) n. 10/2011 GUUE L 12 of 15/01/2011 + Reg. (EU) 2016/1416 + DM 21/03/1973 GU n° 104 20/04/1973 Annex IV Part 1 + UNI EN 1186-1:2003 + UNI EN 1186-9:2003  |
| 64054   | Materials and articles in contact with foodstuffs. Overall migration into aqueous food simulants using a pouch                      | Reg. CE 1935/2004 GUCE L 338 of 13/11/04 + Reg. (EU) n. 10/2011 GUUE L 12 of 15/01/2011 + Reg. (EU) 2016/1416 + DM 21/03/1973 GU n° 104 20/04/1973 Annex IV Part 1 + UNI EN 1186-1:2003 + UNI EN 1186-7:2003  |
| * 64050 | Materials and articles in contact with foodstuffs. Specific migration of chemical substance   | Reg. CE 1935/2004 GU CE L 338 of 13/11/04 + DM 21/03/1973 GU n. 104 UNI EN 13130-1:2005   |
| 64047   | Materials and articles in contact with foodstuffs. Specific migration of primary aromatic amines with simulant B (3% acetic acid)   | DM 21/03/1973 SO GU n° 104 20/04/1973 All IV Part B DM n° 220 26/04/1993 SO GU n° 162 13/07/1993 All III Part B + LMBG § 35 L 00.00-6 1:1995/Cor:2002<br>UNI EN 1186-3:2003 + LMBG § 35 L 00.00-6 1:1995/Cor:2002<br>UNI EN 1186-7:2003 + LMBG § 35 L 00.00-6 1:1995/Cor:2002<br>UNI EN 1186-9:2003 + LMBG § 35 L 00.00-6 1:1995/Cor:2002   |



|         |   |   |
|---------|---|---|
| * 64048 | Materials and articles in contact with foodstuffs. Plastics. Specific migration of Phthalates   | UNI EN 13130-1:2005 + UNI EN 13130-2:2005   |
| * 64049 | Materials and articles in contact with foodstuffs. Plastics and finished fabrics with water-oil repellent. PFC in simulants   | MIP 140:2015 Rev. 0   |
| 64052   | Materials and articles in contact with foodstuffs. Specific migration of barium (Ba), cobalt (Co), iron (Fe), lithium (Li), manganese (Mn), copper (Cu), zinc (Zn), antimony (Sb), aluminum (Al), in food simulants | Reg. CE 1935/2004 GUCE L 338 of 13/11/04 + Reg. (EU) n. 10/2011 GUUE L12 of 15/01/2011 + Reg. (EU) 2016/1416 + UNI EN ISO 17294-2:2016  |
| 64055   | Materials and articles in contact with foodstuffs. Dyes migration in food simulants   | Reg. CE 1935/2004 GUCE L 338 of 13/11/04 + DM 21/03/1973 GU n° 104 20/04/1973 Annex IV Part 7   |
| * 64300 | Materials and articles in contact with foodstuffs. Plastics. Maximum extractable fraction in selected solvent   | 21 CFR Ch.1 Part 177.1500   |
| * 64056 | Materials and articles in contact with foodstuffs. Plastics - Part 15: Alternative test methods to migration into fatty food simulants by rapid extraction into iso-octane and/or 95% ethanol                       | Reg. CE 1935/2004 GU CE L 338 of 13/11/04 + Reg. (EU) n. 10/2011 GUUE L 12 of 15/01/2011 + Reg. (EU) 2016/1416 + DM 21/03/1973 GU n° 104 20/04/1973 Annex IV Part 1 + UNI EN 1186-1:2003 + UNI EN 1186-3:2003 + UNI EN 1186-15:2003 |

## BIOLOGICAL TESTS

### Barrier properties

| Code    | Description   | Methods   |
|---------|---|---|
| 90100   | Fabrics, Nonwoven fabrics. Penetration by blood and body fluids. Synthetic blood method                             | ISO 16603:2004  |
| * 90101 | Fabrics, Nonwoven fabrics. Penetration by blood and body fluids. Synthetic blood method                             | ASTM F1670/F1670M-17  |
| * 90110 | Fabrics, Nonwoven fabrics. Penetration by blood and other body fluid-borne pathogens. Phi-X174 bacteriophage method | ISO 16604:2004<br>ASTM F 1671/F 1671M-13<br>JIS T 8061:2010 |
| 90121   | Fabrics. Wet bacterial penetration  | UNI EN ISO 22610:2006                                       |
| * 90103 | Fabrics. Wet bacterial penetration  | ISO 22610:2018  |
| * 90130 | Fabrics, Nonwoven fabrics. Penetration by biologically contaminated aerosols  | ISO/DIS 22611:2003  |
| 90131   | Fabrics, Nonwoven fabrics. Penetration by biologically contaminated powders   | UNI EN ISO 22612:2005 + EC 1-2011                           |

### Antimicrobial properties

| Code    | Description   | Methods  |
|---------|---|--|
| 90140   | Fabrics, Nonwoven fabrics. Assessment of antibacterial activity. Agar diffusion plate test  | UNI EN ISO 20645:2005  |
| * 90141 | Fabrics, Nonwoven fabrics. Assessment of antimycotic effect - Agar diffusion plate test   | SN 195921:1994   |
| * 90142 | Fabrics, Nonwoven fabrics. Assessment of the effect of microfungi on textile materials - Mycotic resistance   | UNI EN 14119:2004 (except met. B2) +<br>UNI EN ISO 13934-1:2013  |
| * 90143 | Fabrics, Nonwoven fabrics. Assessment of the effect of microfungi on textile materials - Antimycotic activity   | UNI EN 14119:2004 Met. B2  |
| * 90145 | Fabrics, Nonwoven fabrics. Antibacterial activity of textile materials- Parallel streak method  | AATCC 147-2016   |
| * 90146 | Fabrics, Nonwoven fabrics. Mildew and rot resistance of textile materials. Test I Soil burial test  | AATCC 30-2017 + ASTM D 5035-11<br>(2015)                         |
| * 90149 | Fabrics, Nonwoven fabrics. Mildew and rot resistance of textile materials. Test III Plate agar  | AATCC 30-2017  |
| * 90147 | Fabrics, Nonwoven fabrics. Resistance of cellulose-containing textiles to microorganisms - Soil burial test - Assessment of rot-retardant finishing                     | UNI EN ISO 11721-1:2002 + EC 1-2004 +<br>UNI EN ISO 13934-1:2013 |
| * 90148 | Fabrics, Nonwoven fabrics. Resistance of cellulose-containing textiles to microorganisms - Soil burial test - Assessment of long-term resistance of a rot retard        | UNI EN ISO 11721-2:2004 + UNI EN ISO<br>13934-1:2013             |
| * 90150 | Fabrics, Nonwoven fabrics. Quantitative determination of antibacterial effect of immobilized antimicrobial agents under dynamic contact conditions (shake flask method) | ASTM E 2149-13   |
| * 90153 | Fabrics, Nonwoven fabrics. Assessment of antibacterial activity. Absorption method  | JIS L 1902:2015  |
| * 90159 | Fabrics, Nonwoven fabrics. Quantitative determination of antibacterial efficacy in textile materials - Printing method  | JIS L 1902:2015  |
| * 90154 | Fabrics, Nonwoven fabrics. Determination of antibacterial activity of products with antibacterial characteristics. Absorption method                                    | UNI EN ISO 20743:2013  |
| * 90144 | Fabrics, Nonwoven fabrics. Quantitative determination of antibacterial efficacy on textile materials. Transfer method   | UNI EN ISO 20743:2013  |
| * 90156 | Fabrics, Nonwoven fabrics. Quantitative determination of antibacterial efficacy on textile materials - Absorption method  | AATCC 100-2012   |
| * 90157 | Fabrics, Nonwoven fabrics. Assessment of acaricid efficacy  | NF G39-011 2009  |

### Quantitative determination of microorganisms on surfaces

| Code    | Description  | Methods                            |
|---------|--|------------------------------------|
| * 90160 | Fabrics, Nonwoven fabrics. Determination of biocontamination through contact plates. Total bacterial content         | UNI EN ISO 14698-1:2004 appendix D |
| * 90170 | Fabrics, Nonwoven fabrics. Determination of biocontamination through contact plates. Total yeasts and moulds content | UNI EN ISO 14698-1:2004 appendix D |



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|---------|---|---|
| * 90180 | Fabrics, Nonwoven fabrics. Determination of biocontamination through contact plates. Total gram-negative bacteria content | UNI EN ISO 14698-1:2004 appendix D                            |
| * 90190 | Fabrics, Nonwoven fabrics. Evaluation of cleanliness - microbial. Stomaching method                                       | UNI EN ISO 11737-2:2010<br>UNI EN ISO 14698-1:2004 appendix D |

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### **Resistance to sterilisation**

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| <b>Code</b> | <b>Description</b>                       | <b>Methods</b>     |
|-------------|--|--------------------|
| * 90292     | Fabrics, Nonwoven fabrics. Sterilization | MIP 412:2004 Rev.0 |

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## CERTIFICATION OF SANITARY PROCESSES IN LAUNDRIES

### General costs

| Code  | Description                                       | Methods |
|-------|---|---------|
| 90001 | Evaluation of technical documentation             |         |
| 90010 | Issuing of certificate of conformity              |         |
| 90011 | Extension of certificate of conformity            |         |
| 90012 | Translation into English or French of certificate |         |
| 90013 | Duplicate of conformity certificate               |         |
| 90014 | Audit on the spot                                 |         |

### Quantitative determination of microorganisms on surfaces

| Code    | Description   | Methods   |
|---------|---|---|
| * 90160 | Fabrics, Nonwoven fabrics. Determination of biocontamination through contact plates. Total bacterial content              | UNI EN ISO 14698-1:2004 appendix D                            |
| * 90170 | Fabrics, Nonwoven fabrics. Determination of biocontamination through contact plates. Total yeasts and moulds content      | UNI EN ISO 14698-1:2004 appendix D                            |
| * 90180 | Fabrics, Nonwoven fabrics. Determination of biocontamination through contact plates. Total gram-negative bacteria content | UNI EN ISO 14698-1:2004 appendix D                            |
| * 90190 | Fabrics, Nonwoven fabrics. Evaluation of cleanliness - microbial. Stomaching method                                       | UNI EN ISO 11737-2:2010<br>UNI EN ISO 14698-1:2004 appendix D |
| * 90195 | Fabrics, Nonwoven fabrics. Validation of antimicrobial efficacy of washing cycles in usage conditions                     | UNI EN ISO 14698-1:2004 appendix E                            |

### Waters

| Code    | Description  | Methods   |
|---------|--|---|
| * 90200 | Waters. Pollution and pathogens indicator microorganism. Total coliforms   | APAT IRSA-CNR – Manual and Guidelines 29:2003 – Method 7010/C |
| * 90210 | Waters. Pollution and pathogens indicator microorganism. Faecal coliforms  | APAT IRSA-CNR – Manual and Guidelines 29:2003 – Method 7020/B |
| * 90220 | Waters. Pollution and pathogens indicator microorganism. Faecal streptococci and enterococci   | APAT IRSA-CNR – Manual and Guidelines 29:2003 – Method 7040/C |
| * 90230 | Waters. Microorganisms indicators of pollution and pathogens. Count of colonies on agar at 36°C (mesophil microorganisms) and at 22°C (psychrophil microorganisms) | APAT IRSA-CNR – Manual and Guidelines 29:2003 – Method 7050   |



## BIOLOGICAL LABEL

### General costs

| Code  | Description                                       | Methods |
|-------|---|---------|
| 90020 | Certificate issuing                               |         |
| 90023 | Certificate duplicate                             |         |
| 90021 | Certificate extension                             |         |
| 90022 | Translation of certificate into English or French |         |

### Tests

| Code    | Description  | Methods  |
|---------|--|--|
| 90427   | Textiles. Domestic washing and drying for textile testing  | UNI EN ISO 6330:2012   |
| * 90154 | Fabrics, Nonwoven fabrics. Determination of antibacterial activity of products with antibacterial characteristics. Absorption method | UNI EN ISO 20743:2013  |
| * 90155 | Finished products or raw materials. Biocompatibility test  | Determination of the EC50 in skin-derived cell monolayers (fibroblasts or keratinocytes lines) for the evaluation of biocompatibility of medical devices according to UNI EN ISO 10993-5, and for the estimation of the acute toxicity of raw materials and finished products. For solid products or devices an elution pre-treatment in a suitable extraction fluid is required |



## ANTIBACTERIAL EFFICACY CERTIFICATE

### General costs

| Code  | Description         | Methods |
|-------|---------------------|---------|
| 90050 | Certificate issuing |         |

### Tests

| Code    | Description  | Methods               |
|---------|--|-----------------------|
| 70429   | Textiles. Domestic washing and drying for textile testing  | UNI EN ISO 6330:2012  |
| * 90154 | Fabrics, Nonwoven fabrics. Determination of antibacterial activity of products with antibacterial characteristics. Absorption method | UNI EN ISO 20743:2013 |

## BIOCOMPATIBILITY TESTS

### Tests

| Code    | Description   | Methods  |
|---------|---|--|
| * 90060 | Finished products or raw materials.Basic sensitisation            | Quantitative evaluation of the sensitisation risk of finished products and raw materials trough the expression of co-stimulatory molecules on monocytes/macrophages  |
| * 90061 | Advanced sensitisation  | Quantitative evaluation of the sensitisation risk of finished products and raw materials trough the expression of cell surface markers on dendritic cells  |
| * 90062 | Finished products or raw materials.Ex-vivo sensitisation          | Reactivity evaluation from a serum pool of human subjects allergic to latex, shrimps, gluten or preservatives o others specific allergens versus finished products and raw material  |
| * 90063 | Finished products or raw materials.Sensitation elisa test         | Reactivity quantification of finished products and raw materials using antibodies to specific aptens (li.e. atex, shrimps, gluten, preservatives)  |
| * 90064 | Finished products or raw materials.Local lymph node assay         | Alternative in vivo test used for testing of medical devices and raw materials, according to the OECD TG 429 and in compliace with UNI/EN/ISO 10993-10 + The sample is tested at three concentrations. It is recommded for substances at risk  |
| * 90065 | Finished products or raw materials.Reduced local lymph node assay | Alternative in vivo test used for testing of medical devices and raw materials, according to the test ESAC statement of 27th april 2007 and OECD 429 and in compliance with UNI/EN/ISO 10993-10. The sample is tested at one concentration. It is recommded for substances not at risk |
| * 90066 | Cytokine assay on 3D epidermis                                    | Assay of cytokines involved in the allergic reaction cascade, even aimed to discriminate between pro-sensitising and pro-inflammatory effect. + Price for one cytokine test  |
| * 90067 | Cytokine assay on human keratinocytes or on monocytes/macrophages | Assay of cytokines involved in the allergic reaction cascade, even aimed to discriminate between pro-sensitising and pro-inflammatory effect. + Price for one cytokine test  |
| * 90068 | Cytokine assay on dendritic cells                                 | Assay of cytokines involved in the allergic reaction cascade, even aimed to discriminate between pro-sensitising and pro-inflammatory effect. + Price for one cytokine test  |



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|---------|--|--|
| * 90069 | Finished products or raw materials. Sensitisation inhibition on monocytes/ macrophages | Inhibition of the sensitisation effect induced by a specific apten (i.e. nickel) by finished products or raw materials in different concentration through the quantification of the expression of co-stimulatory molecules   |
| * 90072 | Finished products or raw materials. Cytotoxicity with pretreatment                     | Determination of the EC50 in skin-derived cell monolayers (fibroblasts or keratinocytes lines) for the evaluation of biocompatibility of medical devices according to UNI/EN /ISO10993-5, and for the estimation of the acute toxicity of raw materials and finished products  |
| * 90074 | Finished products or raw materials. Skin irritation on 3D epidermidis                  | Estimation of the skin irritation potential using a two time point MTT assay as cell viability endpoint in a human reconstituted epidermis; irritation assessment against a negative control and a known irritant (SLS) as positive control using the ET50 value   |
| * 90075 | Finished products or raw materials. Eye irritation/cytotoxicity                        | Estimation of the eye irritation potential by IC50 determination (NRU cell viability test) on cultured fibroblasts. The product is tested at various dilutions and the IC50 is assessed against a negative control and a known eye irritant (SLS) as positive control  |
| * 90076 | Finished products or raw materials. Phototoxicity                                      | 3T3/NRU test according to EU normative (Annex V - B.41, Council Directive 67/548/EEC) and OECD Test Guideline 432. The phototoxicity of the substance is assessed in cultured 3T3 fibroblasts by measuring the cell viability after exposure to the product in the presence or not of UVA and compared against a known phototoxic substance (chlorpromazine). Especially suitable to test raw materials designed for topical use under UV exposure, sun products, fragrances, day-care cosmetic products |
| * 90077 | Finished products or raw materials. Ames test  | Mutagenesis test for raw materials/finished products according to the Ames protocol (Annex V - B.13-14 CD 67/548/EEC and OECD Test Guideline 471) on 5 strains of Salmonella, with and without S9 metabolic activation   |
| * 90078 | Finished products or raw materials. Ecotoxicity test on crustacean Preliminary         | Preliminary ecotoxicity test on raw materials/finished products/water according to OECD 202 on Daphnia magna   |



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|---------|---|--|
| * 90079 | Finished products or raw materials. Ecotoxicity test on crustacean "range finding test"   | Complete ecotoxicity test on raw materials/finished products/water according to OECD 202 on Daphnia magna, necessary to better determine EC50 when the sample shows ecotoxicity effect on the preliminary test                             |
| * 90082 | Finished products or raw materials. Skin irritation on 3D epidermis according to OECD 439 | Estimation of the skin irritation potential using MTT assay at one time point in a human reconstituted epidermis; comparison with a negative control and a known irritant (SLS) as positive control according to validated ECVAM protocols |
| * 90083 | Finished products or raw materials. Occlusive epicutaneous test (Patch test)              | Skin compatibility evaluation (irritation).<br>Single Patch test (48 h)  |

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## TESTS OF REACTION TO FIRE

### Tests

| Code    | Description  | Methods  |
|---------|--|--|
| * 71101 | Fabrics. Washing treatment   | UNI 9176:2010 Met. A   |
| 71100   | Fabrics. Reaction to fire by applying a small flame (test not performed for ministerial approval)                                    | UNI 8456:2010  |
| 71105   | Textiles. Reaction to fire of combustible materials subject to small flame (test not performed for ministerial approval)             | UNI 8457:2010  |
| * 71109 | Fabrics. Reaction to fire of materials can be hit by flame with radiant heating (isotropic/anisotropic sample - equal/unequal faces) | UNI 9174:2010  |
| * 71200 | Fabrics. Reaction to fire of upholstered products by applying small flame  | UNI 9175:2010  |
| 71110   | Fabrics. Burning behaviour of vertically oriented specimens (surface ignition)   | UNI EN ISO 6941:2004 Procedure A   |
| 71120   | Fabrics. Burning behaviour of vertically oriented specimens (edge ignition)  | UNI EN ISO 6941:2004 Procedure B   |
| 71111   | Fabrics. Burning behaviour of vertically oriented specimens (surface ignition)   | UNI EN ISO 6940:2004 Procedure A   |
| 71121   | Fabrics. Burning behaviour of vertically oriented specimens (edge ignition)  | UNI EN ISO 6940:2004 Procedure B   |
| * 71130 | Textiles. Burning behaviour of children's nightwear  | UNI EN 1103:2007 + UNI EN ISO 6941:2004 + UNI EN 14878:2008 Par. 7 + EC 1-2010                   |
| * 70407 | Textiles. Burning behaviour  | UNI EN 1103:2007 + UNI EN ISO 6941:2004  |
| * 70448 | Toys. Flammability   | UNI EN 71-2:2014   |
| 71300   | Upholstered furniture. Assessment of ignitability. Ignition source: slow smouldering cigarette                                       | UNI EN 1021-1:2014   |
| 71301   | Upholstered furniture. Assessment of ignitability. Ignition source: slow smouldering cigarette                                       | BS 5852:2006 (ignition source 0 Par. 8)  |
| 71400   | Upholstered furniture. Assessment of ignitability. Ignition source: Match flame equivalent   | UNI EN 1021-2:2014   |
| 71401   | Upholstered furniture. Assessment of ignitability. Ignition source: Match flame equivalent   | BS 5852:2006 (ignition sources 1,2,3 Par. 9.2)   |
| * 70416 | Automotive interior materials. Resistance to burning   | MVSS302:2002<br>UNI 4818-19:1992   |
| 70417   | Automotive interior materials. Burning behaviour   | UNI ISO 3795:1992  |
| 70443   | Protective clothing. Resistance to heat. Dimensional changes and appearance changes  | ISO 17493:2016 (except 8.3 and 8.4) + UNI EN ISO 3759:2011                                       |
| 70408   | Protective clothing. Limited flame spread  | UNI EN ISO 15025:2017 Met. A   |
| 70409   | Protective clothing. Limited flame spread  | UNI EN ISO 15025:2017 Met. B   |
| 70450   | Protective clothing. Heat transmission on exposure to a flame  | UNI EN 367:1993  |
| 70438   | Protective clothing. Exposition to a source of radiant heat  | UNI EN ISO 6942:2004 Met. B  |
| 70461   | Protective clothing. Contact heat transmission   | UNI EN ISO 12127-1:2016  |
| 70616   | Protective clothing. Charge decay  | UNI EN 1149-3:2005 Met. 2  |
| * 70618 | Protective clothing. Electrostatic discharge susceptible items   | ANSI/ESD STM 2.1:2013 + CEI EN 61340-5-1:2008  |
| 70411   | Protective clothing. Ignition and flammability   | UNI EN 13274-4:2002 Met. 3   |
| * 71112 | Protective clothing. Reaction to fire, optical and toxicity density of gasses effluent from the burning of organic materials         | ATS 1000.001   |
| 70414   | Textiles. Flammability   | CPSC 16 C.F.R. Part 1610:2008 + AATCC 124-2009   |
| * 70418 | Textiles and accessories for children's sleepwear. Sizes and ergonomic requirements  | CPSC 16 CFR Part 1615:2008 par. 1615.1; 1615.2<br>CPSC 16 CFR Part 1616:2008 par. 1615.1; 1615.2 |



|         |  |  |
|---------|--|--|
| 70413   | Textiles and accessories for children's sleepwear. Flammability                                | CPSC 16 CFR Part 1615:2008 (except par 1615.5; par 1615.31; par 1615.32; par 1615.35; par 1615.36; par 1615.62; par 1615.63; par 1615.64)<br>CPSC 16 CFR Part 1616:2008 (except par 1616.6; par 1616.31; par 1616.32; par 1616.35; par 1616.36; par 1616.61; par 1616.62; par 1616.63; par 1616.64; par 1616.65)                                   |
| 70419   | Textiles and accessories for children's sleepwear. Flammability after wet washing              | CPSC 16 CFR Part 1615:2008 (except par 1615.5; par 1615.31; par 1615.32; par 1615.35; par 1615.36; par 1615.62; par 1615.63; par 1615.64) + AATCC 124-2009<br>CPSC 16 CFR Part 1616:2008 (except par 1616.6; par 1616.31; par 1616.32; par 1616.35; par 1616.36; par 1616.61; par 1616.62; par 1616.63; par 1616.64; par 1616.65) + AATCC 124-2009 |
| * 70399 | Plastics. Determination of burning behaviour by oxygen index. Part 2: Ambient temperature test | UNI EN ISO 4589-2:2017   |
| 70452   | Protective clothing. Heat transmission on exposure to a flame                                  | UNI EN ISO 9151:2017   |
| * 70125 | Protective clothing. Mass per unit area. Small sample method                                   | UNI EN 12127:1999  |

## PROTECTION AGAINST GENERIC RISKS TESTS

### Tests

| Code    | Description   | Methods  |
|---------|---|--|
| * 70173 | Textiles. Reflectance factor and transmittance factor in UV/VIS/IR (200 - 2500 nm) - Results in tabular form                          | MIP 311:2013 Rev.2   |
| * 70175 | Non-textile samples. Spectrophotometer lecture in transmittance of reflectance - Results in tabular form                              | MIP 311:2013 Rev.2   |
| 70171   | Textiles. UPF determination   | UNI EN 13758-1:2007  |
| 70172   | Textiles. UPF determination   | AS/NZS 4399:2017 Appendix A                                  |
| * 70176 | Textiles. Transmittance or Blocking of Erythemally Weighted Ultraviolet Radiation through Fabrics                                     | AATCC 183-2014   |
| * 70181 | Blinds and shutters. Determination of thermal and visual comfort characteristics  | UNI EN 14501:2006  |
| * 70613 | Fabrics. Attenuation of fabrics to electromagnetic waves at high frequency  | MIL STD 285:1956<br>IEEE STD 299:2006<br>CEI EN 50147-1:1998 |
| * 70178 | Textiles. Water repellency of fabrics by the Bundesmann rain-shower test  | UNI EN 29865:1997  |
| * 70179 | Protective clothing. Determination of resistance to penetration by sprayed liquid chemicals, emulsions and dispersions. Atomizer test | UNI EN 14786:2006 + DIN 32781:2010 Par. 4.1.5                |
| 70505   | Protective clothing. Penetration by liquids   | UNI EN ISO 6530:2005   |
| 70540   | Protective clothing. Perforation  | UNI EN 863:1997  |
| * 70874 | Motorcyclists' protective clothing against mechanical impact. Impact attenuation  | UNI EN 1621-4:2013 Par. 6.6                                  |
| * 70478 | Protective clothing. Abrasion   | UNI EN ISO 12947-2:2017 + UNI EN 14325:2018 Par. 4.4         |
| * 70479 | Protective clothing. Resistance to damage by repeated flexing   | UNI EN ISO 7854:1999 Met. B + UNI EN 14325:2018 Par. 4.5     |
| * 70483 | Protective clothing. Tearing strenght. Trapezoid method   | UNI EN ISO 9073-4:1999 + UNI EN 14325:2018 Par. 4.7          |
| * 70484 | Protective clothing. Tensile strenght and elongation. Strip method  | UNI EN ISO 13934-1:2013 + UNI EN 14325:2018 Par. 4.9         |
| * 70485 | Protective clothing. Perforation  | UNI EN 863:1997 + UNI EN 14325:2018 Par. 4.10                |
| * 70486 | Protective clothing. Penetration by liquids   | UNI EN ISO 6530:2005 + UNI EN 14325:2018 Par. 4.12 and 4.13  |
| * 70839 | Protective clothing. Stiffness  | EN 16027:2011 Par. 5.4                                       |
| * 70161 | Protective clothing. Control of specific design requirements  | ISO 15538:2011 Par. 4  |
| 70177   | Protective clothing. Impact with high energy droplets   | UNI EN 14360:2004  |

## CE MARKING: PERSONAL PROTECTIVE EQUIPMENT

### General costs

| Code  | Description  | Methods |
|-------|--|---------|
| 79999 | EU type-examination certificate                                    |         |
| 79998 | Extension of EU type-examination certificate                       |         |
| 79994 | Revision of EU type-examination certificate                        |         |
| 79993 | Simplified review of EU type-examination certificate               |         |
| 79996 | EU type-examination certificate into English or French language    |         |
| 79995 | Reprinting of EU type-examination certificate                      |         |
| 70001 | Certificate of conformity  |         |
| 70003 | Extension of certificate of conformity                             |         |
| 70002 | Translation of certificate of test into English or French language |         |
| 70010 | Assessment of technical documentation of manufacturer              |         |
| 70009 | Certificate of conformity to type assessment (category III PPE)    |         |
| 70710 | Conformity to type assessment (category III PPE) Module C2         |         |
| 70711 | Conformity to type assessment (category III PPE) Module D          |         |
| 70008 | Certificate of process conformity (Industrial laundry)             |         |
| 70006 | Renewal of certificate of process conformity (Industrial laundry)  |         |
| 70007 | Audit on industrial laundry including sampling of PPE              |         |

### Treatments

| Code    | Description  | Methods  |
|---------|--|--|
| * 70402 | Protective clothing. Treatment to temperature variations         | MIP 301:2004 Rev. 0 + UNI EN ISO 20471:2017 Par. 7.4.4 |
| * 70403 | Textiles. Treatment to temperature variations                    | MIP 301:2004 Rev.0                                     |
| 70405   | Protective clothing. Treatment: fuel and oil                     | UNI EN 343:2019 Par. 5.5                               |
| 70420   | Textiles. Domestic washing and drying for textile testing        | UNI EN ISO 6330:2012                                   |
| 70429   | Textiles. Domestic washing and drying for textile testing        | UNI EN ISO 6330:2012                                   |
| 70426   | Textiles. Domestic washing and drying for textile testing        | UNI EN ISO 6330:2012                                   |
| 70463   | Textiles. Domestic washing and drying for textile testing        | UNI EN ISO 6330:2012                                   |
| 70424   | Textiles. Domestic washing and drying for textile testing        | UNI EN ISO 6330:2012                                   |
| 70421   | Textiles. Domestic washing and drying for textile testing        | UNI EN ISO 6330:2012                                   |
| 70433   | Textiles. Domestic washing and drying for textile testing        | UNI EN ISO 6330:2012                                   |
| 70422   | Textiles. Domestic washing and drying for textile testing        | UNI EN ISO 6330:2012                                   |
| 70430   | Textiles. Dry cleaning   | UNI EN ISO 3175-2:2018                                 |
| 70437   | Textiles. Dry cleaning   | UNI EN ISO 3175-2:2018                                 |
| 70436   | Textiles. Dry cleaning   | UNI EN ISO 3175-2:2018                                 |
| 70464   | Textiles. Dry cleaning   | UNI EN ISO 3175-2:2018                                 |
| 70434   | Textiles. Dry cleaning   | UNI EN ISO 3175-2:2018                                 |
| 70431   | Textiles. Dry cleaning   | UNI EN ISO 3175-2:2018                                 |
| 70449   | Textiles. Dry cleaning   | UNI EN ISO 3175-2:2018                                 |
| 70432   | Textiles. Dry cleaning   | UNI EN ISO 3175-2:2018                                 |
| 70439   | Protective clothing. Exposition to a source of radiant heat      | UNI EN ISO 6942:2004 Met. A                            |
| * 70441 | Protective clothing. Exposition to a source of radiant heat      | UNI EN 366:1994 Met. A                                 |
| 70444   | Textiles. Oven pretreatment                                      | ISO 17493:2016 (except 8.3 and 8.4)                    |
| 70527   | Textiles, Protective clothing. Treatment by low-temperature bend | ISO 4675:2017  |
| * 70528 | Leather. Cold crack temperature of surface coatings              | UNI EN ISO 17233:2017                                  |
| * 70529 | Artificial leather. Treatment of flex cracking                   | DIN 53359:2006-11 (Method A or B)                      |

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|---------|--|---|
| * 70553 | Artificial leather. Treatment of flex cracking + Test of resistance to water penetration.<br>Increasing hydrostatic pressure | DIN 53359:2006-11 (Method A or B) +<br>DIN EN ISO 811:2018-08 |
|---------|--|---|

## Protective Equipment

### UNI EN ISO 13688:2013 "Protective clothings - General requirements"

| Code    | Description  | Methods  |
|---------|--|--|
| 70000   | Protective clothing. Size  | UNI EN ISO 13688:2013 Par. 6   |
| * 70050 | Protective clothing. Control of ergonomic requirements                               | Applicable standards   |
| * 70160 | Protective clothing. Control of specific design requirements                         | Applicable standards   |
| 70490   | Protective clothing, leather. Chromium hexavalent                                    | UNI EN ISO 17075-1:2017 + UNI EN ISO 13688:2013 Par. 4.2   |
| 76114   | Protective clothing. Release of nickel   | UNI EN 1811:2015 + UNI EN ISO 13688:2013 Par. 4.2  |
| 70830   | Protective clothing, leather. pH   | UNI EN ISO 4045:2018 + UNI EN ISO 13688:2013 Par. 4.2  |
| 70831   | Protective clothing, textile. pH of aqueous extract                                  | UNI EN ISO 3071:2006 + UNI EN ISO 13688:2013 Par. 4.2  |
| 76219   | Protective clothing. Aromatic amines derived from azo colorants                      | UNI EN ISO 14362-1:2017 + UNI EN ISO 13688:2013 Par. 4.2   |
| 76229   | Protective clothing. Aromatic amines derived from azo colorants (without extraction) | UNI EN ISO 14362-1:2017 + UNI EN ISO 13688:2013 Par. 4.2   |
| 76220   | Protective clothing. Aromatic amines derived from azo colorants (with extraction)    | UNI EN ISO 14362-1:2017 + UNI EN ISO 13688:2013 Par. 4.2   |
| 70425   | Protective clothing. Domestic washing and drying for textile testing                 | UNI EN ISO 6330:2012 + UNI EN ISO 13688:2013 Par. 5.2  |
| 70250   | Protective clothing. Dimensional change in domestic wet washing and drying           | UNI EN ISO 6330:2012 + UNI EN ISO 3759:2011 + UNI EN ISO 5077:2008 + UNI EN ISO 13688:2013 Par. 5.3  |
| 70435   | Protective clothing. Dry cleaning  | UNI EN ISO 3175-2:2018 + UNI EN ISO 13688:2013 Par. 5.2  |
| 70260   | Protective clothing. Dimensional change in dry cleaning                              | UNI EN ISO 3175-2:2018 + UNI EN ISO 3759:2011 + UNI EN ISO 5077:2008 + UNI EN ISO 13688:2013 Par. 5.3                                      |
| 70455   | Protective clothing. Industrial washing and drying                                   | UNI EN ISO 15797:2018 Tab. 4<br>Procedure A (tumble drying) + UNI EN ISO 13688:2013 Par. 5.2   |
| * 70474 | Protective clothing. Industrial washing and drying                                   | UNI EN ISO 15797:2018 Tab. 4<br>Procedure B (tunnel drying) + UNI EN ISO 13688:2013 Par. 5.2   |
| 70251   | Protective clothing. Dimensional change in industrial washing and drying             | UNI EN ISO 15797:2018 Tab. 4<br>Procedure A (tumble drying) + UNI EN ISO 3759:2011 + UNI EN ISO 5077:2008 + UNI EN ISO 13688:2013 Par. 5.3 |

## Protective clothings against heat and flame

### UNI EN ISO 11612:2015 "Protective clothing - Clothing to protect against heat to flame"

| Code | Description | Methods |
|------|-------------|---------|
|------|-------------|---------|



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|---------|---|---|
| 70270   | Protective clothing. Tensile strenght and elongation. Strip method                  | UNI EN ISO 13934-1:2013 + UNI EN ISO 11612:2015 Par. 6.5.1.1                                |
| 70305   | Protective clothing. Tearing strength. Tear specimen                                | UNI EN ISO 13937-2:2002 + EC 1-2004 + UNI EN ISO 11612:2015 Par. 6.5.2.1                    |
| 70550   | Protective clothing. Leather. Tensile strength                                      | UNI EN ISO 3376:2012 + UNI EN ISO 11612:2015 Par. 6.5.1.2                                   |
| 70561   | Protective clothing. Leather. Tearing strength                                      | UNI EN ISO 3377-1:2012 + UNI EN ISO 11612:2015 Par. 6.5.2.2                                 |
| 70340   | Protective clothing. Seam tensile properties. Grab method                           | UNI EN ISO 13935-2:2014 + UNI EN ISO 11612:2015 Par. 6.5.4                                  |
| 70443   | Protective clothing. Resistance to heat. Dimensional changes and appearance changes | ISO 17493:2016 (except 8.3 and 8.4) + UNI EN ISO 3759:2011 + UNI EN ISO 11612:2015 Par. 6.2 |
| 70408   | Protective clothing. Limited flame spread   | UNI EN ISO 15025:2017 Met. A + UNI EN ISO 11612:2015 Par. 6.3.2                             |
| 70409   | Protective clothing. Limited flame spread   | UNI EN ISO 15025:2017 Met. B + UNI EN ISO 11612:2015 Par. 6.3.3                             |
| 70452   | Protective clothing. Heat transmission on exposure to a flame                       | UNI EN ISO 9151:2017 + UNI EN ISO 11612:2015 Par. 7.2                                       |
| 70438   | Protective clothing. Exposition to a source of radiant heat                         | UNI EN ISO 6942:2004 Met. B + UNI EN ISO 11612: 2015 Par. 7.3                               |
| * 70447 | Protective clothing. Treatment of materials by repeated flexing                     | UNI EN ISO 11612:2015 Annex A   |
| * 70480 | Protective clothing. Aluminium splashes   | UNI EN ISO 9185:2008 + UNI EN ISO 11612:2015 Par. 7.4                                       |
| * 70482 | Protective clothing. Iron splashes  | UNI EN ISO 9185:2008 + UNI EN ISO 11612:2015 Par. 7.5                                       |
| 70461   | Protective clothing. Contact heat transmission                                      | UNI EN ISO 12127-1:2016 + UNI EN ISO 11612:2015 Par. 7.6                                    |
| * 70280 | Protective clothing. Bursting strength and bursting distension                      | UNI EN ISO 13938-1:2001 + EC 1-2004 + UNI EN ISO 11612:2015 Par. 6.5.3                      |
| 70283   | Protective clothing. Bursting strength  | UNI EN ISO 13938-2:2001 + EC 1-2004 + UNI EN ISO 11612:2015 Par. 6.5.3                      |

## Protective clothings against heat and flame

### UNI EN ISO 11611:2015 "Protective clothing for use in welding and allied processes"

| Code    | Description  | Methods  |
|---------|--|--|
| 70408   | Protective clothing. Limited flame spread                          | UNI EN ISO 15025:2017 Met. A + UNI EN ISO 11611:2015 Par. 6.7.2      |
| 70409   | Protective clothing. Limited flame spread                          | UNI EN ISO 15025:2017 Met. B + UNI EN ISO 11611:2015 Par. 6.7.3      |
| * 70471 | Protective clothing. Molten small metal splashes                   | ISO 9150:1988 + UNI EN ISO 11611:2015 Par. 6.8                       |
| 70438   | Protective clothing. Exposition to a source of radiant heat        | UNI EN ISO 6942:2004 Met. B + UNI EN ISO 11611:2015 Par. 6.9         |
| 70615   | Protective clothing. Vertical electrical resistance                | UNI EN 1149-2:1999 + UNI EN ISO 11611:2015 Par. 6.10                 |
| 70270   | Protective clothing. Tensile strenght and elongation. Strip method | UNI EN ISO 13934-1:2013 + UNI EN ISO 11611:2015 Par. 6.2             |
| 70305   | Protective clothing. Tearing strength. Tear specimen               | UNI EN ISO 13937-2:2002 + EC 1-2004 + UNI EN ISO 11611:2015 Par. 6.3 |





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| 70550   | Protective clothing. Leather. Tensile strength                 | UNI EN ISO 3376:2012 + UNI EN ISO 11611:2015 Par. 6.2                |
| * 70560 | Protective clothing. Leather. Tearing strength                 | UNI EN ISO 3377-1:2012 + UNI EN ISO 11611:2015 Par. 6.3              |
| 70340   | Protective clothing. Seam tensile properties. Grab method      | UNI EN ISO 13935-2:2014 + UNI EN ISO 11611:2015 Par. 6.5             |
| * 70580 | Protective clothing. Leather. Fat content                      | UNI EN ISO 4048:2008 + UNI EN ISO 11611:2015 Par. 6.11               |
| * 70280 | Protective clothing. Bursting strength and bursting distension | UNI EN ISO 13938-1:2001 + EC 1-2004 + UNI EN ISO 11611:2015 Par. 6.4 |
| 70283   | Protective clothing. Bursting strength                         | UNI EN ISO 13938-2:2001 + EC 1-2004 + UNI EN ISO 11611:2015 Par. 6.4 |

## Protective clothings against heat and flame

### UNI EN 469:2007 " Protective clothing for firefighters"

| Code  | Description   | Methods   |
|-------|---|---|
| 70165 | Protective clothing. Minimum visible areas  | UNI EN 469:2007 Appendix B  |
| 70408 | Protective clothing. Limited flame spread   | UNI EN ISO 15025:2017 Met. A + UNI EN 469:2007 Par. 6.1                               |
| 70438 | Protective clothing. Exposition to a source of radiant heat                                   | UNI EN ISO 6942:2004 Met. B + UNI EN 469:2007 Par. 6.3                                |
| 70450 | Protective clothing. Heat transmission on exposure to a flame                                 | UNI EN 367:1993 + UNI EN 469:2007 Par. 6.2  |
| 70272 | Protective clothing. Tearing strenght after exposure to a radiant heat source                 | UNI EN ISO 6942:2004 Met. A + UNI EN ISO 13934-1:2013 + UNI EN 469:2007 Par 6.4       |
| 70443 | Protective clothing. Resistance to heat. Dimensional changes and appearance changes           | ISO 17493:2016 (except 8.3 and 8.4) + UNI EN ISO 3759:2011 + UNI EN 469:2007 Par. 6.5 |
| 70270 | Protective clothing. Tensile strenght and elongation. Strip method                            | UNI EN ISO 13934-1:2013 + UNI EN 469:2007 Par. 6.6.1                                  |
| 70320 | Protective clothing. Rubber-or plastics-coated fabrics. Tensile strength                      | UNI EN ISO 1421:2017 + UNI EN 469:2007 Par. 6.6.1                                     |
| 70340 | Protective clothing. Seam tensile properties. Grab method                                     | UNI EN ISO 13935-2:2014 + UNI EN 469:2007 Par. 6.6.2                                  |
| 70306 | Protective clothing. Tearing strength. Tear specimen  | UNI EN ISO 4674-1:2017 Met. B + UNI EN 469:2007 Par. 6.7                              |
| 70305 | Protective clothing. Tearing strength. Tear specimen  | UNI EN ISO 13937-2:2002 + EC 1-2004 + UNI EN 469:2007 Par. 6.7                        |
| 70315 | Protective clothing. Surface wetting. Spray test  | UNI EN ISO 4920:2013 + UNI EN 469:2007 Par. 6.8                                       |
| 70505 | Protective clothing. Penetration by liquids   | UNI EN ISO 6530:2005 + UNI EN 469:2007 Par 6.10                                       |
| 70290 | Protective clothing. Test of resistance to water penetration. Increasing hydrostatic pressure | UNI EN ISO 811:2018 + UNI EN 469:2007 Par. 6.11                                       |
| 70590 | Protective clothing. Water-vapour resistance (Skin Model)                                     | UNI EN ISO 11092:2014 Par. 7.4 + UNI EN 469:2007 Par 6.12                             |
| 70170 | Protective clothing. Colour coordinates   | CIE 15:2004 + UNI EN 469:2007 Par. 6.14   |

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| * 70116 | Protective clothing. Areic coefficient of luminous intensity | CIE 54.2:2001 + UNI EN 469:2007 Par. B.3                                  |
| 70445   | Protective clothing. Oven Treatment                          | ISO 17493:2016 (except 8.3 and 8.4) + UNI EN 469:2007 Appendix B Par. 3.1 |
| * 70117 | Protective clothing. Areic coefficient of luminous intensity | CIE 54.2:2001 + UNI EN 469:2007 Par. B.3                                  |

## Protective clothings against heat and flame

### UNI EN ISO 14116:2015 "Protective clothings - Protection against flame"

| Code    | Description  | Methods  |
|---------|--|--|
| 70408   | Protective clothing. Limited flame spread                          | UNI EN ISO 15025:2017 Met. A + UNI EN ISO 14116:2015 Par. 6.1            |
| 70270   | Protective clothing. Tensile strenght and elongation. Strip method | UNI EN ISO 13934-1:2013 + UNI EN ISO 14116:2015 Par. 6.2.1               |
| 70305   | Protective clothing. Tearing strength. Tear specimen               | UNI EN ISO 13937-2:2002 + EC 1-2004 + UNI EN ISO 14116:2015 Par. 6.2.2.1 |
| 70302   | Protective clothing. Tearing strenght. Trapezoid method            | UNI EN ISO 9073-4:1999 + UNI EN ISO 14116:2015 Par. 6.2.2.2              |
| 70340   | Protective clothing. Seam tensile properties. Grab method          | UNI EN ISO 13935-2:2014 + UNI EN ISO 14116:2015 Par. 6.2.4               |
| * 70280 | Protective clothing. Bursting strength and bursting distension     | UNI EN ISO 13938-1:2001 + EC 1-2004 + UNI EN ISO 14116:2015 Par. 6.2.3   |

## Protective clothings against heat and flame

### UNI EN 1486:2008 " Protective clothing for firefighters - reflective clothing for specialized firefighting"

| Code  | Description   | Methods  |
|-------|---|--|
| 70408 | Protective clothing. Limited flame spread   | UNI EN ISO 15025:2017 Met. A + UNI EN 1486:2008 Par 6.1                                |
| 70525 | Protective clothing. Treatment of repeated flexing                                  | UNI EN 1486:2008 Annex A   |
| 70438 | Protective clothing. Exposition to a source of radiant heat                         | UNI EN ISO 6942:2004 Met. B + UNI EN 1486:2008 Par. 6.2                                |
| 70450 | Protective clothing. Heat transmission on exposure to a flame                       | UNI EN 367:1993 + UNI EN 1486:2008 Par. 6.3  |
| 70461 | Protective clothing. Contact heat transmission                                      | UNI EN ISO 12127-1:2016 + UNI EN 1486:2008 Par. 6.4                                    |
| 70443 | Protective clothing. Resistance to heat. Dimensional changes and appearance changes | ISO 17493:2016 (except 8.3 and 8.4) + UNI EN ISO 3759:2011 + UNI EN 1486:2008 Par. 6.5 |
| 70270 | Protective clothing. Tensile strenght and elongation. Strip method                  | UNI EN ISO 13934-1:2013 + UNI EN 1486:2008 Par. 7.2                                    |
| 70320 | Protective clothing. Rubber-or plastics-coated fabrics. Tensile strength            | UNI EN ISO 1421:2017 + UNI EN 1486:2008 Par. 7.2                                       |
| 70306 | Protective clothing. Tearing strength. Tear specimen                                | UNI EN ISO 4674-1:2017 Met. B + UNI EN 1486:2008 Par. 7.4                              |
| 70340 | Protective clothing. Seam tensile properties. Grab method                           | UNI EN ISO 13935-2:2014 + UNI EN 1486:2008 Par. 7.5                                    |
| 70315 | Protective clothing. Surface wetting. Spray test                                    | UNI EN ISO 4920:2013 + UNI EN 1486:2008 Par. 8.1                                       |

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| * 70280 | Protective clothing. Bursting strength and bursting distension | UNI EN ISO 13938-1:2001 + EC 1-2004 +<br>UNI EN 1486:2008 Par. 7.3 |
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## Protective clothings against heat and flame

### IEC 61482-2:2018 "Live working - Protective clothing against the thermal hazard of an electric arc"

| Code    | Description  | Methods  |
|---------|--|--|
| * 70492 | Protective clothing. Melting behaviour   | UNI EN ISO 3146:2002 + IEC<br>61482-2:2018 Par. 5.2.5  |
| 70443   | Protective clothing. Resistance to heat. Dimensional changes and appearance changes  | ISO 17493:2016 (except 8.3 and 8.4) +<br>UNI EN ISO 3759:2011 + IEC<br>61482-2:2018 Par. 5.3.1 |
| * 70636 | Protective clothing. Volume resistance   | CEI EN 61340-2-3:2017 Par. 8.2.3 + IEC<br>61482-2:2018 Par. 5.3.2                              |
| 70408   | Protective clothing. Limited flame spread  | UNI EN ISO 15025:2017 Met. A + IEC<br>61482-2:2018 Par. 5.3.1                                  |
| 70305   | Protective clothing. Tearing strength. Tear specimen   | UNI EN ISO 13937-2:2002 + EC 1-2004 +<br>IEC 61482-2:2018 Par. 5.3.4.1                         |
| 70270   | Protective clothing. Tensile strenght and elongation. Strip method   | UNI EN ISO 13934-1:2013 + IEC<br>61482-2:2018 Par. 5.3.4.2                                     |
| * 71503 | Protective clothing. Determination of the arc rating (ATPV or EBT50) of flame resistant materials for clothing - method A panels     | CEI EN 61482-1-1:2010 + IEC<br>61482-2:2018 Par. 5.4.1   |
| * 71504 | Protective clothing. Determination of the arc rating (ATPV or EBT50) of flame resistant materials for clothing - method B mannequins | CEI EN 61482-1-1:2010 + IEC<br>61482-2:2018 Par. 5.4.1   |
| * 71501 | Protective clothing. Determination of arc protection class of material by using a constrained and directed arc (box test)            | CEI EN 61482-1-2:2015 + IEC<br>61482-2:2018 Par. 5.4.1   |
| * 71502 | Protective clothing. Determination of arc protection class of clothing by using a constrained and directed arc (box test)            | CEI EN 61482-1-2:2015 + IEC<br>61482-2:2018 Par. 5.4.1   |
| * 70280 | Protective clothing. Bursting strength and bursting distension   | UNI EN ISO 13938-1:2001 + EC 1-2004 +<br>IEC 61482-2:2018 Par. 5.3.4.3                         |
| 70283   | Protective clothing. Bursting strength   | UNI EN ISO 13938-2:2001 + EC 1 - 2004<br>+ IEC 61482-2:2018 Par. 5.3.4.3                       |

## Protective clothings against heat and flame

### UNI EN 15614:2007 "Protective clothing for firefighters. Laboratory test methods and performance requirements for wildland clothing"

| Code  | Description   | Methods   |
|-------|---|---|
| 70165 | Protective clothing. Minimum visible areas  | UNI EN 15614:2007 Par. 9.2  |
| 70408 | Protective clothing. Limited flame spread   | UNI EN ISO 15025:2017 Met. A + UNI EN<br>15614:2007 Par. 6.2.2                                |
| 70409 | Protective clothing. Limited flame spread   | UNI EN ISO 15025:2017 Met. B + UNI EN<br>15614:2007 Par. 6.2.3                                |
| 70438 | Protective clothing. Exposition to a source of radiant heat                         | UNI EN ISO 6942:2004 Met. B + UNI EN<br>15614:2007 Par. 6.3                                   |
| 70443 | Protective clothing. Resistance to heat. Dimensional changes and appearance changes | ISO 17493:2016 (except 8.3 and 8.4) +<br>UNI EN ISO 3759:2011 + UNI EN<br>15614:2007 Par. 6.4 |
| 70270 | Protective clothing. Tensile strenght and elongation. Strip method                  | UNI EN ISO 13934-1:2013 + UNI EN<br>15614:2007 Par. 7.1                                       |

|         |  |   |
|---------|--|---|
| 70305   | Protective clothing. Tearing strength. Tear specimen         | UNI EN ISO 13937-2:2002 + EC 1-2004 +<br>UNI EN 15614:2007 Par. 7.2 |
| 70340   | Protective clothing. Seam tensile properties. Grab method    | UNI EN ISO 13935-2:2014 + UNI EN<br>15614:2007 Par. 7.3             |
| 70600   | Protective clothing. Thermal resistance (Skin Model)         | UNI EN ISO 11092:2014 Par. 7.3 + UNI<br>EN 15614:2007 Par. 8.1      |
| 70590   | Protective clothing. Water-vapour resistance (Skin Model)    | UNI EN ISO 11092:2014 Par. 7.4 + UNI<br>EN 15614:2007 Par. 7.4      |
| 70445   | Protective clothing. Oven Treatment                          | ISO 17493:2016 (except 8.3 and 8.4) +<br>UNI EN 15614:2007 Par. 9.2 |
| * 70117 | Protective clothing. Areic coefficient of luminous intensity | CIE 54.2:2001 + UNI EN 15614:2007 Par.<br>9.2                       |
| * 70492 | Protective clothing. Melting behaviour                       | UNI EN ISO 3146:2002 + UNI EN<br>15614:2007 Par. 6.5                |

## Protective clothings against heat and flame

### UNI EN 13911:2017 "Protective clothing for firefighters - Requirements and test methods for fire hoods for firefighters"

| Code    | Description   | Methods   |
|---------|---|---|
| 70408   | Protective clothing. Limited flame spread   | UNI EN ISO 15025:2017 Met. A + UNI EN<br>13911:2017 Par. 6.1.2                                  |
| 70452   | Protective clothing. Heat transmission on exposure to a flame                       | UNI EN ISO 9151:2017 + UNI EN<br>13911:2017 Par. 6.1.3  |
| 70438   | Protective clothing. Exposition to a source of radiant heat                         | UNI EN ISO 6942:2004 Met. B + UNI EN<br>13911:2017 Par. 6.1.4                                   |
| * 70282 | Protective clothing. Bursting strenght after exposure to a radiant heat source      | UNI EN ISO 6942:2004 Met. A + UNI EN<br>ISO 13938-1:2001 + UNI EN 13911:2017<br>Par. 6.1.5      |
| 70443   | Protective clothing. Resistance to heat. Dimensional changes and appearance changes | ISO 17493:2016 (except 8.3 and 8.4) +<br>UNI EN ISO 3759:2011 + UNI EN<br>13911:2017 Par. 6.1.6 |
| * 70280 | Protective clothing. Bursting strength and bursting distension                      | UNI EN ISO 13938-1:2001 + EC 1-2004 +<br>UNI EN 13911:2017 Par. 6.1.7                           |

## Protective clothing against cold and rain

### UNI EN 342:2018 "Ensembles and garments for protection against cold"

| Code    | Description   | Methods  |
|---------|---|--|
| * 70610 | Thermic maniquine   | UNI EN ISO 15831:2005 + UNI EN<br>342:2018 Par. 6.3          |
| 70585   | Protective clothing. Permeability to air  | UNI EN ISO 9237:1997 + UNI EN<br>342:2018 Par. 6.4           |
| 70290   | Protective clothing. Test of resistance to water penetration. Increasing hydrostatic pressure | UNI EN ISO 811:2018 + UNI EN<br>342:2018 Par. 6.5            |
| 70590   | Protective clothing. Water-vapour resistance (Skin Model)                                     | UNI EN ISO 11092:2014 Par. 7.4 + UNI<br>EN 342:2018 Par. 6.6 |
| 70600   | Protective clothing. Thermal resistance (Skin Model)  | UNI EN ISO 11092:2014 Par. 7.3 + UNI<br>EN 342:2018 Par. 6.6 |



|         |  |  |
|---------|--|--|
| 70307   | Protective clothing. Tearing strenght. Double-teared method    | UNI EN ISO 4674-1:2017 Met. A + UNI EN 342:2018 Par. 6.7.1       |
| * 70295 | Protective clothing. Low-temperature bend test                 | ISO 4675:2017 + UNI EN 342:2018 Par. 6.7.3                       |
| * 70280 | Protective clothing. Bursting strength and bursting distension | UNI EN ISO 13938-1:2001 + EC 1-2004 + UNI EN 342:2018 Par. 6.7.2 |
| 70283   | Protective clothing. Bursting strength                         | UNI EN ISO 13938-2:2001 + EC 1-2004 + UNI EN 342:2018 Par. 6.7.2 |

## Protective clothing against cold and rain

### UNI EN 343:2019 "Protective clothing - Protection against rain"

| Code    | Description   | Methods  |
|---------|---|--|
| 70290   | Protective clothing. Test of resistance to water penetration. Increasing hydrostatic pressure | UNI EN ISO 811:2018 + UNI EN 343:2019 Par. 6.3   |
| 70401   | Protective clothing. Pretreatment by abrasion (Martindale)                                    | UNI EN 530:2010 Met. 2 + UNI EN 343:2019 Par. 5.3  |
| 70415   | Protective clothing. Treatment of abrasion (Martindale). Deterioration of the specimen        | UNI EN ISO 12947-1:2000 + EC 1-2010 + UNI EN ISO 12947-2:2017 + UNI EN 343:2019 Par. 5.3 |
| 70522   | Protective clothing. Treatment of repeated flexing  | UNI EN ISO 7854:1999 Met. C + UNI EN 343:2019 Par. 5.4                                   |
| 70405   | Protective clothing. Treatment: fuel and oil  | UNI EN 343:2019 Par. 5.5   |
| 70590   | Protective clothing. Water-vapour resistance (Skin Model)                                     | UNI EN ISO 11092:2014 Par. 7.4 + UNI EN 343:2019 Par. 6.4                                |
| 70320   | Protective clothing. Rubber-or plastics-coated fabrics. Tensile strength                      | UNI EN ISO 1421:2017 + UNI EN 343:2019 Par. 6.5  |
| 70270   | Protective clothing. Tensile strenght and elongation. Strip method                            | UNI EN ISO 13934-1:2013 + UNI EN 343:2019 Par. 6.5                                       |
| 70307   | Protective clothing. Tearing strenght. Double-teared method                                   | UNI EN ISO 4674-1:2017 Met. A + UNI EN 343:2019 Par. 6.6                                 |
| * 70280 | Protective clothing. Bursting strength and bursting distension                                | UNI EN ISO 13938-1:2001 + EC 1 - 2004 + UNI EN 343:2019 Par. 6.7                         |
| 70283   | Protective clothing. Bursting strength  | UNI EN ISO 13938-2:2001 + EC 1 - 2004 + UNI EN 343:2019 Par. 6.7                         |
| 70340   | Protective clothing. Seam tensile properties. Grab method                                     | UNI EN ISO 13935-2:2014 + UNI EN 343:2019 Par. 6.9                                       |
| 70177   | Protective clothing. Impact with high energy droplets   | UNI EN 14360:2004 + UNI EN 343:2019 Par. 6.10  |

## Protective clothing against cold and rain

### UNI EN 14058:2018 "Single garments for protection against cold"

| Code  | Description   | Methods   |
|-------|---|---|
| 70600 | Protective clothing. Thermal resistance (Skin Model)  | UNI EN ISO 11092:2014 Par. 7.3 + UNI EN 14058:2018 Par. 6.3 |
| 70585 | Protective clothing. Permeability to air  | UNI EN ISO 9237:1997 + UNI EN 14058:2018 Par. 6.4           |
| 70290 | Protective clothing. Test of resistance to water penetration. Increasing hydrostatic pressure | UNI EN ISO 811:2018 + UNI EN 14058:2018 Par. 6.5            |

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|---------|--|--|
| 70590   | Protective clothing. Water-vapour resistance (Skin Model)      | UNI EN ISO 11092:2014 Par. 7.4 + UNI EN 14058:2018 Par. 6.6        |
| * 70610 | Thermic mannikine  | UNI EN ISO 15831:2005 + UNI EN 14058:2018 Par. 6.7                 |
| 70307   | Protective clothing. Tearing strenght. Double-teared method    | UNI EN ISO 4674-1:2017 Met. A + UNI EN 14058:2018 Par. 6.8.1       |
| * 70280 | Protective clothing. Bursting strength and bursting distension | UNI EN ISO 13938-1:2001 + EC 1-2004 + UNI EN 14058:2018 Par. 6.8.2 |
| 70283   | Protective clothing. Bursting strength                         | UNI EN ISO 13938-2:2001 + EC 1-2004 + UNI EN 14058:2018 Par. 6.8.2 |

## Protective clothing against low-visibility risks

### UNI EN ISO 20471:2017 "High-visibility clothing"

| Code    | Description   | Methods   |
|---------|---|---|
| 70165   | Protective clothing. Minimum visible areas  | UNI EN ISO 20471:2017 Par. 4.1                                    |
| 70180   | Protective clothing. Exposure to artificial light with Xenon arc fading lamp                      | ISO 105-B02:1994 Met. 3 + UNI EN ISO 20471:2017 Par. 5.2          |
| 70170   | Protective clothing. Colour coordinates   | CIE 15:2004 + UNI EN ISO 20471:2017 Par. 7.2                      |
| 70190   | Protective clothing. Colour fastness to rubbing   | UNI EN ISO 105-X12:2016 + UNI EN ISO 20471:2017 Par. 5.3.1        |
| 70200   | Protective clothing. Colour fastness to perspiration  | UNI EN ISO 105-E04:2013 + UNI EN ISO 20471:2017 Par. 5.3.2        |
| 70210   | Protective clothing. Colour fastness to bleaching: Hypochlorite                                   | UNI EN 20105-N01:1997 + UNI EN ISO 20471:2017 Par. 5.3.3          |
| 70220   | Protective clothing. Colour fastness to domestic and commercial laundering                        | UNI EN ISO 105-C06:2010 + UNI EN ISO 20471:2017 Par. 5.3.3        |
| 70230   | Protective clothing. Colour fastness to hot pressing  | UNI EN ISO 105-X11:1998 + UNI EN ISO 20471:2017 Par. 5.3.3        |
| 70240   | Protective clothing. Colour fastness to dry cleaning  | UNI EN ISO 105-D01:2010 + UNI EN ISO 20471:2017 Par. 5.3.3        |
| 70270   | Protective clothing. Tensile strenght and elongation. Strip method                                | UNI EN ISO 13934-1:2013 + UNI EN ISO 20471:2017 Par. 5.5.1        |
| 70320   | Protective clothing. Rubber-or plastics-coated fabrics. Tensile strength                          | UNI EN ISO 1421:2017 + UNI EN ISO 20471:2017 Par. 5.5.3           |
| 70307   | Protective clothing. Tearing strenght. Double-teared method                                       | UNI EN ISO 4674-1:2017 Met. A + UNI EN ISO 20471:2017 Par. 5.5.3  |
| 70590   | Protective clothing. Water-vapour resistance (Skin Model)   | UNI EN ISO 11092:2014 Par. 7.4 + UNI EN ISO 20471:2017 Par. 5.6.3 |
| 70600   | Protective clothing. Thermal resistance (Skin Model)  | UNI EN ISO 11092:2014 Par. 7.3 + UNI EN ISO 20471:2017 Par. 5.6.3 |
| * 70116 | Protective clothing. Areic coefficient of luminous intensity                                      | CIE 54.2:2001 + UNI EN ISO 20471:2017 Par. 7.3                    |
| * 70117 | Protective clothing. Areic coefficient of luminous intensity                                      | CIE 54.2:2001 + UNI EN ISO 20471:2017 Par. 7.3                    |
| * 70118 | Protective clothing. Areic coefficient of luminous intensity under rain influence                 | CIE 54.2:2001 + UNI EN ISO 20471:2017 Par. 7.4.5                  |
| 70520   | Protective clothing. Fabrics coated with polymeric materials. Treatment through repeated bendings | UNI EN ISO 7854:1999 Met. A + UNI EN ISO 20471:2017 Par. 7.4.2    |

|         |  |  |
|---------|--|--|
| 70523   | Protective clothing. Treatment by low-temperature bend         | ISO 4675:2017 + UNI EN ISO 20471:2017 Par. 7.4.3                       |
| * 70402 | Protective clothing. Treatment to temperature variations       | MIP 301:2004 Rev. 0 + UNI EN ISO 20471:2017 Par. 7.4.4                 |
| 70475   | Protective clothing. Pretreatment by abrasion (Martindale)     | UNI EN ISO 12947-2:2017 + UNI EN ISO 20471:2017 Par. 7.4.1             |
| * 70280 | Protective clothing. Bursting strength and bursting distension | UNI EN ISO 13938-1:2001 + EC 1-2004 + UNI EN ISO 20471:2017 Par. 5.5.2 |
| 70283   | Protective clothing. Bursting strength                         | UNI EN ISO 13938-2:2001 + EC 1-2004 + UNI EN ISO 20471:2017 Par. 5.5.2 |

## UNI EN 1150:2001 "Visibility clothing for non professional use"

| Code    | Description   | Methods   |
|---------|---|---|
| * 70166 | Protective clothing. Minimum visibile areas   | UNI EN 1150:2001 Par. 4.1                                 |
| 70180   | Protective clothing. Exposure to artificial light with Xenon arc fading lamp                      | ISO 105-B02:1994 Met. 3 + UNI EN 1150:2001 Par. 5.2.2     |
| 70170   | Protective clothing. Colour coordinates   | CIE 15:2004 + UNI EN 1150:2001 Par. 5.2.1                 |
| 70220   | Protective clothing. Colour fastness to domestic and commercial laundering                        | UNI EN ISO 105-C06:2010 + UNI EN 1150:2001 Par. 5.3       |
| 70240   | Protective clothing. Colour fastness to dry cleaning  | UNI EN ISO 105-D01:2010 + UNI EN 1150:2001 Par. 5.3       |
| 70231   | Protective clothing. Colour fastness to hot pressing  | UNI EN ISO 105-X11:1998 + UNI EN 1150:2001 Par. 5.3       |
| * 70116 | Protective clothing. Areic coefficient of luminous intensity                                      | CIE 54.2:2001 + UNI EN 1150:2001 Par. 6.1                 |
| * 70117 | Protective clothing. Areic coefficient of luminous intensity                                      | CIE 54.2:2001 + UNI EN 1150:2001 Par. 6.2                 |
| * 70118 | Protective clothing. Areic coefficient of luminous intensity under rain influence                 | CIE 54.2:2001 + UNI EN 1150:2001 Par. 6.2                 |
| 70401   | Protective clothing. Pretreatment by abrasion (Martindale)  | UNI EN 530:2010 Met. 2 + UNI EN 1150:2001 Par. 7.4.1      |
| 70520   | Protective clothing. Fabrics coated with polymeric materials. Treatment through repeated bendings | UNI EN ISO 7854:1999 Met. A + UNI EN 1150:2001 Par. 7.4.2 |
| 70523   | Protective clothing. Treatment by low-temperature bend  | ISO 4675:2017 + UNI EN 1150:2001 Par. 7.4.3               |
| * 70402 | Protective clothing. Treatment to temperature variations  | MIP 301:2004 Rev.0 + UNI EN 1150:2001 Par. 7.4.4          |

## Protective clothing against electrostatic charges

### UNI EN 1149-5:2018 "Electrostatic properties Part 5: Material performance and design requirements"

| Code  | Description                                      | Methods   |
|-------|--|---|
| 70614 | Protective clothing. Electric surface resistance | UNI EN 1149-1:2006 + UNI EN 1149-5:2018 Par. 4.2.1        |
| 70616 | Protective clothing. Charge decay                | UNI EN 1149-3:2005 Met. 2 + UNI EN 1149-5:2018 Par. 4.2.1 |

|         |   |  |
|---------|---|--|
| * 70637 | Protective clothing. Thickness            | UNI EN ISO 5084:1998 (except points A1 and A2 of appendix) + UNI EN 1149-5:2018 Par. 4.2.1 |
| * 70638 | Protective clothing. Electric capacitance | CEI EN 60079-32-2:2016 + UNI EN 1149-5:2018 Par. 4.2.2.3                                   |

### Protective clothing against entanglement

#### UNI EN 510:1994 "Specification for protective clothing for use where there is a risk of entanglement with moving parts"

| Code    | Description   | Methods                  |
|---------|---|--------------------------|
| * 70261 | Protective clothing. Effectiveness of the elements of closing | UNI EN 510:1994 Par. 4.2 |

### Protective clothing against chemical risk

#### UNI EN 13034:2009 "Protective clothing against liquid chemicals (type 6 and type PB 6 clothing)"

| Code    | Description  | Methods  |
|---------|--|--|
| 70400   | Protective clothing. Abrasion (Martindale)                         | UNI EN 530:2010 Met. 2 + UNI EN 14325:2005 Par. 4.4.1 + UNI EN 13034:2009 Par. 4.1       |
| 70302   | Protective clothing. Tearing strenght. Trapezoid method            | UNI EN ISO 9073-4:1999 + UNI EN 14325:2005 Par. 4.7 + UNI EN 13034:2009 Par. 4.1         |
| 70270   | Protective clothing. Tensile strenght and elongation. Strip method | UNI EN ISO 13934-1:2013 + UNI EN 14325:2005 Par. 4.9 + UNI EN 13034:2009 Par. 4.1        |
| 70540   | Protective clothing. Perforation                                   | UNI EN 863:1997 + UNI EN 14325:2005 Par. 4.10 + UNI EN 13034:2009 Par. 4.1               |
| 70505   | Protective clothing. Penetration by liquids                        | UNI EN ISO 6530:2005 + UNI EN 14325:2005 Par. 4.12 and 4.13 + UNI EN 13034:2009 Par. 4.1 |
| 70340   | Protective clothing. Seam tensile properties. Grab method          | UNI EN ISO 13935-2:2014 + UNI EN 14325:2005 Par. 5.5 + UNI EN 13034:2009 Par. 4.2.2      |
| * 70605 | Protective clothing. Penetration by spray                          | UNI EN ISO 17491-4:2008 + UNI EN 13034:2009 Par. 5.2                                     |

### Protective clothing against chemical risk

#### UNI EN ISO 13982-1:2011 "Protective clothing for use against solid particulate (type 5 clothing)"

| Code  | Description   | Methods   |
|-------|---|---|
| 70400 | Protective clothing. Abrasion (Martindale)                    | UNI EN 530:2010 Met. 2 + UNI EN 14325:2005 Par. 4.4.1 + UNI EN ISO 13982-1:2011 Par. 4.1    |
| 70521 | Protective clothing. Resistance to damage by repeated flexing | UNI EN ISO 7854:1999 Met. B + UNI EN 14325:2005 Par. 4.5 + UNI EN ISO 13982-1:2011 Par. 4.1 |



|         |   |   |
|---------|---|---|
| 70302   | Protective clothing. Tearing strenght. Trapezoid method   | UNI EN ISO 9073-4:1999 + UNI EN 14325:2005 Par. 4.7 + UNI EN ISO 13982-1:2011 Par. 4.1    |
| 70540   | Protective clothing. Perforation                          | UNI EN 863:1997 + UNI EN 14325:2005 Par. 4.10 + UNI EN ISO 13982-1:2011 Par. 4.1          |
| 70340   | Protective clothing. Seam tensile properties. Grab method | UNI EN ISO 13935-2:2014 + UNI EN 14325:2005 Par. 5.5 + UNI EN ISO 13982-1:2011 Par. 4.2.2 |
| * 70506 | Protective clothing. Aerosol penetration                  | UNI EN ISO 13982-2:2005 + UNI EN ISO 13982-1:2011 Par. 4.3.2                              |

## Protective clothing against chemical risk

### UNI EN 14605:2009 "Protective clothing against liquid chemicals

### Performance Requirements for clothing with liquid-tight (Type 3 and Type PB 3) or spray-tight (Type 4 and Type PB 4)"

| Code    | Description  | Methods   |
|---------|--|---|
| 70400   | Protective clothing. Abrasion (Martindale)                                       | UNI EN 530:2010 Met. 2 + UNI EN 14325:2005 Par. 4.4.1 + UNI EN 14605:2009 Par. 4.1    |
| 70521   | Protective clothing. Resistance to damage by repeated flexing                    | UNI EN ISO 7854:1999 Met. B + UNI EN 14325:2005 Par. 4.5 + UNI EN 14605:2009 Par. 4.1 |
| 70302   | Protective clothing. Tearing strenght. Trapezoid method                          | UNI EN ISO 9073-4:1999 + UNI EN 14325:2005 Par. 4.7 + UNI EN 14605:2009 Par. 4.1      |
| 70270   | Protective clothing. Tensile strenght and elongation. Strip method               | UNI EN ISO 13934-1:2013 + UNI EN 14325:2005 Par. 4.9 + UNI EN 14605:2009 Par. 4.1     |
| 70540   | Protective clothing. Perforation   | UNI EN 863:1997 + UNI EN 14325:2005 Par. 4.10 + UNI EN 14605:2009 Par. 4.1            |
| * 70503 | Protective clothing. Permeation by liquids                                       | UNI EN ISO 6529:2003 + UNI EN 14325:2005 Par. 4.11 + UNI EN 14605:2009 Par. 4.2       |
| * 70504 | Protective clothing. Permeation by liquids (antiblastic) or no standard chemical | UNI EN ISO 6529:2003 + UNI EN 14325:2005 Par. 4.11 + UNI EN 14605:2009 Par. 4.2       |
| 70340   | Protective clothing. Seam tensile properties. Grab method                        | UNI EN ISO 13935-2:2014 + UNI EN 14325:2005 Par. 5.5 + UNI EN 14605:2009 Par. 4.2     |
| * 70605 | Protective clothing. Penetration by spray  | UNI EN ISO 17491-4:2008 + UNI EN 14605:2009 Par. 4.3.4                                |
| * 70606 | Protective clothing. Penetration by a jet of liquid                              | UNI EN ISO 17491-3:2008 + UNI EN 14605:2009 Par.4.3.4                                 |
| * 70608 | Protective clothing. Visor. Mechanical strenght of visor                         | UNI EN 12941:2009 + UNI EN 14605:2009 Par. 4.4.2                                      |
| * 70578 | Protective clothing. Visor. Field of vision                                      | UNI EN 14605:2009 Par. 4.4.3  |
| * 70577 | Protective clothing. Visor. Distortion of vision                                 | UNI EN 14605:2009 Par. 4.4.4  |

## Protective clothing against chemical risk

### UNI EN 943-1:2003 "Protective clothing against liquid and gaseous chemicals, including liquid aerosols and solid particles. Performance requirements for ventilated and non-ventilated "gas-tight" (Type 1) and "non-gas-tight" (Type 2) chemical protective suits"

| Code    | Description   | Methods  |
|---------|---|--|
| 70400   | Protective clothing. Abrasion (Martindale)  | UNI EN 530:2010 Met. 2 + UNI EN 943-1:2003 Appendix B.2.3      |
| 70521   | Protective clothing. Resistance to damage by repeated flexing                                 | UNI EN ISO 7854:1999 Met. B + UNI EN 943-1:2003 Appendix B.2.4 |
| * 70547 | Protective clothing. Resistance to damage by repeated flexing (-30°C)                         | UNI EN ISO 7854:1999 Met. B + UNI EN 943-1:2003 Par. 4.1       |
| 70302   | Protective clothing. Tearing strenght. Trapezoid method                                       | UNI EN ISO 9073-4:1999 + UNI EN 943-1:2003 Appendix B.2.6      |
| 70270   | Protective clothing. Tensile strenght and elongation. Strip method                            | UNI EN ISO 13934-1:2013 + UNI EN 943-1:2003 Appendix B.2.8     |
| 70540   | Protective clothing. Perforation  | UNI EN 863:1997 + UNI EN 943-1:2003 Appendix B.2.9             |
| * 70503 | Protective clothing. Permeation by liquids  | UNI EN ISO 6529:2003 + UNI EN 943-1:2003 Appendix B.2.10       |
| 70411   | Protective clothing. Ignition and flammability  | UNI EN 13274-4:2002 Met. 3 + UNI EN 943-1:2003 Appendix B.2.13 |
| 70340   | Protective clothing. Seam tensile properties. Grab method                                     | UNI EN ISO 13935-2:2014 + UNI EN 943-1:2003 Appendix B.3.5     |
| * 70571 | Protective clothing. Resistance of joints and assemblies                                      | UNI EN 943-1:2003 Par. 6.5                                     |
| * 70572 | Protective clothing. Practical performance tests. Simulation test to work                     | UNI EN 943-1:2003 Par. 6.2                                     |
| * 70573 | Protective clothing. Conditioning   | UNI EN 943-1:2003 Par. 5.2                                     |
| * 70574 | Protective clothing. Determination of leak-tightness of gas-tight suits                       | UNI EN 464:1995 + UNI EN 943-1:2003 Par. 5.3                   |
| * 70576 | Protective clothing. Leak tightness of gas internal pressure                                  | UNI EN 943-1:2003 Appendix A                                   |
| * 70579 | Protective clothing. Visual screen. Mechanical resistance                                     | UNI EN 943-1:2003 Par. 6.7                                     |
| * 70581 | Protective clothing. Resistance of the connection system air supply                           | UNI EN 14594:2005 + UNI EN 943-1:2003 Par. 5.7.1               |
| * 70582 | Protective clothing. Resistance to bending  | UNI EN 14594:2005 + UNI EN 943-1:2003 Par. 5.7.3               |
| * 70583 | Protective clothing. Pratical performance test. Pairs. Resistance of the connections. Airflow | UNI EN 14594:2005 + UNI EN 943-1:2003 Par. 5.8.1, 5.8.2, 5.10  |
| * 70584 | Protective clothing. Breathing hose outside   | UNI EN 14594:2005 + UNI EN 943-1:2003 Par. 5.9.1               |
| * 70586 | Protective clothing. Breathing hose resistant to external collapse                            | UNI EN 14594:2005 + UNI EN 943-1:2003 Par. 5.9.1.1             |
| * 70587 | Protective clothing. Breathing hose internal  | UNI EN 14594:2005 + UNI EN 943-1:2003 Par. 5.9.2               |
| * 70588 | Protective clothing. Breathing hose resistant to internal collapse                            | UNI EN 14594:2005 + UNI EN 943-1:2003 Par. 5.9.2.1             |
| * 70589 | Protective clothing. Ventilation hose outside   | UNI EN 14594:2005 + UNI EN 943-1:2003 Par. 5.9.3               |
| * 70594 | Protective clothing. Air flow rate warning device   | UNI EN 14594:2005 + UNI EN 943-1:2003 Par. 5.11                |
| * 70595 | Protective clothing. Discharge devices, tightness test to losses for exhalation valves        | UNI EN 943-1:2003 Par. 5.13 and 6.6                            |

|         |   |                                     |
|---------|---|-------------------------------------|
| * 70596 | Protective clothing. Pressure in the chemical protective coverall           | UNI EN 943-1:2003 Par. 5.14 and 6.4 |
| * 70597 | Protective clothing. Breathing resistance                                   | UNI EN 943-1:2003 Par. 5.15         |
| * 70598 | Protective clothing. Carbon dioxide content of exhalation air               | UNI EN 943-1:2003 Par. 5.16         |
| * 70599 | Protective clothing. Noise associated with the feeding of air into the suit | UNI EN 943-1:2003 Par. 5.17         |
| * 70578 | Protective clothing. Visor. Field of vision                                 | UNI EN 943-1:2003 Par. 5.5.3        |
| * 70577 | Protective clothing. Visor. Distortion of vision                            | UNI EN 943-1:2003 Par. 5.5.2        |

## Protective clothing against radioactive contamination

### UNI EN 1073-1:2000 "Requirements and test methods for ventilated protective clothing against particulate radioactive contamination"

| Code    | Description  | Methods  |
|---------|--|--|
| 70400   | Protective clothing. Abrasion (Martindale)   | UNI EN 530:2010 Met. 2 + UNI EN 1073-1:2000 Par. 4.2       |
| 70521   | Protective clothing. Resistance to damage by repeated flexing                          | UNI EN ISO 7854:1999 Met. B + UNI EN 1073-1:2000 Par. 4.2  |
| 70540   | Protective clothing. Perforation   | UNI EN 863:1997 + UNI EN 1073-1:2000 Par. 4.2              |
| * 70501 | Rubber-or plastics-coated fabrics. Blocking resistance                                 | UNI EN 25978:1996 + UNI EN 1073-1:2000 Par. 4.2            |
| 70302   | Protective clothing. Tearing strenght. Trapezoid method                                | UNI EN ISO 9073-4:1999 + UNI EN 1073-1:2000 Par. 4.2       |
| 70411   | Protective clothing. Ignition and flammability   | UNI EN 13274-4:2002 Met. 3 + UNI EN 1073-1:2000 Par. 4.2   |
| * 70457 | Protective clothing. Leak tightness of gas internal pressure                           | UNI EN 943-1:2015 Par. 5.5 and Appendix A                  |
| 70340   | Protective clothing. Seam tensile properties. Grab method                              | UNI EN ISO 13935-2:2014 + UNI EN 1073-1:2000 Par. 4.4      |
| * 70548 | Protective clothing. Resistance of joints and assemblies                               | UNI EN 1073-1:2000 Par. 4.4.2                              |
| * 70579 | Protective clothing. Visual screen. Mechanical resistance                              | UNI EN 1073-1:2000 Par. 4.5                                |
| * 70458 | Protective clothing. Air supply system. Connection resistance                          | UNI EN 14594:2018 Par. 6.6 + UNI EN 1073-1:2000 Par. 4.6   |
| * 70459 | Pre-Conditioning   | UNI EN 1073-1:2000 Par. 5.1.4                              |
| * 70467 | Protective clothing. Air flow rate   | UNI EN 1073-1:2000 Par. 4.8                                |
| * 70594 | Protective clothing. Air flow rate warning device                                      | UNI EN 14594:2018 Par. 6.15 + UNI EN 1073-1:2000 Par. 4.9  |
| * 70595 | Protective clothing. Discharge devices, tightness test to losses for exhalation valves | UNI EN 1073-1:2000 Par. 4.11                               |
| * 70596 | Protective clothing. Pressure in the chemical protective coverall                      | UNI EN 1073-1:2000 Par. 4.12                               |
| * 70598 | Protective clothing. Carbon dioxide content of exhalation air                          | UNI EN 14594:2018 Par. 6.13 + UNI EN 1073-1:2000 Par. 4.13 |
| * 70599 | Protective clothing. Noise associated with the feeding of air into the suit            | UNI EN 14594:2018 Par. 6.18 + UNI EN 1073-1:2000 Par. 4.14 |
| * 70468 | Protective clothing. Practical performance tests                                       | UNI EN 1073-1:2000 Par. 5.2                                |
| * 70469 | Protective clothing. Control of specific requirements (breathing tube)                 | UNI EN 1073-1:2000 Par. 4.7                                |
| * 70577 | Protective clothing. Visor. Distortion of vision                                       | UNI EN 1073-1:2000 Par. 4.5                                |

## Protective clothing against radioactive contamination

### UNI EN 1073-2:2003 "Requirements and test methods for non-ventilated protective clothing against particulate radioactive contamination"

| Code | Description | Methods |
|------|-------------|---------|
|------|-------------|---------|



|         |   |  |
|---------|---|--|
| 70400   | Protective clothing. Abrasion (Martindale)                | UNI EN 530:2010 Met. 2 + UNI EN 1073-2:2003 Par. 4.2     |
| 70411   | Protective clothing. Ignition and flammability            | UNI EN 13274-4:2002 Met. 3 + UNI EN 1073-2:2003 Par. 4.2 |
| 70340   | Protective clothing. Seam tensile properties. Grab method | UNI EN ISO 13935-2:2014 + UNI EN 1073-2:2003 Par. 4.4.1  |
| 70540   | Protective clothing. Perforation                          | UNI EN 863:1997 + UNI EN 1073-2:2003 Par. 4.2            |
| * 70501 | Rubber-or plastics-coated fabrics. Blocking resistance    | UNI EN 25978:1996 + UNI EN 1073-2:2003 Par. 4.2          |
| 70302   | Protective clothing. Tearing strenght. Trapezoid method   | UNI EN ISO 9073-4:1999 + UNI EN 1073-2:2003 Par. 4.2     |
| * 70508 | Protective clothing. Aerosol penetration                  | EN 13982-2:2004 + UNI EN 1073-2:2003 Par. 5.3            |
| * 70549 | Data re-processing of aerosol penetration test            | UNI EN 1073-2:2003                                       |
| 70502   | Protective clothing. Practical performance tests          | UNI EN 1073-2:2003 Par. 5.2                              |
| * 70548 | Protective clothing. Resistance of joints and assemblies  | UNI EN 1073-2:2003 Par. 4.4.2                            |

## Protective clothing against biological risk

### UNI EN 14126:2004 "Protective clothing - Performance requirements and tests methods for protective clothing against infective agents"

If protection against chemicals is also claimed, the materials shall be tested and classified in accordance with the test methods and performance classification system specified in the relevant clauses of EN 14325:2005.

Protective clothing against infective agents shall fulfill the whole suit requirements specified in the relevant standards for chemical protective clothing.

| Code    | Description  | Methods   |
|---------|--|---|
| 90400   | Protective clothing. Abrasion (Martindale)                     | UNI EN 530:2010 Met. 2 + UNI EN 14325:2005 Par. 4.4.1 + UNI EN 14126:2004 Par. 4.1.2                  |
| 90302   | Protective clothing. Tearing strength. Trapezoid method        | UNI EN ISO 9073-4:1999 + UNI EN 14325:2005 Par. 4.7 + UNI EN 14126:2004 Par. 4.1.2                    |
| 90521   | Protective clothing. Resistance to damage by repeated flexing  | UNI EN ISO 7854:1999 Met. B + UNI EN 14325:2005 Par. 4.5 + UNI EN 14126:2004 Par. 4.1.2               |
| * 90280 | Protective clothing. Bursting strength and bursting distension | UNI EN ISO 13938-1:2001 + EC 1-2004 + UNI EN 14325:2005 Par. 4.8 + UNI EN 14126:2004 Par. 4.1.2       |
| 90270   | Protective clothing. Tensile Strength. Strip method            | UNI EN ISO 13934-1:2013 + UNI EN 14325:2005 Par. 4.9 + UNI EN 14126:2004 Par. 4.1.2                   |
| 90541   | Protective clothing. Perforation                               | UNI EN 863:1997 + UNI EN 14325:2005 Par. 4.10 + UNI EN 14126:2004 Par. 4.1.2                          |
| * 90411 | Protective clothing. Ignition and flammability                 | UNI EN 13274-4:2002 Met. 3 + UNI EN 14325:2005 Par. 4.14 and Par. 4.15 + UNI EN 14126:2004 Par. 4.1.2 |

|         |   |  |
|---------|---|--|
| 90505   | Protective clothing. Penetration by liquids   | UNI EN ISO 6530:2005 + UNI EN 14325:2005 Par. 4.12 and 4.13 + UNI EN 14126:2004 Par. 4.1.3 |
| * 90503 | Protective clothing. Permeation by liquids  | UNI EN ISO 6529:2003 + UNI EN 14325:2005 Par. 4.11 + UNI EN 14126:2004 Par. 4.1.3          |
| * 90504 | Protective clothing. Permeation by liquids  | UNI EN ISO 6529:2003 + UNI EN 14325:2005 Par. 4.11 + UNI EN 14126:2004 Par. 4.1.3          |
| 90102   | Protective clothing. Penetration by blood and body fluids. Synthetic blood method                             | ISO 16603:2004 + UNI EN 14126:2004 Par. 4.1.4.1  |
| * 90112 | Protective clothing. Penetration by blood and other body fluids-born pathogens. Phi-X174 bacteriophage method | ISO 16604:2004 + UNI EN 14126:2004 Par. 4.1.4.1  |
| 90123   | Protective clothing. Wet bacterial penetration  | UNI EN ISO 22610:2006 + UNI EN 14126:2004 Par. 4.1.4.2                                     |
| * 90134 | Protective clothing. Penetration by biologically contaminated aerosols  | ISO/DIS 22611:2003 + UNI EN 14126:2004 Par. 4.1.4.3  |
| 90135   | Protective clothing. Penetration by biologically contaminated powders   | UNI EN ISO 22612:2005 + EC 1-2011 + UNI EN 14126:2004 Par. 4.1.4.4                         |
| 90341   | Protective clothing. Seam tensile properties. Grab method   | UNI EN ISO 13935-2:2014 + UNI EN 14325:2005 Par. 5.5 + UNI EN 14126:2004 Par. 4.1.2        |

## Protective clothing for user of hand-held chain saws UNI EN 381-5:1996 "Requirement for leg"

| Code    | Description   | Methods   |
|---------|---|---|
| * 70511 | Protective clothing. Checking protective coverage     | UNI EN 381-2:2003 + UNI EN 381-2:1996 Par. 7 + UNI EN 381-5:1996 Par. 6.2       |
| * 70512 | Protective clothing. Resistance to chainsaw cutting   | UNI EN 381-2:1996 + UNI EN 381-5:1996 Par. 6.3.2                                |
| 70513   | Protective clothing. Attachment of protective padding | UNI EN ISO 13934-2:2014 + UNI EN 381-2:1996 Par. 9 + UNI EN 381-5:1996 Par. 6.4 |

## Protective clothing for user of hand-held chain saws UNI EN 381-11:2004 "Requirement for upper body protectors"

| Code    | Description   | Methods   |
|---------|---|---|
| * 70514 | Protective clothing. Checking protective coverage         | UNI EN 381-10:2003 Par. 7 + UNI EN 381-11:2004 Par. 4.4                                     |
| * 70515 | Protective clothing. Resistance to chainsaw cutting       | UNI EN 381-10:2003 Par. 8 + UNI EN 381-11:2004 Par. 4.6                                     |
| 70513   | Protective clothing. Attachment of protective padding     | UNI EN ISO 13934-2:2014 + UNI EN 381-10:2003 Par. 9 + UNI EN 381-11:2004 Par. 4.7           |
| 70611   | Protective clothing. Water-vapour resistance (Skin Model) | UNI EN ISO 11092:2014 Par. 7.4 + UNI EN 381-10:2002 Par. 10.1 + UNI EN 381-11:2004 Par. 4.3 |

## Protective clothing for professional motorcycle rider

### UNI EN 13595-1:2004 "Protective clothing for professional motorcycle riders: jackets, trousers and one piece or divided suits. General requirements"

| Code    | Description  | Methods  |
|---------|--|--|
| 70516   | Protective clothing for motorcycle riders. Impact abrasion resistance  | UNI EN 13595-2:2004 + UNI EN 13595-1:2004 Par. 5.4           |
| 70517   | Protective clothing for motorcycle riders. Impact cut resistance   | UNI EN 13595-4:2004 + UNI EN 13595-1:2004 Par. 5.5           |
| 70518   | Protective clothing for motorcycle riders. Burst strength  | UNI EN 13595-3:2004 + UNI EN 13595-1:2004 Par. 5.6           |
| 70539   | Protective clothing for motorcycle riders. Tearing strenght. Double-teared method                              | UNI EN ISO 4674-1:2017 Met. A + UNI EN 13595-1:2004 Par. 5.2 |
| 70542   | Protective clothing for motorcycle riders, leather. Colour fastness to water                                   | UNI EN ISO 11642:2013 + UNI EN 13595-1:2004 Par. 5.7         |
| 70543   | Protective clothing for motorcycle riders. Colour fastness to water  | UNI EN ISO 105-E01:2013 + UNI EN 13595-1:2004 Par. 5.7       |
| 70544   | Protective clothing for motorcycle riders, leather. pH   | UNI EN ISO 4045:2018 + UNI EN 13595-1:2004 Par. 5.8          |
| 70546   | Protective clothing for motorcycle riders, textile. pH of aqueous extract                                      | UNI EN ISO 3071:2006 + UNI EN 13595-1:2004 Par. 5.8          |
| 70519   | Protective clothing for motorcycle riders. Retention system effectiveness (sleeves, legs)                      | UNI EN 13595-1:2004 Par. 7.1                                 |
| 70509   | Protective clothing for motorcycle riders. Retention system effectiveness (connection between divisible suits) | UNI EN 13595-1:2004 Par. 7.1 and Appendix B                  |
| 70531   | Protective clothing for motorcycle riders. Impact protector retention system effectiveness                     | UNI EN 13595-1:2004 Par. 7.2 and Appendix B                  |
| * 70532 | Protective clothing for motorcycle riders. Determination of zone classification of risk categories             | UNI EN 13595-1:2004 Par. 8 and Appendix C                    |
| * 70533 | Protective clothing for motorcycle riders. Determination of garment fitting ergonomics                         | UNI EN 13595-1:2004 Par. 6 and Appendix A                    |
| 70538   | Protective clothing for motorcycle riders, leather. Tearing strength   | UNI EN ISO 3377-1:2012 + UNI EN 13595-1:2004 Par. 5.2        |

## Protective clothing for motorcyclists

### UNI EN 1621-1:2013 "Motorcyclists' protective clothing against mechanical impact. Part 1: Motorcyclists' limb joint impact protectors - Requirements and test methods"

| Code    | Description   | Methods   |
|---------|---|---|
| 70860   | Motorcyclists' protective clothings against mechanical impact. Check areas of impact              | UNI EN 1621-1:2013 Par. 4                             |
| 70859   | Motorcyclists' protectives clothings against mechanical impact. Impact attenuation                | UNI EN 1621-1:2013 Par. 5.4                           |
| 70867   | Motorcyclists' protectives clothings against mechanical impact. Colour fastness to water          | UNI EN ISO 105-E01:2013 + UNI EN 1621-1:2013 Par. 6.2 |
| 70872   | Motorcyclists' protectives clothings against mechanical impact, leather. Colour fastness to water | UNI EN ISO 11642:2013 + UNI EN 1621-1:2013 Par. 6.2   |
| * 70868 | Motorcyclists' protectives clothings against mechanical impact. Ergonomic assessment              | UNI EN 1621-1:2013 Par. 5.5                           |
| 70869   | Motorcyclists' protectives clothings against mechanical impact. Hydrolytic ageing                 | UNI EN 1621-1:2013 Par. 6.3.4.3                       |
| 70870   | Motorcyclists' protectives clothings against mechanical impact. Conditioning at high temperatures | UNI EN 1621-1:2013 Par. 6.3.4.4                       |
| 70871   | Motorcyclists' protectives clothings against mechanical impact. Conditioning at low temperatures  | UNI EN 1621-1:2013 Par. 6.3.4.5                       |

## Protective clothing for professional motorcycle rider

### UNI EN 1621-2:2014 "Motorcyclists' protectives clothing against mechanical impact. Motorcyclists' back protectors: requirements and test methods"

| Code    | Description   | Methods   |
|---------|---|---|
| 70865   | Motorcyclists' protective clothings against mechanical impact. Impact test for back protectors    | UNI EN 1621-2:2014 Par. 4.4                           |
| * 70861 | Motorcyclists' protective clothings against mechanical impact. Ergonomic requirements             | UNI EN 1621-2:2014 Par. 4.5                           |
| 70862   | Motorcyclists' protective clothings against mechanical impact. Size                               | UNI EN 1621-2:2014 Par. 4.6                           |
| 70869   | Motorcyclists' protectives clothings against mechanical impact. Hydrolytic ageing                 | UNI EN 1621-2:2014 Par. 5.1.6.2                       |
| 70870   | Motorcyclists' protectives clothings against mechanical impact. Conditioning at high temperatures | UNI EN 1621-2:2014 Par. 5.1.6.3                       |
| 70871   | Motorcyclists' protectives clothings against mechanical impact. Conditioning at low temperatures  | UNI EN 1621-2:2014 Par. 5.1.6.4                       |
| 70867   | Motorcyclists' protectives clothings against mechanical impact. Colour fastness to water          | UNI EN ISO 105-E01:2013 + UNI EN 1621-2:2014 Par. 4.2 |
| 70872   | Motorcyclists' protectives clothings against mechanical impact, leather. Colour fastness to water | UNI EN ISO 11642:2013 + UNI EN 1621-2:2014 Par. 4.2   |
| 70860   | Motorcyclists' protective clothings against mechanical impact. Check areas of impact              | UNI EN 1621-2:2014 Par. 4.3                           |

## FprEN 17092-2:2017 "Protective garments for motorcycle riders - Part 2: Class AAA garments - Requirements"

| Code    | Description   | Methods  |
|---------|---|--|
| * 70625 | Protective clothing for motorcycle riders. Dimensional stability of garments in domestic washing and drying | UNI EN ISO 6330:2012 + UNI EN ISO 3759:2011 + UNI EN ISO 5077:2008 + FprEN 17092-2:2017 Par. 4.1.2   |
| * 70626 | Protective clothing for motorcycle riders. Dimensional stability of garments in dry cleaning                | UNI EN ISO 3175-2:2018 + UNI EN ISO 3759:2011 + UNI EN ISO 5077:2008 + FprEN 17092-2:2017 Par. 4.1.2 |
| * 70627 | Protective clothing for motorcycle riders. Impact protector location and fixation                           | FprEN 17092-1:2017 Par. 5.5.2 + FprEN 17092-2:2017 Par. 4.2  |
| * 70628 | Protective clothing for motorcycle riders. Determination of impact abrasion resistance (Darmstadt method)   | FprEN 17092-1:2017 Par. 5.3 + FprEN 17092-2:2017 Par. 4.3  |
| * 70629 | Protective clothing for motorcycle riders. Resistance of seams: tensile strength                            | EN 13594:2015 Annex B + FprEN 17092-2:2017 Par. 4.4.2  |
| * 70635 | Protective clothing for motorcycle riders, textile. Tear strength   | UNI EN ISO 4674-1:2017 Met. B + FprEN 17092-2:2017 Par. 4.5  |
| 70538   | Protective clothing for motorcycle riders, leather. Tearing strength  | UNI EN ISO 3377-1:2012 + FprEN 17092-2:2017 Par. 4.5   |
| * 70630 | Protective clothing for motorcycle riders. Restraint (two-piece suit)                                       | FprEN 17092-1:2017 Par. 5.5.3.1 + FprEN 17092-2:2017 Par. 4.6.2                                      |
| * 70631 | Protective clothing for motorcycle riders. Restraint (sleeve)   | FprEN 17092-1:2017 Par. 5.5.3.2 + FprEN 17092-2:2017 Par. 4.6.3                                      |
| * 70632 | Protective clothing for motorcycle riders. Determination of risk category zones                             | FprEN 17092-1:2017 Par. 5.2 + FprEN 17092-2:2017 Par. 4.7.1  |
| * 70633 | Protective clothing for motorcycle riders. Fit and ergonomics   | FprEN 17092-1:2017 Par. 5.6 + FprEN 17092-2:2017 Par. 4.8  |

## FprEN 17092-3:2017 "Protective garments for motorcycle riders - Part 3: Class AA garments - Requirements"

| Code | Description | Methods |
|------|-------------|---------|
|------|-------------|---------|

|         |   |  |
|---------|---|--|
| * 70625 | Protective clothing for motorcycle riders. Dimensional stability of garments in domestic washing and drying | UNI EN ISO 6330:2012 + UNI EN ISO 3759:2011 + UNI EN ISO 5077:2008 + FprEN 17092-3:2017 Par. 4.1.2   |
| * 70626 | Protective clothing for motorcycle riders. Dimensional stability of garments in dry cleaning                | UNI EN ISO 3175-2:2018 + UNI EN ISO 3759:2011 + UNI EN ISO 5077:2008 + FprEN 17092-3:2017 Par. 4.1.2 |
| * 70627 | Protective clothing for motorcycle riders. Impact protector location and fixation                           | FprEN 17092-1:2017 Par. 5.5.2 + FprEN 17092-3:2017 Par. 4.2  |
| * 70628 | Protective clothing for motorcycle riders. Determination of impact abrasion resistance (Darmstadt method)   | FprEN 17092-1:2017 Par. 5.3 + FprEN 17092-3:2017 Par. 4.3  |
| * 70629 | Protective clothing for motorcycle riders. Resistance of seams: tensile strength                            | EN 13594:2015 Annex B + FprEN 17092-3:2017 Par. 4.4.2  |
| * 70635 | Protective clothing for motorcycle riders, textile. Tear strength   | UNI EN ISO 4674-1:2017 Met. B + FprEN 17092-3:2017 Par. 4.5  |
| 70538   | Protective clothing for motorcycle riders, leather. Tearing strength  | UNI EN ISO 3377-1:2012 + FprEN 17092-3:2017 Par. 4.5   |
| * 70630 | Protective clothing for motorcycle riders. Restraint (two-piece suit)                                       | FprEN 17092-1:2017 Par. 5.5.3.1 + FprEN 17092-3:2017 Par. 4.6.2                                      |
| * 70631 | Protective clothing for motorcycle riders. Restraint (sleeve)   | FprEN 17092-1:2017 Par. 5.5.3.2 + FprEN 17092-3:2017 Par. 4.6.3                                      |
| * 70632 | Protective clothing for motorcycle riders. Determination of risk category zones                             | FprEN 17092-1:2017 Par. 5.2 + FprEN 17092-3:2017 Par. 4.7.1  |
| * 70633 | Protective clothing for motorcycle riders. Fit and ergonomics   | FprEN 17092-1:2017 Par. 5.6 + FprEN 17092-3:2017 Par. 4.8  |

## FprEN 17092-4:2017 "Protective garments for motorcycle riders - Part 4: Class A garments - Requirements"

| Code    | Description   | Methods  |
|---------|---|--|
| * 70625 | Protective clothing for motorcycle riders. Dimensional stability of garments in domestic washing and drying | UNI EN ISO 6330:2012 + UNI EN ISO 3759:2011 + UNI EN ISO 5077:2008 + FprEN 17092-4:2017 Par. 4.1.2   |
| * 70626 | Protective clothing for motorcycle riders. Dimensional stability of garments in dry cleaning                | UNI EN ISO 3175-2:2018 + UNI EN ISO 3759:2011 + UNI EN ISO 5077:2008 + FprEN 17092-4:2017 Par. 4.1.2 |
| * 70627 | Protective clothing for motorcycle riders. Impact protector location and fixation                           | FprEN 17092-1:2017 Par. 5.5.2 + FprEN 17092-4:2017 Par. 4.2  |
| * 70628 | Protective clothing for motorcycle riders. Determination of impact abrasion resistance (Darmstadt method)   | FprEN 17092-1:2017 Par. 5.3 + FprEN 17092-4:2017 Par. 4.3  |
| * 70629 | Protective clothing for motorcycle riders. Resistance of seams: tensile strength                            | EN 13594:2015 Annex B + FprEN 17092-4:2017 Par. 4.4.2  |
| * 70635 | Protective clothing for motorcycle riders, textile. Tear strength   | UNI EN ISO 4674-1:2017 Met. B + FprEN 17092-4:2017 Par. 4.5  |
| 70538   | Protective clothing for motorcycle riders, leather. Tearing strength  | UNI EN ISO 3377-1:2012 + FprEN 17092-4:2017 Par. 4.5   |
| * 70630 | Protective clothing for motorcycle riders. Restraint (two-piece suit)                                       | FprEN 17092-1:2017 Par. 5.5.3.1 + FprEN 17092-4:2017 Par. 4.6.2                                      |
| * 70631 | Protective clothing for motorcycle riders. Restraint (sleeve)   | FprEN 17092-1:2017 Par. 5.5.3.2 + FprEN 17092-4:2017 Par. 4.6.3                                      |
| * 70632 | Protective clothing for motorcycle riders. Determination of risk category zones                             | FprEN 17092-1:2017 Par. 5.2 + FprEN 17092-4:2017 Par. 4.7.1  |



|         |   |   |
|---------|---|---|
| * 70633 | Protective clothing for motorcycle riders. Fit and ergonomics | FprEN 17092-1:2017 Par. 5.6 + FprEN 17092-4:2017 Par. 4.8 |
|---------|---|---|

## FprEN 17092-5:2017 "Protective garments for motorcycle riders - Part 5: Class B garments - Requirements"

| Code    | Description   | Methods  |
|---------|---|--|
| * 70625 | Protective clothing for motorcycle riders. Dimensional stability of garments in domestic washing and drying | UNI EN ISO 6330:2012 + UNI EN ISO 3759:2011 + UNI EN ISO 5077:2008 + FprEN 17092-5:2017 Par. 4.1.2   |
| * 70626 | Protective clothing for motorcycle riders. Dimensional stability of garments in dry cleaning                | UNI EN ISO 3175-2:2018 + UNI EN ISO 3759:2011 + UNI EN ISO 5077:2008 + FprEN 17092-5:2017 Par. 4.1.2 |
| * 70628 | Protective clothing for motorcycle riders. Determination of impact abrasion resistance (Darmstadt method)   | FprEN 17092-1:2017 Par. 5.3 + FprEN 17092-5:2017 Par. 4.2  |
| * 70629 | Protective clothing for motorcycle riders. Resistance of seams: tensile strength                            | EN 13594:2015 Annex B + FprEN 17092-5:2017 Par. 4.3.2  |
| * 70635 | Protective clothing for motorcycle riders, textile. Tear strength   | UNI EN ISO 4674-1:2017 Met. B + FprEN 17092-5:2017 Par. 4.4  |
| 70538   | Protective clothing for motorcycle riders, leather. Tearing strength  | UNI EN ISO 3377-1:2012 + FprEN 17092-5:2017 Par. 4.4   |
| * 70630 | Protective clothing for motorcycle riders. Restraint (two-piece suit)                                       | FprEN 17092-1:2017 Par. 5.5.3.1 + FprEN 17092-5:2017 Par. 4.5.2                                      |
| * 70631 | Protective clothing for motorcycle riders. Restraint (sleeve)   | FprEN 17092-1:2017 Par. 5.5.3.2 + FprEN 17092-5:2017 Par. 4.5.3                                      |
| * 70632 | Protective clothing for motorcycle riders. Determination of risk category zones                             | FprEN 17092-1:2017 Par. 5.2 + FprEN 17092-5:2017 Par. 4.6.1  |
| * 70633 | Protective clothing for motorcycle riders. Fit and ergonomics   | FprEN 17092-1:2017 Par. 5.6 + FprEN 17092-5:2017 Par. 4.7  |

## FprEN 17092-6:2017 "Protective garments for motorcycle riders - Part 6: Class C garments - Requirements"

| Code    | Description   | Methods  |
|---------|---|--|
| * 70625 | Protective clothing for motorcycle riders. Dimensional stability of garments in domestic washing and drying | UNI EN ISO 6330:2012 + UNI EN ISO 3759:2011 + UNI EN ISO 5077:2008 + FprEN 17092-6:2017 Par. 4.1.2   |
| * 70626 | Protective clothing for motorcycle riders. Dimensional stability of garments in dry cleaning                | UNI EN ISO 3175-2:2018 + UNI EN ISO 3759:2011 + UNI EN ISO 5077:2008 + FprEN 17092-6:2017 Par. 4.1.2 |
| * 70627 | Protective clothing for motorcycle riders. Impact protector location and fixation                           | FprEN 17092-1:2017 Par. 5.5.2 + FprEN 17092-6:2017 Par. 4.2  |
| * 70628 | Protective clothing for motorcycle riders. Determination of impact abrasion resistance (Darmstadt method)   | FprEN 17092-1:2017 Par. 5.3 + FprEN 17092-6:2017 Par. 4.3  |
| * 70629 | Protective clothing for motorcycle riders. Resistance of seams: tensile strength                            | EN 13594:2015 Annex B + FprEN 17092-6:2017 Par. 4.4.2  |
| * 70635 | Protective clothing for motorcycle riders, textile. Tear strength   | UNI EN ISO 4674-1:2017 Met. B + FprEN 17092-6:2017 Par. 4.5  |
| 70538   | Protective clothing for motorcycle riders, leather. Tearing strength  | UNI EN ISO 3377-1:2012 + FprEN 17092-6:2017 Par. 4.5   |

|         |   |  |
|---------|---|--|
| * 70631 | Protective clothing for motorcycle riders. Restraint (sleeve)                   | FprEN 17092-1:2017 Par. 5.5.3.2 +<br>FprEN 17092-6:2017 Par. 4.6.3 |
| * 70632 | Protective clothing for motorcycle riders. Determination of risk category zones | FprEN 17092-1:2017 Par. 5.2 + FprEN<br>17092-6:2017 Par. 4.7.1     |
| * 70633 | Protective clothing for motorcycle riders. Fit and ergonomics                   | FprEN 17092-1:2017 Par. 5.6 + FprEN<br>17092-6:2017 Par. 4.8       |

## Protective clothing against heat and flame

### UNI EN ISO 14460:2003 "Protective clothing. Protection against heat and flame. Performance requirements and test methods"

| Code    | Description   | Methods  |
|---------|---|--|
| * 70456 | Protective clothing. Washing and dry cleaning                 | UNI EN ISO 6330:2012 + UNI EN ISO<br>3175-2:2018 + UNI EN ISO 14460:2003<br>Par. 5.5 |
| * 70275 | Protective clothing. Seam tensile strength. Strip method      | UNI EN ISO 13935-1:2014 + UNI EN ISO<br>14460:2003 Par. 6.5                          |
| 70408   | Protective clothing. Limited flame spread                     | UNI EN ISO 15025:2017 Met. A + UNI EN<br>ISO 14460:2003 Par. 6.1                     |
| 70452   | Protective clothing. Heat transmission on exposure to a flame | UNI EN ISO 9151:2017 + UNI EN ISO<br>14460:2003 Par. 6.2                             |

## PROTECTIVE GLOVES

### UNI EN 420:2010 "Protective gloves - general requirements"

| Code    | Description   | Methods   |
|---------|---|---|
| 70800   | Protective gloves. Size   | UNI EN 420:2010 Par 5.1                                 |
| * 70810 | Protective gloves. Glove design and construction - General                                  | MIP 302:2004 Rev.0 + UNI EN 420:2010<br>Par. 4.1        |
| 70820   | Protective gloves. Dexterity  | UNI EN 420:2010 Par. 6.2                                |
| 70832   | Protective gloves, leather. pH  | UNI EN ISO 4045:2008 + UNI EN<br>420:2010 Par. 4.3.2    |
| 70833   | Protective gloves, textile. pH of aqueous extract   | UNI EN ISO 3071:2006 + UNI EN<br>420:2010 Par. 4.3.2    |
| 70491   | Protective gloves, leather. Hexavalent chromium   | UNI EN ISO 17075-1:2017 + UNI EN<br>420:2010 Par. 4.3.3 |
| * 70837 | Protective gloves. Determination of extractable protein content                             | UNI EN 455-3:2015 + UNI EN 420:2010<br>Par. 4.3.4       |
| * 70291 | Protective gloves. Leather. Resistance to water penetration                                 | UNI EN 344:1994 + UNI EN 420:2010<br>Par. 4.2           |
| 70292   | Protective gloves. Test of resistance to water penetration. Increasing hydrostatic pressure | UNI EN ISO 811:2018 + UNI EN<br>420:2010 Par. 4.2       |
| * 70293 | Protective gloves. Water vapour transmission  | UNI EN 420:2010 Par. 6.3                                |
| * 70294 | Protective gloves. Water vapour absorption  | UNI EN 420:2010 Par. 6.4                                |

## PROTECTIVE GLOVES

### UNI EN 388:2019 "Protective gloves against mechanical risk"

| Code  | Description   | Methods                  |
|-------|---|--------------------------|
| 70840 | Protective gloves. Abrasion resistance (Martindale) | UNI EN 388:2019 Par. 6.1 |

|         |   |   |
|---------|---|---|
| 70545   | Protective gloves. Blade-cut resistance | UNI EN 388:2019 Par. 6.2                              |
| * 70551 | Protective gloves. Cut resistance       | UNI EN ISO 13997:2001 + UNI EN 388:2019 Par. 6.3      |
| 70845   | Protective gloves. Tear resistance      | UNI EN 388:2019 Par. 6.4                              |
| 70541   | Protective gloves. Puncture resistance  | UNI EN 388:2019 Par. 6.5                              |
| * 70552 | Protective gloves. Impact test          | UNI EN 13594:2015 Par. 6.9 + UNI EN 388:2019 Par. 6.6 |

## PROTECTIVE GLOVES

### UNI EN 407:2004 "Protective gloves against thermal risks (heat and/or fire)"

| Code    | Description   | Methods  |
|---------|---|--|
| 70840   | Protective gloves. Abrasion resistance (Martindale)         | UNI EN 388:2019 Par. 6.1 + UNI EN 407:2004 Par. 4.3    |
| 70845   | Protective gloves. Tear resistance                          | UNI EN 388:2019 Par. 6.4 + UNI EN 407:2004 Par. 4.4    |
| 70462   | Protective gloves. Contact heat                             | UNI EN ISO 12127-1:2016 + UNI EN 407:2004 Par.6.4      |
| 70451   | Protective gloves. Heat transmission on exposure to a flame | UNI EN 367:1993 + UNI EN 407:2004 Par. 6.5             |
| 70453   | Protective gloves. Exposition to a source of radiant heat   | UNI EN ISO 6942:2004 Met. B + UNI EN 407:2004 Par. 6.6 |
| * 70472 | Protective gloves. Molten metal small splashes              | UNI EN 348:1993 + UNI EN 407:2004 Par. 6.7             |
| * 70481 | Protective gloves. Molten metal big splashes                | UNI EN ISO 9185:2008+ UNI EN 407:2004 Par. 6.8         |
| 70412   | Protective gloves. Burning behaviour                        | UNI EN ISO 6941:2004 + UNI EN 407:2004 Par. 6.3        |

## PROTECTIVE GLOVES

### prEN 407:2017 "Protective gloves against thermal risks (heat and/or fire)"

| Code    | Description   | Methods   |
|---------|---|---|
| * 70811 | Protective gloves. Protective requirements                  | prEN 407:2017 Par. 4.3                                |
| * 70473 | Protective gloves. Limited flame spread                     | UNI EN ISO 15025:2017 Met. B + prEN 407:2017 Par. 6.2 |
| 70462   | Protective gloves. Contact heat                             | UNI EN ISO 12127-1:2016 + prEN 407:2017 Par. 6.3      |
| 70451   | Protective gloves. Heat transmission on exposure to a flame | UNI EN ISO 9151:2017 + prEN 407:2017 Par. 6.4         |
| 70453   | Protective gloves. Exposition to a source of radiant heat   | UNI EN ISO 6942:2004 Met.B + prEN 407:2017 Par. 6.5   |
| * 70472 | Protective gloves. Molten metal small splashes              | UNI EN 348:1993 + prEN 407:2017 Par. 6.6              |
| * 70481 | Protective gloves. Molten metal big splashes                | UNI EN ISO 9185:2008 + prEN 407:2017 Par. 6.7         |

## PROTECTIVE GLOVES

### UNI EN 12477:2006 "Protective gloves for welders"

| Code    | Description  | Methods                    |
|---------|--|----------------------------|
| * 70834 | Protective gloves. Control of ergonomic requirements | UNI EN 12477:2006 Par. 3.2 |

|         |   |  |
|---------|---|--|
| * 70476 | Protective gloves. Abrasion (Martindale)                    | UNI EN 388:2004 Par. 6.1 + UNI EN 12477:2006 Par. 5.1                        |
| * 70477 | Protective gloves. Blade-cut                                | UNI EN 388:2004 Par. 6.2 + UNI EN 12477:2006 Par. 5.2                        |
| 70845   | Protective gloves. Tear resistance                          | UNI EN 388:2019 Par. 6.4 + UNI EN 12477:2006 Par. 5.3                        |
| 70541   | Protective gloves. Puncture resistance                      | UNI EN 388:2019 Par. 6.5 + UNI EN 12477:2006 Par. 5.4                        |
| 70412   | Protective gloves. Burning behaviour                        | UNI EN 407:2004 Par. 6.3 + UNI EN ISO 6941:2004 + UNI EN 12477:2006 Par. 5.5 |
| 70617   | Protective gloves. Vertical electrical resistance           | UNI EN 1149-2:1999 + UNI EN 12477:2006 Par. 5.10                             |
| 70462   | Protective gloves. Contact heat                             | UNI EN ISO 12127-1:2016 + UNI EN 12477:2006 Par. 5.6                         |
| 70451   | Protective gloves. Heat transmission on exposure to a flame | UNI EN 367:1993 + UNI EN 12477:2006 Par. 5.7                                 |
| * 70472 | Protective gloves. Molten metal small splashes              | UNI EN 348:1993 + UNI EN 12477:2006 Par. 5.8                                 |

## PROTECTIVE GLOVES

### UNI EN 659:2008 + EC 1-2009 "Protective gloves for firefighters"

| Code    | Description   | Methods   |
|---------|---|---|
| * 70836 | Protective gloves. Control of ergonomic requirements  | UNI EN 659:2008 Par. 3.2  |
| 70840   | Protective gloves. Abrasion resistance (Martindale)   | UNI EN 388:2019 Par. 6.1 + UNI EN 659:2008 Par. 3.3 + EC 1-2009             |
| 70545   | Protective gloves. Blade-cut resistance   | UNI EN 388:2019 Par. 6.2 + UNI EN 659:2008 Par. 3.4 + EC 1-2009             |
| 70845   | Protective gloves. Tear resistance  | UNI EN 388:2019 Par. 6.4 + UNI EN 659:2008 Par. 3.5 + EC 1-2009             |
| 70541   | Protective gloves. Puncture resistance  | UNI EN 388:2019 Par. 6.5 + UNI EN 659:2008 Par. 3.6 + EC 1-2009             |
| 70465   | Protective gloves. Contact heat (after dry and wet conditioning)                            | UNI EN ISO 12127-1:2016 + UNI EN 659:2008 Par. 3.10 + EC 1-2009             |
| 70446   | Protective gloves. Resistance to heat. Dimensional changes and changes appearance to heat   | ISO 17493:2016 (except 8.3 and 8.4) + UNI EN 659:2008 Par. 3.11 + EC 1-2009 |
| 70341   | Protective gloves. Seam tensile properties. Grab method                                     | UNI EN ISO 13935-2:2014 + UNI EN 659:2008 Par. 3.14 + EC 1-2009             |
| * 70296 | Protective gloves. Leather. Resistance to water penetration                                 | UNI EN 344:1994 + UNI EN 659:2008 Par. 3.16 + EC 1-2009                     |
| 70292   | Protective gloves. Test of resistance to water penetration. Increasing hydrostatic pressure | UNI EN ISO 811:2018 + UNI EN 659:2008 Par. 3.16 + EC 1-2009                 |
| 70825   | Protective gloves. Glove integrity test   | ISO 15383:2001 Annex A + UNI EN 659:2008 Par. 3.17 + EC 1-2009              |
| 70507   | Protective gloves. Penetration by liquids   | UNI EN ISO 6530:2005 + UNI EN 659:2008 Par. 3.18 + EC 1-2009                |
| 70821   | Protective gloves. Removal time (after dry and wet conditioning)                            | UNI EN 659:2008 Par. 3.15 + EC 1-2009                                       |
| 70451   | Protective gloves. Heat transmission on exposure to a flame                                 | UNI EN 367:1993 + UNI EN 659:2008 Par. 3.8 + EC 1-2009                      |
| 70453   | Protective gloves. Exposition to a source of radiant heat                                   | UNI EN ISO 6942:2004 Met.B + UNI EN 659:2008 Par. 3.9 + EC 1-2009           |



70412 Protective gloves. Burning behaviour

UNI EN 407:2004 Par. 6.3 + UNI EN ISO 6941:2004 + UNI EN 659:2008 Par. 3.7 + EC 1-2009

## PROTECTIVE GLOVES

### UNI EN ISO 374-1:2018 "Protective gloves against dangerous chemicals and micro-organisms - Part 1 chemical risks"

| Code    | Description   | Methods   |
|---------|---|---|
| 70842   | Protective gloves. Determination of resistance to penetration by water    | UNI EN 374-2:2015 Par. 7.3 + UNI EN ISO 374-1:2018 Par. 5.2 |
| 70841   | Protective gloves. Determination of resistance to penetration by air      | UNI EN 374-2:2015 Par. 7.2 + UNI EN ISO 374-1:2018 Par. 5.2 |
| * 70873 | Protective gloves. Determination of resistance to degradation             | UNI EN 374-4:2014 + UNI EN ISO 374-1:2018 Par. 5.3          |
| * 70829 | Protective gloves. Determination of resistance to permeation by chemicals | UNI EN 16523-1:2015 + UNI EN ISO 374-1:2018 Par. 5.4        |
| * 70843 | Protective gloves. Determination of resistance to permeation by chemicals | UNI EN 16523-1:2015 + UNI EN ISO 374-1:2018 Par. 5.4        |

## PROTECTIVE GLOVES

### UNI EN ISO 374-5:2017 "Protective gloves against dangerous chemicals and micro-organisms - Part 5 micro-organisms risks"

| Code    | Description  | Methods   |
|---------|--|---|
| * 90113 | Protective gloves. Protection against viruses                          | ISO 16604:2004 Procedure B + UNI EN ISO 374-5:2017 Par. 5.3 |
| 70842   | Protective gloves. Determination of resistance to penetration by water | UNI EN 374-2:2015 Par. 7.3 + UNI EN ISO 374-5:2017 Par. 5.2 |
| 70841   | Protective gloves. Determination of resistance to penetration by air   | UNI EN 374-2:2015 Par. 7.2 + UNI EN ISO 374-5:2017 Par. 5.2 |

## PROTECTIVE GLOVES

### UNI EN 511:2006 "Protective gloves against cold"

| Code    | Description   | Methods  |
|---------|---|--|
| 70840   | Protective gloves. Abrasion resistance (Martindale) | UNI EN 388:2019 Par. 6.1 + UNI EN 511:2006 Par. 4.1    |
| 70845   | Protective gloves. Tear resistance                  | UNI EN 388:2019 Par. 6.4 + UNI EN 511:2006 Par. 4.1    |
| * 70844 | Protective gloves. Bending behavior                 | UNI EN ISO 7854:1999 Met. A + UNI EN 511:2006 Par. 5.2 |
| 70825   | Protective gloves. Glove integrity test             | ISO 15383:2001 Annex A + UNI EN 511:2006 Par. 5.3      |
| * 70846 | Protective gloves. Low-temperature bend test        | ISO 4675:2017 + UNI EN 511:2006 Par. 5.4               |
| * 70847 | Protective gloves. Convective cold                  | UNI EN 511:2006 Par. 5.5 + Appendix A                  |
| * 70848 | Protective gloves. Contact cold                     | ISO 5085-1:1989 + UNI EN 511:2006 Par. 5.6             |

## PROTECTIVE GLOVES

## UNI EN 16350:2014 "Protective gloves. Electrostatic properties"

| Code    | Description                                       | Methods   |
|---------|---|---|
| * 70634 | Protective gloves. Control of design requirements | UNI EN 16350:2014 Par. 4.2.2                    |
| * 70619 | Protective gloves. Conditioning                   | UNI EN 16350:2014 Par. 5.3                      |
| * 70620 | Protective gloves. Vertical electrical resistance | UNI EN 1149-2:1997 + UNI EN 16350:2014 Par. 5.5 |

## PROTECTIVE GLOVES FOR MOTORCYCLE RIDERS UNI EN 13594:2015 "Requirements and test methods"

| Code    | Description  | Methods   |
|---------|--|---|
| 70850   | Protective gloves for motorcycle riders, leather. pH   | UNI EN ISO 4045:2018 + UNI EN 420:2010 Par. 4.3.2 + UNI EN 13594:2015 Par. 4.2    |
| * 70866 | Protective gloves for motorcycle riders. Control of ergonomic requirements                           | UNI EN 13594:2015 Par. 4.5  |
| 70851   | Protective gloves for motorcycle riders, leather. Hexavalent chromium                                | UNI EN ISO 17075-1:2017 + UNI EN 420:2010 Par. 4.3.3 + UNI EN 13594:2015 Par. 4.2 |
| * 70852 | Protective gloves for motorcycle riders. Ergonomic requirements                                      | UNI EN 13594:2015 Par. 4.4  |
| 70853   | Protective gloves for motorcycle riders. Size  | UNI EN 420:2010 Par. 5.1 + UNI EN 13594:2015 Par. 6.4                             |
| 70854   | Protective gloves for motorcycle riders. Retention system effectiveness                              | UNI EN 13594:2015 Par. 6.5  |
| 70855   | Protective gloves for motorcycle riders. Tear resistance   | UNI EN 388:2019 Par. 6.4 + UNI EN 13594:2015 Par. 6.6                             |
| 70856   | Protective gloves for motorcycle riders. Resistance of seams: tensile strength                       | UNI EN 13594:2015 Par. 6.7  |
| 70857   | Protective gloves for motorcycle riders. Blade-cut resistance  | UNI EN 388:2019 Par. 6.2 + UNI EN 13594:2015 Par. 4.9                             |
| 70858   | Protective gloves for motorcycle riders. Test method for determination of impact abrasion resistance | UNI EN 13595-2:2004 + UNI EN 13594:2015 Par. 6.8                                  |
| 70864   | Protective gloves for motorcycle riders. Impact attenuation  | UNI EN 1621-1:2013 Par. 5.4 + UNI EN 13594:2015 Par. 6.9                          |

# PROTECTIVE CLOTHING FOR DRIVERS

## Homologation procedure CIK-FIA N2013-1 edition 12th February 2019

| Code    | Description  | Methods   |
|---------|--|---|
| 70922   | Protective clothing for drivers. Assessment Report   | CIK-FIA N2013-1:2019  |
| * 70900 | Protective clothing for drivers. Garment zoning  | CIK-FIA N2013-1:2019 Par. 2.4.2.1   |
| * 70901 | Protective clothing for drivers. Design requirements   | CIK-FIA N2013-1:2019 Par. 2.4.2.3 and 2.4.9   |
| * 70902 | Protective clothing for drivers. Comfort evaluation  | CIK-FIA N2013-1:2019 Par. 2.4.10  |
| * 70903 | Protective clothing for drivers. Size  | UNI EN 340:2004 Par. 6 + CIK-FIA N2013-1:2019 Par. 2.4.8  |
| 70904   | Protective clothing for drivers. Domestic washing and drying for textile testing                         | UNI EN ISO 6330:2012 + UNI EN 340:2004 Par. 5.4 + CIK-FIA N2013-1:2019 Par. 2.4.2.2   |
| 70905   | Protective clothing for drivers. Dimensional change in domestic wet washing and drying                   | UNI EN ISO 6330:2012 + UNI EN ISO 3759:2011 + UNI EN ISO 5077:2008 + UNI EN 340:2004 Par. 5.3 + CIK-FIA N2013-1:2019 Par. 2.4.2.2   |
| 70906   | Protective clothing for drivers. Dry cleaning  | UNI EN ISO 3175-2:2018 + CIK-FIA N2013-1:2019 Par. 2.4.2.2  |
| 70907   | Protective clothing for drivers. Dimensional change in dry cleaning                                      | UNI EN ISO 3175-2:2018 + UNI EN ISO 3759:2011 + UNI EN ISO 5077:2008 + UNI EN 340:2004 Par. 5.3 + CIK-FIA N2013-1:2019 Par. 2.4.2.2 |
| * 70908 | Protective clothing for drivers, leather. Tearing strength   | UNI EN ISO 3377-2:2016 + CIK-FIA N2013-1:2019 Par. 2.4.3  |
| 70909   | Protective clothing for drivers. Tearing strength. Double-teared method                                  | UNI EN ISO 13937-4:2002 + EC 1-2004 + CIK-FIA N2013-1:2019 Par. 2.4.3   |
| 70910   | Protective clothing for drivers. Impact abrasion resistance  | UNI EN 13595-2:2004 + CIK-FIA N2013-1:2019 Par. 2.4.4   |
| 70911   | Protective clothing for drivers. Seam tensile properties. Grab method                                    | UNI EN ISO 13935-2:2014 + CIK-FIA N2013-1:2019 Par. 2.4.5   |
| 70912   | Protective clothing for drivers. Contact heat transmission   | UNI EN ISO 12127-1:2016 + CIK-FIA N2013-1:2019 Par. 2.4.6   |
| 70913   | Protective clothing for drivers, leather. pH   | UNI EN ISO 4045:2008 + CIK-FIA N2013-1:2019 Par. 2.4.7.1  |
| 70914   | Protective clothing for drivers, textile. pH of aqueous extract  | UNI EN ISO 3071:2006 + CIK-FIA N2013-1:2019 Par. 2.4.7.1  |
| 70915   | Protective clothing for drivers, leather. Aromatic amines derived from azocolorants                      | UNI EN ISO 17234-1:2015 + CIK-FIA N2013-1:2019 Par. 2.4.7.2   |
| 70916   | Protective clothing for drivers, leather. 4-aminoazobenzene from azocolorants                            | UNI EN ISO 17234-2:2011 + CIK-FIA N2013-1:2019 Par. 2.4.7.2   |
| 70923   | Protective clothing for drivers, textile. Aromatic amines derived from azocolorants                      | UNI EN ISO 14362-1:2017 + CIK-FIA N2013-1:2019 Par. 2.4.7.2   |
| 70924   | Protective clothing for drivers, textile. Aromatic amines derived from azocolorants (without extraction) | UNI EN ISO 14362-1:2017 + CIK-FIA N2013-1:2019 Par. 2.4.7.2   |
| 70917   | Protective clothing for drivers, textile. Aromatic amines derived from azocolorants (with extraction)    | UNI EN ISO 14362-1:2017 + CIK-FIA N2013-1:2019 Par. 2.4.7.2   |
| 70918   | Protective clothing for drivers, leather. Chromium hexavalent  | UNI EN ISO 17075-1:2017 + CIK-FIA N2013-1:2019 Par. 2.4.7.3   |

|       |  |   |
|-------|--|---|
| 70919 | Protective clothing for drivers. Release of nickel                           | UNI EN 1811:2015 + CIK-FIA<br>N2013-1:2019 Par. 2.4.7.4                     |
| 70983 | Protective clothing for drivers. Simulation of wear and corrosion on coating | UNI EN 1811:2015 + UNI EN 12472:2009<br>+ CIK-FIA N2013-1:2019 Par. 2.4.7.4 |
| 70920 | Protective clothing for drivers. Colour fastness to perspiration             | UNI EN ISO 105-E04:2009 + CIK-FIA<br>N2013-1:2019 Par. 2.4.7.5              |
| 70921 | Protective clothing for drivers, leather. Colour fastness to perspiration    | UNI EN ISO 11641:2013 + CIK-FIA<br>N2013-1:2019 Par. 2.4.7.5                |

### Standard FIA 8856-2018 Overall for automobile drivers

| Code    | Description  | Methods   |
|---------|--|---|
| 70925   | Assessment Report FIA  |   |
| 70948   | Shipping samples/reports   |   |
| * 70935 | Protective overall for automobile drivers. Control of ergonomic requirements                     | FIA 8856-2018 Par. 4.1  |
| 70943   | Protective overall for automobile drivers. Domestic washing and drying for textile testing       | UNI EN ISO 6330:2012 + FIA 8856-2018<br>Par. A-1.2  |
| 70941   | Protective overall for automobile drivers. Dimensional change in domestic wet washing and drying | UNI EN ISO 6330:2012 + UNI EN ISO<br>3759:2011 + UNI EN ISO 5077:2008 +<br>FIA 8856-2018 Par. A-8   |
| 70945   | Protective overall for automobile drivers. Dry cleaning  | UNI EN ISO 3175-2:2018 + FIA<br>8856-2018 Par. A-1.2  |
| 70942   | Protective overall for automobile drivers. Dimensional change in dry cleaning                    | UNI EN ISO 3175-2:2018 + UNI EN ISO<br>3759:2011 + UNI EN ISO 5077:2008 +<br>FIA 8856-2018 Par. A-8 |
| 70944   | Protective overall for automobile drivers. Domestic washing and drying for textile testing       | UNI EN ISO 6330:2012 + FIA 8856-2018<br>Par. A-1.2  |
| 70946   | Protective overall for automobile drivers. Dry cleaning  | UNI EN ISO 3175-2:2018 + FIA<br>8856-2018 Par. A-1.2  |
| 70947   | Protective overall for automobile drivers. Washing and dry cleaning                              | UNI EN ISO 6330:2012 + UNI EN ISO<br>3175-2:2018 + FIA 8856-2018 Par. A-1.2                         |
| 70936   | Protective overall for automobile drivers. Limited flame spread                                  | UNI EN ISO 15025:2017 Met. A + FIA<br>8856-2018 Par. A-1  |
| 70937   | Protective overall for automobile drivers. Heat transmission on exposure to a flame              | UNI EN ISO 9151:2017 + FIA 8856-2018<br>Par. A-2  |
| 70938   | Protective overall for automobile drivers. Mechanical resistance after exposure to a flame       | UNI EN ISO 9151:2017 + FIA 8856-2018<br>Par. A-4  |
| 70939   | Protective overall for automobile drivers. Limited flame spread on seams                         | UNI EN ISO 15025:2017 Met. A + FIA<br>8856-2018 Par. A-5  |
| 70940   | Protective overall for automobile drivers. Seam tensile strength. Grab method                    | UNI EN ISO 13935-2:2014 + FIA<br>8856-2018 Par. A-6   |
| 71128   | Protective overall for automobile drivers. Tensile strength of shoulder handles. Grab method     | UNI EN ISO 13935-2:2014 + FIA<br>8856-2018 Par. A-7   |

### Standard FIA 8856-2018 Undergarments for automobile drivers

| Code    | Description  | Methods  |
|---------|--|--|
| 70925   | Assessment Report FIA  |  |
| 70948   | Shipping samples/reports   |  |
| * 70949 | Protective undergarments for automobile drivers. Control of ergonomic requirements               | FIA 8856-2018 Par. 4.2                             |
| 70952   | Protective undergarments for automobile drivers. Domestic washing and drying for textile testing | UNI EN ISO 6330:2012 + FIA 8856-2018<br>Par. A-1.2 |



|       |   |  |
|-------|---|--|
| 70953 | Protective undergarments for automobile drivers. Dry cleaning                             | UNI EN ISO 3175-2:2018 + FIA 8856-2018 Par. A-1.2                        |
| 70954 | Protective undergarments for automobile drivers. Washing and dry cleaning                 | UNI EN ISO 6330:2012 + UNI EN ISO 3175-2:2018 + FIA 8856-2018 Par. A-1.2 |
| 70950 | Protective undergarments for automobile drivers. Limited flame spread                     | UNI EN ISO 15025:2017 Met. A + FIA 8856-2018 Par. A-1                    |
| 70951 | Protective undergarments for automobile drivers. Limited flame spread on seams            | UNI EN ISO 15025:2017 Met. A + FIA 8856-2018 Par. A-5                    |
| 71129 | Protective undergarments for automobile drivers. Heat transmission on exposure to a flame | UNI EN ISO 9151:2017 + FIA 8856-2018 Par. A-3                            |

### Standard FIA 8856-2018 Balaclava hood for automobile drivers

| Code    | Description   | Methods   |
|---------|---|---|
| 70925   | Assessment Report FIA   |   |
| 70948   | Shipping samples/reports  |   |
| * 70956 | Protective balaclava hood for automobile drivers. Control of ergonomic requirements   | FIA 8856-2018 Par. 4.3  |
| * 71131 | Protective balaclava hood for automobile drivers. Control of ergonomic requirements for balaclava with helmet extraction system | FIA 8856-2018 Par. 4.9  |
| 70959   | Protective balaclava hood for automobile drivers. Domestic washing and drying for textile testing                               | UNI EN ISO 6330:2012 + FIA 8856-2018 Par. A-1.2                                     |
| 70960   | Protective balaclava hood for automobile drivers. Dry cleaning  | UNI EN ISO 3175-2:2018 + FIA 8856-2018 Par. A-1.2                                   |
| 70961   | Protective balaclava hood for automobile drivers. Washing and dry cleaning  | UNI EN ISO 6330:2012 + UNI EN ISO 3175-2:2018 + FIA 8856-2018 Par. A-1.2            |
| 70957   | Protective balaclava hood for automobile drivers. Limited flame spread  | UNI EN ISO 15025:2017 Met. A + FIA 8856-2018 Par. A-1                               |
| 70958   | Protective balaclava hood for automobile drivers. Limited flame spread on seams   | UNI EN ISO 15025:2017 Met. A + FIA 8856-2018 Par. A-5                               |
| 71113   | Protective balaclava hood for automobile drivers. Heat transmission on exposure to a flame                                      | UNI EN ISO 9151:2017 + FIA 8856-2018 Par. A-2                                       |
| 71115   | Protective balaclava hood for automobile drivers. Convective heat   | ISO 17493:2016 (except 8.3 and 8.4) + UNI EN ISO 3759:2011 + FIA 8856-2018 Par. A-9 |

### Standard FIA 8856-2018 Socks for automobile drivers

| Code    | Description  | Methods  |
|---------|--|--|
| 70925   | Assessment Report FIA  |  |
| 70948   | Shipping samples/reports   |  |
| * 70963 | Protective socks for automobile drivers. Control of ergonomic requirements               | FIA 8868-2018 Par. 4.4   |
| 70966   | Protective socks for automobile drivers. Domestic washing and drying for textile testing | UNI EN ISO 6330:2012 + FIA 8856-2018 Par. A-1.2                          |
| 70967   | Protective socks for automobile drivers. Dry cleaning                                    | UNI EN ISO 3175-2:2018 + FIA 8856-2018 Par. A-1.2                        |
| 70968   | Protective socks for automobile drivers. Washing and dry cleaning                        | UNI EN ISO 6330:2012 + UNI EN ISO 3175-2:2018 + FIA 8856-2018 Par. A-1.2 |
| 70964   | Protective socks for automobile drivers. Limited flame spread                            | UNI EN ISO 15025:2017 Met. A + FIA 8856-2018 Par. A-1                    |
| 70965   | Protective socks for automobile drivers. Limited flame spread on seams                   | UNI EN ISO 15025:2017 Met. A + FIA 8856-2018 Par. A-5                    |

|       |   |  |
|-------|---|--|
| 70969 | Protective socks for automobile drivers. Mass per unit area. Small sample method  | UNI EN 12127:1999 + FIA 8856-2018<br>Par. 4.4    |
| 71116 | Protective socks for automobile drivers. Heat transmission on exposure to a flame | UNI EN ISO 9151:2017 + FIA 8856-2018<br>Par. A-2 |

### Standard FIA 8856-2018 Shoes for automobile drivers

| Code    | Description  | Methods   |
|---------|--|---|
| 70925   | Assessment Report FIA  |   |
| 70948   | Shipping samples/reports   |   |
| * 70970 | Protective shoes for automobile drivers. Control of ergonomic requirements               | FIA 8856-2018 Par. 4.5  |
| 70973   | Protective shoes for automobile drivers. Domestic washing and drying for textile testing | UNI EN ISO 6330:2012 + FIA 8856-2018<br>Par. A-1.2                          |
| 70974   | Protective shoes for automobile drivers. Dry cleaning                                    | UNI EN ISO 3175-2:2018 + FIA<br>8856-2018 Par. A-1.2                        |
| 70975   | Protective shoes for automobile drivers. Washing and dry cleaning                        | UNI EN ISO 6330:2012 + UNI EN ISO<br>3175-2:2018 + FIA 8856-2018 Par. A-1.2 |
| 70971   | Protective shoes for automobile drivers. Limited flame spread                            | UNI EN ISO 15025:2017 Met. A + FIA<br>8856-2018 Par. A-1                    |
| 70972   | Protective shoes for automobile drivers. Limited flame spread on seams                   | UNI EN ISO 15025:2017 Met. A + FIA<br>8856-2018 Par. A-5                    |
| 71117   | Protective shoes for automobile drivers. Heat transmission on exposure to a flame        | UNI EN ISO 9151:2017 + FIA 8856-2018<br>Par. A-2                            |

### Standard FIA 8856-2018 Rain-proof overgarments for automobile drivers

| Code    | Description  | Methods   |
|---------|--|---|
| 70925   | Assessment Report FIA  |   |
| 70948   | Shipping samples/reports   |   |
| * 70976 | Protective rain-proof overgarments for automobile drivers. Control of ergonomic requirements               | FIA 8856-2018 Par. 4.6  |
| 70979   | Protective rain-proof overgarments for automobile drivers. Domestic washing and drying for textile testing | UNI EN ISO 6330:2012 + FIA 8856-2018<br>Par. A-1.2                          |
| 70980   | Protective rain-proof overgarments for automobile drivers. Dry cleaning                                    | UNI EN ISO 3175-2:2018 + FIA<br>8856-2018 Par. A-1.2                        |
| 70981   | Protective rain-proof overgarments for automobile drivers. Washing and dry cleaning                        | UNI EN ISO 6330:2012 + UNI EN ISO<br>3175-2:2018 + FIA 8856-2018 Par. A-1.2 |
| 70977   | Protective rain-proof overgarments for automobile drivers. Limited flame spread                            | UNI EN ISO 15025:2017 Met. A + FIA<br>8856-2018 Par. A-1                    |
| 70978   | Protective rain-proof overgarments for automobile drivers. Limited flame spread on seams                   | UNI EN ISO 15025:2017 Met. A + FIA<br>8856-2018 Par. A-5                    |

### Standard FIA 8856-2018 Protective cooling undergarments for automobile drivers

| Code    | Description  | Methods  |
|---------|--|--|
| 70925   | Assessment Report FIA  |  |
| 70948   | Shipping samples/reports   |  |
| * 71118 | Protective cooling undergarments for automobile drivers. Control of ergonomic requirements               | FIA 8856-2018 Par. 4.8                               |
| 71119   | Protective cooling undergarments for automobile drivers. Domestic washing and drying for textile testing | UNI EN ISO 6330:2012 + FIA 8856-2018<br>Par. A-1.2   |
| 71122   | Protective cooling undergarments for automobile drivers. Dry cleaning                                    | UNI EN ISO 3175-2:2018 + FIA<br>8856-2018 Par. A-1.2 |



|       |   |   |
|-------|---|---|
| 71123 | Protective cooling undergarments for automobile drivers. Domestic washing and dry cleaning        | UNI EN ISO 6330:2012 + UNI EN ISO 3175-2:2018 + FIA 8856-2018 Par. A-1.2            |
| 71124 | Protective cooling undergarments for automobile drivers. Limited flame spread                     | UNI EN ISO 15025:2017 Met. A + FIA 8856-2018 Par. A-1                               |
| 71125 | Protective cooling undergarments for automobile drivers. Limited flame spread on seams            | UNI EN ISO 15025:2017 Met. A + FIA 8856-2018 Par. A-5                               |
| 71126 | Protective cooling undergarments for automobile drivers. Heat transmission on exposure to a flame | UNI EN ISO 9151:2017 + FIA 8856-2018 Par. A-3                                       |
| 71127 | Protective cooling undergarments for automobile drivers. Convective heat resistance               | ISO 17493:2016 (except 8.3 and 8.4) + UNI EN ISO 3759:2011 + FIA 8856-2018 Par. A-9 |

## PROTECTIVE GLOVES FOR AUTOMOBILE DRIVERS

### Standard FIA 8856-2018 Protective gloves for automobile drivers

| Code    | Description   | Methods   |
|---------|---|---|
| 70925   | Assessment Report FIA   |   |
| 70948   | Shipping samples/reports  |   |
| * 70926 | Protective gloves for automobile drivers. Control of ergonomic requirements               | FIA 8856-2018 Par. 4.7  |
| * 70927 | Protective gloves for automobile drivers. Positioning parts in leather                    | FIA 8856-2018 Appendix E  |
| 70928   | Protective gloves for automobile drivers. Domestic washing and drying for textile testing | UNI EN ISO 6330:2012 + FIA 8856-2018 Par. A-1.2                           |
| 70929   | Protective gloves for automobile drivers. Dry cleaning                                    | UNI EN ISO 3175-2:2018 + FIA 8856-2018 Par. A-1.2                         |
| 70982   | Protective gloves for automobile drivers. Washing and dry cleaning                        | UNI EN ISO 6330:2012 + UNI EN ISO 3175-2:2018 + FIA 8856-2018 Par. A-1.2  |
| * 70930 | Protective gloves for automobile drivers, leather. Thickness                              | ISO 2589:2016 + FIA 8856-2018 Par. 4.7.2                                  |
| 70931   | Protective gloves for automobile drivers. Limited flame spread                            | UNI EN ISO 15025:2017 Met. A + FIA 8856-2018 Par. A-1                     |
| 70932   | Protective gloves for automobile drivers, seams fingers. Limited flame spread             | UNI EN ISO 6941:2004 + UNI EN 407:2004 Par. 6.3 + FIA 8856-2018 Par. A-10 |
| 70933   | Protective gloves for automobile drivers. Heat transmission on exposure to a flame        | UNI EN ISO 9151:2017 + FIA 8856-2018 Par. A-2                             |
| 70934   | Protective gloves for automobile drivers. Mechanical resistance after exposure to a flame | UNI EN ISO 9151:2017 + FIA 8856-2018 Par. A-4                             |

## PROTECTIVE CLOTHING FOR MECHANICS

### Standard FIA 8867-2016 Protective clothing for mechanics

| Code    | Description  | Methods  |
|---------|--|--|
| 70925   | Assessment Report FIA  |  |
| 70948   | Shipping samples/reports   |  |
| * 70899 | Protective clothing for mechanics. Control of ergonomic requirements                     | FIA 8867-2016 Par. 4.2   |
| 70984   | Protective clothing for mechanics. Domestic washing and drying for textile testing       | UNI EN ISO 6330:2012 + FIA 8867-2016 Appendix A Par. A-1.2   |
| 70985   | Protective clothing for mechanics. Dimensional change in domestic wet washing and drying | UNI EN ISO 6330:2012 + UNI EN ISO 3759:2011 + UNI EN ISO 5077:2008 + FIA 8867-2016 Par. 6.6              |
| 70986   | Protective clothing for mechanics. Dry cleaning  | UNI EN ISO 3175-2:2018 + FIA 8867-2016 Appendix A Par. A-1.2   |
| 70987   | Protective clothing for mechanics. Dimensional change in dry cleaning                    | UNI EN ISO 3175-2:2018 + UNI EN ISO 3759:2011 + UNI EN ISO 5077:2008 + FIA 8867-2016 Appendix A Par. 6.6 |
| 70988   | Protective clothing for mechanics. Domestic washing and drying for textile testing       | UNI EN ISO 6330:2012 + FIA 8867-2016 Appendix A Par. A-1.2   |
| 70989   | Protective clothing for mechanics. Dry cleaning  | UNI EN ISO 3175-2:2018 + FIA 8867-2016 Appendix A Par. A-1.2   |
| 70990   | Protective clothing for mechanics. Washing and dry cleaning                              | UNI EN ISO 6330:2012 + UNI EN ISO 3175-2:2018 + FIA 8867-2016 Appendix A Par. A-1.2                      |
| 70991   | Protective clothing for mechanics. Limited flame spread                                  | UNI EN ISO 15025:2017 Met. A + FIA 8867-2016 Par. 6.1  |
| 70992   | Protective clothing for mechanics. Heat transmission on exposure to a flame              | UNI EN ISO 9151:2017 + FIA 8867-2016 Par. 6.2  |
| 70993   | Protective clothing for mechanics. Mechanical resistance after exposure to a flame       | UNI EN ISO 9151:2017 + FIA 8867-2016 Par. 6.3  |
| 70994   | Protective clothing for mechanics. Limited flame spread on seams                         | UNI EN ISO 15025:2017 Met. A + FIA 8867-2016 Par. 6.4  |
| 70995   | Protective clothing for mechanics. Seam tensile strength. Strip method                   | UNI EN ISO 13935-1:2014 + FIA 8867-2016 Par. 6.5   |

## BIOMETRIC DEVICE

### Standard FIA 8868-2018 Biometric device

| Code    | Description   | Methods  |
|---------|---|--|
| 70925   | Assessment Report FIA   |  |
| 70948   | Shipping samples/reports  |  |
| * 72000 | Biometric device. Control of general design requirements                            | FIA 8868-2018 Par. 4.2   |
| * 72001 | Biometric device. Control of ergonomic requirements for sensors                     | FIA 8868-2018 Par. 4.4   |
| * 72002 | Biometric device. Control of ergonomic requirements for the electronic unit case    | FIA 8868-2018 Par. 4.5   |
| * 72003 | Biometric device. Control of ergonomic requirements for the electronic control unit | FIA 8868-2018 Par. 4.6   |
| * 72004 | Biometric device. Control of ergonomic requirements for connectors                  | FIA 8868-2018 Par. 4.7   |
| * 72005 | Biometric device. Control of ergonomic requirements for cables                      | FIA 8868-2018 Par. 4.7   |
| 72006   | Biometric device. Domestic washing and dry cleaning                                 | UNI EN ISO 6330:2012 + UNI EN ISO 3175-2:2018 + FIA 8868-2018 Appendix A Par. A-1.2      |
| 72007   | Biometric device. Domestic washing and drying for textile testing                   | UNI EN ISO 6330:2012 + FIA 8868-2018 Appendix A Par. A-1.2                               |
| 72008   | Biometric device. Limited flame spread  | UNI EN ISO 15025:2017 Met. A + FIA 8868-2018 Appendix A Par. A-1.3                       |
| 72009   | Biometric device. Risk of explosion   | UNI EN ISO 9151:2017 + FIA 8868-2018 Appendix A Par. A-2                                 |
| 72010   | Biometric device. Limited flame spread on seams                                     | UNI EN ISO 15025:2017 Met. A + FIA 8868-2018 Appendix A Par. A-3                         |
| 72011   | Biometric device. Convective heat resistance  | ISO 17493:2016 (except 8.3 and 8.4) + FIA 8868-2018 Appendix A Par. A-4                  |
| * 72012 | Biometric device. Crush test  | FIA 8868-2018 Appendix A Par. A-5  |
| * 72013 | Biometric device. Degrees of protection provided by enclosures (IP code)            | CEI EN 60529:1997 + A1:2000 + A2:2014 + EC 2017-03 + EC 2017-05 + FIA 8868-2018 Par. 4.5 |

## COMFORT TESTS

### General Costs

| Code  | Description          | Methods |
|-------|----------------------|---------|
| 70888 | Technical evaluation |         |

### Tests

| Code    | Description   | Methods   |
|---------|---|---|
| 13100   | Textiles. Identification of fibres in textiles  | Reg UE N 1007/2011 + ISO/TR 11827:2012  |
| 14170   | Textiles. Quantitative analysis of binary blends of textile fibres                                | Reg UE N 1007/2011, UNI EN ISO 1833:2011 parts 1, 5, 8, 9, 12, 13, 14, 15, 16, 17, 19, 24 (except 2); UNI EN ISO 1833:2013 parts 22, 25, 26; UNI EN ISO 1833:2017 parts 4, 7, 11; UNI EN ISO 1833:2019 parts 3, 6, 10, 18, 20, 21 |
| 14180   | Textiles. Quantitative analysis of ternary blends of textile fibres                               | Reg UE N 1007/2011, UNI EN ISO 1833:2011 parts 1, 2, 5, 8, 9, 12, 13, 14, 15, 16, 17, 19, 24; UNI EN ISO 1833:2013 parts 22, 25, 26; UNI EN ISO 1833:2017 parts 4, 7, 11; UNI EN ISO 1833:2019 parts 3, 6, 10, 18, 20, 21         |
| * 14190 | Textiles. Quantitative analysis of blends of four textile fibres                                  | MIP 258:2008 Rev.0  |
| * 14191 | Textiles. Quantitative analysis of blends of five textile fibres                                  | MIP 258:2008 Rev.0  |
| * 14210 | Textiles. Quantitative analysis of blends of six textile fibres                                   | MIP 258:2008 Rev.0  |
| * 14215 | Textiles. Quantitative analysis of blends of seven textile fibres                                 | MIP 258:2008 Rev.0  |
| * 14151 | Textiles. Quantitative analysis of binary and ternary blends of textile fibres. Microscope method | MIP 258:2008 Rev.0  |
| 14123   | Fabrics. Mass per unit area. Small sample method  | UNI EN 12127:1999   |
| 35155   | Textiles. Domestic washing and drying for textile testing   | UNI EN ISO 6330:2012  |
| 35156   | Textiles. Dry cleaning  | UNI EN ISO 3175-2:2018  |
| 70593   | Textiles. Water-vapour resistance (Skin Model)  | UNI EN ISO 11092:2014 Par. 7.4  |
| 70607   | Textiles. Thermal resistance (Skin Model)   | UNI EN ISO 11092:2014 Par. 7.3  |
| * 70591 | Fabrics. Drying time (Skin Model)   | MIP 320:2008 Rev.0<br>AATCC 201-2014  |
| * 70592 | Fabrics. Absorption and release index (Skin Model)  | MIP 321:2008 Rev.0<br>CEN/TR 16422:2012 Annex B   |
| * 70601 | Fabrics. Determination of surface friction force  | MIP 322:2008 Rev.0  |
| * 70602 | Fabrics. Surface hairiness grade  | MIP 323:2011 Rev.0  |
| * 70603 | Fabrics. Water absorption time  | MIP 324:2011 Rev.0  |
| * 70604 | Fabrics. Bending angle  | MIP 325:2011 Rev.0  |
| * 70609 | Textiles. Liquid moisture management properties   | AATCC 195-2017  |
| * 70621 | Fabrics. Drying time (Skin Model)   | AATCC 201-2014  |
| * 70639 | Textiles. Determination of moisture drying rate   | ISO 17617 (Method B)  |
| * 70623 | Textiles. Determination of thermal conductivity and thermal diffusivity (hot disc method)         | ISO 22007-2:2015  |
| * 70624 | Textiles. Determination of surface resistivity  | JIS K 7194:1994   |
| * 70610 | Thermic maniquine   | UNI EN ISO 15831:2005 + UNI EN 342:2018 Par. 6.3  |
| * 70622 | Thermography  |   |

## UV STANDARD 801 LABEL

### General costs

| Code  | Description                                       | Methods |
|-------|---|---------|
| 70099 | Certificate issuing                               |         |
| 70096 | Certificate issuing                               |         |
| 70098 | Certificate duplicate                             |         |
| 70097 | Certificate extension                             |         |
| 70996 | Translation of certificate into English or French |         |

### Tests

#### A category: apparel and fabrics for apparel

| Code    | Description  | Methods              |
|---------|--|----------------------|
| * 70094 | Preliminary screening  | UV STANDARD 801:2015 |
| * 70095 | Preliminary test   | UV STANDARD 801:2015 |
| * 70101 | Apparel and fabrics for apparel. Determination of UPF with treatment | UV STANDARD 801:2015 |
| * 70111 | Apparel and fabrics for apparel. Determination of UPF with treatment | UV STANDARD 801:2015 |
| * 70121 | Apparel and fabrics for apparel. Determination of UPF with treatment | UV STANDARD 801:2015 |
| * 70131 | Apparel and fabrics for apparel. Determination of UPF with treatment | UV STANDARD 801:2015 |

#### B category: fabrics for external use

| Code    | Description   | Methods              |
|---------|---|----------------------|
| * 70094 | Preliminary screening   | UV STANDARD 801:2015 |
| * 70095 | Preliminary test  | UV STANDARD 801:2015 |
| * 70102 | Fabrics for external use. Determination of UPF with treatment | UV STANDARD 801:2015 |
| * 70112 | Fabrics for external use. Determination of UPF with treatment | UV STANDARD 801:2015 |
| * 70122 | Fabrics for external use. Determination of UPF with treatment | UV STANDARD 801:2015 |
| * 70132 | Fabrics for external use. Determination of UPF with treatment | UV STANDARD 801:2015 |



## LAT CALIBRATION CENTRE

### Spectrophotometer calibration

| Code  | Description   | Methods  |
|-------|---|--|
| 30200 | Calibration in one of the following geometries: 45°/0°, t/8°, d/8°, for measurement of the reflectance factor                           | PdT LAT 05:2019 Rev.6<br>PdT LAT 06:2017 Rev.5 |
| 30250 | Calibration in one of the following geometries: 45°/0°, t/8°, d/8°, for measurement of the reflectance factor and the colorimetric data | PdT LAT 05:2019 Rev.6<br>PdT LAT 06:2017 Rev.5 |

### Calibration of reference samples or ceramic tiles

| Code  | Description  | Methods  |
|-------|--|--|
| 30300 | Measurement of the reflectance factor in one of the following geometries: d/8°, t/8°, 45°/0°                           | PdT LAT 03:2019 Rev.6<br>PdT LAT 04:2017 Rev.5 |
| 30350 | Measurement of the reflectance factor and the colorimetric data in one of the following geometries: d/8°, t/8°, 45°/0° | PdT LAT 03:2019 Rev.6<br>PdT LAT 04:2017 Rev.5 |

### From 2nd to 11th measurement (more geometries or more tiles)

| Code  | Description   | Methods  |
|-------|---|--|
| 30302 | Measurement of the reflectance factor                           | PdT LAT 03:2019 Rev.6<br>PdT LAT 04:2017 Rev.5 |
| 30352 | Measurement of the reflectance factor and the colorimetric data | PdT LAT 03:2019 Rev.6<br>PdT LAT 04:2017 Rev.5 |

### Calibration set of ceramic tiles

| Code  | Description  | Methods               |
|-------|--|-----------------------|
| 30501 | Calibration of a set of ceramic colour standards (12 tiles) for measurement of the reflectance factor in one of the following geometries: d/8°, t/8°, 45°/0°                           | PdT LAT 03:2019 Rev.6 |
| 30502 | Calibration of a set of ceramic colour standards (12 tiles) for measurement of the reflectance factor in two of the following geometries: d/8°, t/8°, 45°/0°                           | PdT LAT 03:2019 Rev.6 |
| 30503 | Calibration of a set of ceramic colour standards (12 tiles) for measurement of the reflectance factor in all the following geometries: d/8°, t/8°, 45°/0°                              | PdT LAT 03:2019 Rev.6 |
| 30551 | Calibration of a set of ceramic colour standards (12 tiles) for measurement of the reflectance factor and the colorimetric data in one of the following geometries: d/8°, t/8°, 45°/0° | PdT LAT 03:2019 Rev.6 |
| 30552 | Calibration of a set of ceramic colour standards (12 tiles) for measurement of the reflectance factor and the colorimetric data in two of the following geometries: d/8°, t/8°, 45°/0° | PdT LAT 03:2019 Rev.6 |
| 30553 | Calibration of a set of ceramic colour standards (12 tiles) for measurement of the reflectance factor and the colorimetric data in all the following geometries: d/8°, t/8°, 45°/0°    | PdT LAT 03:2019 Rev.6 |

### Supply and calibration of ceramic tiles

| Code  | Description  | Methods               |
|-------|--|-----------------------|
| 30601 | Set of glossy ceramic colour standards C.C.S. II (12 tiles) for measurement of the reflectance factor in one of the following geometries: d/8°, t/8°, 45°/0° | PdT LAT 03:2019 Rev.6 |
| 30611 | Set of matt ceramic colour standards C.C.S. II (12 tiles) for measurement of the reflectance factor in one of the following geometries: d/8°, t/8°, 45°/0°   | PdT LAT 03:2019 Rev.6 |
| 30621 | White or black tile with glossy surface for measurement of the reflectance factor in one of the following geometries: d/8°, t/8°, 45°/0°                     | PdT LAT 03:2019 Rev.6 |
| 30631 | White or black tile with matt surface for measurement of the reflectance factor in one of the following geometries: d/8°, t/8°, 45°/0°                       | PdT LAT 03:2019 Rev.6 |
| 30681 | Single colour tile with glossy surface for measurement of the reflectance factor in one of the following geometries: d/8°, t/8°, 45°/0°                      | PdT LAT 03:2019 Rev.6 |



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|       |  |                       |
|-------|--|-----------------------|
| 30701 | Set of glossy ceramic colour standards C.C.S. II (12 tiles) for measurement of the reflectance factor and the colorimetric data in one of the following geometries: d/8°, t/8°, 45°/0° | PdT LAT 03:2019 Rev.6 |
| 30711 | Set of matt ceramic colour standards C.C.S. II (12 tiles) for measurement of the reflectance factor and the colorimetric data in one of the following geometries: d/8°, t/8°, 45°/0°   | PdT LAT 03:2019 Rev.6 |
| 30721 | White or black tile with glossy surface for measurement of the reflectance factor and the colorimetric data in one of the following geometries: d/8°, t/8°, 45°/0°                     | PdT LAT 03:2019 Rev.6 |
| 30731 | White or black tile with matt surface for measurement of the reflectance factor in one of the following geometries: d/8°, t/8°, 45°/0°   | PdT LAT 03:2019 Rev.6 |
| 30781 | Single colour tile with glossy surface for measurement of the reflectance factor in one of the following geometries: d/8°, t/8°, 45°/0°  | PdT LAT 03:2019 Rev.6 |

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## CALIBRATION

| Code    | Description   | Methods            |
|---------|---|--------------------|
| * 40001 | Millimeter ruler, tape measures (up to 50 m)          | PdT 013:2008 Rev.1 |
| * 40002 | Meter counter   | PdT 070:2008 Rev.0 |
| * 40003 | Tachometer  | PdT 038:2008 Rev.1 |
| * 40004 | Lenses  | PdT 006:2016 Rev.2 |
| * 40005 | Sample cutters  | PdT 006:2016 Rev.2 |
| * 40006 | Fabric piece lenght (up to 150 m)                     | UNI EN 1773:1998   |
| * 40007 | Fabric piece lenght (up to 40 m)                      | UNI EN 1773:1998   |
| * 40008 | Calibrator (until 500 mm)                             | PdT 033:2008 Rev.1 |
| * 40009 | Micrometers   | PdT 072:2008 Rev.0 |
| * 40010 | Comparators   | PdT 017:2008 Rev.1 |
| * 40011 | Feeler gauge  | PdT 006:2016 Rev.2 |
| * 40012 | Tensorapid calibration bars                           | PdT 006:2016 Rev.2 |
| * 40013 | Precision balances (up to 5 kg)                       | PdT 002:2008 Rev.2 |
| * 40014 | Precision balances (up to 30 kg)                      | PdT 002:2008 Rev.2 |
| * 40015 | Precision balances (up to 300 kg)                     | PdT 002:2008 Rev.2 |
| * 40017 | Romana balance  | PdT 073:2004 Rev.0 |
| * 40018 | Single mass (up to 10 masses)                         | PdT 014:2016 Rev.2 |
| * 40019 | Single mass (more than 10 masses)                     | PdT 014:2016 Rev.2 |
| * 40020 | Tensorapid calibration masses (a couple of 1 and 2 N) | PdT 014:2016 Rev.2 |
| * 40021 | Tensorapid calibration masses (complete serie)        | PdT 014:2016 Rev.2 |
| * 40022 | Hoffmann's Press                                      | PdT 074:2016 Rev.1 |
| * 40023 | Thermometers or thermocouples                         | PdT 036:2016 Rev.5 |
| * 40024 | Thermo-hygrographs                                    | PdT 039:2016 Rev.1 |
| * 40025 | Igrometer yarn cones                                  | PdT 075:2008 Rev.0 |
| * 40026 | Psychrometers   | PdT 008:2016 Rev.3 |
| * 40027 | Environmental condition detector                      | PdT 008:2016 Rev.3 |
| * 40028 | Ovens-muffles   | PdT 011:2016 Rev.6 |
| * 40029 | Thermostatic water baths                              | PdT 011:2016 Rev.6 |
| * 40030 | Conditioning ovens                                    | PdT 003:2016 Rev.2 |
| * 40031 | Spray test  | PdT 006:2016 Rev.2 |
| * 40032 | Twist tester  | PdT 021:2008 Rev.2 |
| * 40033 | Warp reel   | PdT 004:2008 Rev.1 |
| * 40034 | Warp reel with yarn tensioning device                 | PdT 004:2008 Rev.1 |
| * 40035 | Planofil (Black Table)                                | PdT 035:2008 Rev.1 |
| * 40036 | Water column (up to 20m)                              | PdT 026:2016 Rev.4 |
| * 40037 | Washing machines                                      | PdT 032:2016 Rev.4 |
| * 40038 | Wascator  | PdT 032:2016 Rev.4 |
| * 40039 | Tumbler   | PdT 032:2016 Rev.4 |
| * 40040 | Crockmeter  | PdT 028:2016 Rev.2 |
| * 40041 | Tensionmeter  | PdT 005:2008 Rev.1 |
| * 40042 | Abrasion tester Martindale                            | PdT 009:2016 Rev.4 |
| * 40043 | Abrasion tester Cesconi                               | PdT 077:2016 Rev.1 |
| * 40045 | Perspirometers  | PdT 022:2016 Rev.2 |
| * 40046 | Strength tester (up to 10000 daN)                     | PdT 016:2016 Rev.3 |
| * 40047 | Strength tester Uster Tensorapid                      | PdT 029:2008 Rev.2 |
| * 40048 | Crimptester   | PdT 007:2008 Rev.1 |
| * 40049 | pH-meters   | PdT 078:2008 Rev.0 |



|         |  |  |
|---------|--|--|
| * 40050 | Densimeters  | PdT 079:2016 Rev.1                       |
| * 40051 | Oil extractors - Wira  | PdT 037:2016 Rev.1                       |
| * 40052 | Chronometers   | PdT 030:2008 Rev.1                       |
| * 40053 | Grey scale for assessing fastness  | PdT 027:2016 Rev.1                       |
| * 40054 | Grey scale for assessing staining  | PdT 027:2016 Rev.1                       |
| * 40055 | Micropipette   | PdT 020:2016 Rev.6                       |
| * 40056 | Manometers (up to 40 bar)  | PdT 031:2016 Rev.3                       |
| * 40057 | Capillary Viscosimeter   | PdT 034:2016 Rev.2                       |
| * 40058 | Object-micrometers   | PdT 013:2008 Rev.1                       |
| * 40059 | Rameuse (temperature probes)   | PdT 031:2016 Rev.3<br>PdT 036:2016 Rev.5 |
| * 40060 | Preparation machines, dyeing machine, washing machines (temperature probes and manometers) | PdT 031:2016 Rev.3<br>PdT 036:2016 Rev.5 |
| * 40062 | Climatic chambers  | PdT 008:2016 Rev.3                       |
| * 40063 | Irons  | PdT 006:2016 Rev.2<br>PdT 014:2016 Rev.2 |
| * 40064 | Abrasion tester Martindale   | PdT 040:2008 Rev.0                       |
| * 40073 | Protractors and angles   | PdT 041:2016 Rev.2                       |

# Index

|   |    |
|---|----|
|   | 5  |
| GENERAL COSTS   | 5  |
|   | 5  |
| PHYSICAL-MECHANICAL TESTS   | 6  |
| General   | 6  |
| Fibres  | 6  |
| Threads and yarns   | 6  |
| General   |    |
| Threads and yarns   | 7  |
| Linear density (mass per unit length)                                       |    |
| Threads and yarns   | 7  |
| Tensile strenght  |    |
| Threads and yarns   | 7  |
| Twist   |    |
| Threads and yarns   | 8  |
| Commercial Mass   |    |
| FABRICS AND READY-MADE GARMENTS – CONSTRUCTION TESTS                        | 9  |
| Dimensions and weights  | 9  |
| Interlacings and wavese   | 9  |
| Linear Density (yarn count) and crimp                                       | 9  |
| Twist of yarns from fabrics   | 9  |
| Density per cm  | 10 |
| FABRICS AND READY-MADE GARMENTS – PERFORMANCE TESTS                         | 11 |
| General   | 11 |
| Tensile strenght  | 11 |
| Tensile strenght of yarns from fabrics                                      | 11 |
| Tearing strenght  | 11 |
| Seam and Stretch  | 11 |
| Permeability and perforation  | 12 |
| Spirality and bow and skew  | 12 |
| Abrasion and pilling  | 12 |
| Treatments  | 13 |
| FABRICS COATED WITH POLYMERIC MATERIALS                                     | 14 |
|   | 14 |
| RUBBER OR PLASTICS COATED FABRICS   | 15 |
|   | 15 |
| NONWOVEN FABRICS  | 16 |
|   | 16 |
| YARNS, FABRICS (SPECIFICATIONS)   | 17 |
| Tests on Para-aramid multifilament yarns - UNI EN 12562:2001 specifications | 17 |
| Upholstery fabrics - UNI EN 14465:2008 specifications                       | 17 |

|  |    |
|--|----|
| Rubber or plastics coated fabrics - ISO 8096:2005 + Cor 1:2005 specifications      | 17 |
| <b>LEATHER</b>   | 19 |
| Tests  | 19 |
| <b>COLOURANTS, PIGMENTS AND AUXILIARIES</b>  | 21 |
| Tests  | 21 |
| <b>CHILDREN'S GARMENT. SAFETY</b>  | 22 |
| Tests  | 22 |
| <b>TOYS</b>  | 23 |
| Tests  | 23 |
| <b>FOOTWEAR</b>  | 24 |
| Tests  | 24 |
| <b>CHEMICAL TESTS</b>  | 25 |
| General  | 25 |
| Fibre composition  | 26 |
| Textiles, finished products. Composition labelling                                 | 27 |
| Determination of non-fibrous materials   | 27 |
| Colour fastness  | 27 |
| Dimensional changes  | 29 |
| Instrumental colorimetry   | 29 |
| Care labelling   | 29 |
| Chemical Treatments  | 30 |
| Dyeing treatments  | 31 |
| <b>MATERIALS. THERMAL CHARACTERIZATION</b>   | 32 |
|  | 32 |
| <b>WATER AND INDUSTRIAL WASTEWATER</b>   | 33 |
| Wastewater, superficial water, underground water, drinking water and liquid wastes | 33 |
| Special Offer  | 35 |
| <b>SOILS, WASTES</b>   | 36 |
| Soils, wastes, sludges, sediments  | 36 |
| Special Offer  | 36 |
| <b>WORKPLACE AIR</b>   | 38 |
| Tests  | 38 |
| <b>ACCESSORIES AND PARTICULAR MATERIALS</b>  | 39 |
| Hoisery  | 39 |
| Zippers  | 39 |
| Touch and close fasteners  | 39 |
| Elastic tapes  | 40 |
| Buttons  | 40 |
| Feathers and downs   | 40 |

|  |           |
|--|-----------|
| Fishing nets   | 41        |
| Agricultural nets  | 41        |
| <b>NON-ACTIVE MEDICAL DEVICES</b>  | <b>42</b> |
| Absorbent cotton gauzes and absorbent cotton and viscose gauzes - UNI EN 14079:2004 specifications   | 42        |
| Medical compresses   | 42        |
| Surgical drapes and gowns and clean air suits, used as medical devices for patients, clinical staff and equipment. UNI EN 13795-1:2019 and UNI EN 13795-2:2019 | 42        |
| <b>STANDARD 100 by OEKO-TEX®</b>   | <b>44</b> |
| General costs  | 44        |
| Tests  | 44        |
| <b>LEATHER STANDARD by OEKO-TEX®</b>   | <b>47</b> |
| General costs  | 47        |
| Tests  | 47        |
| <b>ECO PASSPORT by OEKO-TEX®</b>   | <b>49</b> |
| General costs  | 49        |
| Tests  | 49        |
| <b>ECOLABEL LABEL</b>  | <b>50</b> |
| General costs  | 50        |
| Tests  | 50        |
| <b>ECOLOGICAL TESTS</b>  | <b>51</b> |
| Tests  | 51        |
| Special offer  | 53        |
| <b>USA. Tests to verify products' and accessories' conformity.</b>   | <b>56</b> |
| Tests  | 56        |
| Proposition 65. Textiles. Test selection   | 57        |
| <b>CHINA. GB 18401. Tests to verify conformity</b>   | <b>58</b> |
| General costs  | 58        |
| Tests  | 58        |
| <b>China GB 31701. Safety for infants and children textile products</b>  | <b>59</b> |
| Tests  | 59        |
| <b>CHINA. Other mandatory national standards (GB 28480, GB 20400, GB 25038, GB 25036)</b>  | <b>60</b> |
| GB 28480 "Adornment for children and adults - Chemical requirements"   | 60        |
| GB 20400 "Leather and Fur. Limit of harmful matter"  | 60        |
| GB 25038 "Rubber shoes healthy and safe specification"   | 60        |
| GB 25036 "Children's canvas rubber footwear shoes"   | 60        |
| <b>CHINA. Other tests performed according to Chinese methods</b>   | <b>61</b> |
| Tests  | 61        |
| <b>REACH. SVCH and Candidate List. Tests to verify products and accessories</b>  | <b>62</b> |



|   |    |
|---|----|
| Tests   | 62 |
| FOOD CONTACT CRITERIA   | 63 |
| Tests   | 63 |
| BIOLOGICAL TESTS  | 67 |
| Barrier properties  | 67 |
| Antimicrobial properties  | 67 |
| Quantitative determination of microorganisms on surfaces  | 67 |
| Resistance to sterilisation   | 68 |
| CERTIFICATION OF SANITARY PROCESSES IN LAUNDRIES  | 69 |
| General costs   | 69 |
| Quantitative determination of microorganisms on surfaces  | 69 |
| Waters  | 69 |
| BIOLOGICAL LABEL  | 70 |
| General costs   | 70 |
| Tests   | 70 |
| ANTIBACTERIAL EFFICACY CERTIFICATE  | 71 |
| General costs   | 71 |
| Tests   | 71 |
| BIOCOMPATIBILITY TESTS  | 72 |
| Tests   | 72 |
| TESTS OF REACTION TO FIRE   | 75 |
| Tests   | 75 |
| PROTECTION AGAINST GENERIC RISKS TESTS  | 77 |
| Tests   | 77 |
| CE MARKING: PERSONAL PROTECTIVE EQUIPMENT   | 78 |
| General costs   | 78 |
| Treatments  | 78 |
| Protective Equipment  | 79 |
| UNI EN ISO 13688:2013 "Protective clothings - General requirements"   | 79 |
| Protective clothings against heat and flame   | 79 |
| UNI EN ISO 11612:2015 "Protective clothing - Clothing to protect against heat to flame"                     |    |
| Protective clothings against heat and flame   | 80 |
| UNI EN ISO 11611:2015 "Protective clothing for use in welding and allied processes"                         |    |
| Protective clothings against heat and flame   | 81 |
| UNI EN 469:2007 " Protective clothing for firefighters"   |    |
| Protective clothings against heat and flame   | 82 |
| UNI EN ISO 14116:2015 "Protective clothings - Protection against flame"                                     |    |
| Protective clothings against heat and flame   | 82 |
| UNI EN 1486:2008 " Protective clothing for firefighters - reflective clothing for specialized firefighting" |    |
| Protective clothings against heat and flame   | 83 |



|   |    |
|---|----|
| IEC 61482-2:2018 "Live working - Protective clothing against the thermal hazard of an electric arc"   |    |
| Protective clothings against heat and flame   | 83 |
| UNI EN 15614:2007 "Protective clothing for firefighters. Laboratory test methods and performance requirements for wildland clothing"  |    |
| Protective clothings against heat and flame   | 84 |
| UNI EN 13911:2017 "Protective clothing for firefighters - Requirements and test methods for fire hoods for firefighters"  |    |
|   | 84 |
| Protective clothing against cold and rain   | 84 |
| UNI EN 342:2018 "Ensembles and garments for protection against cold"  |    |
| Protective clothing against cold and rain   | 85 |
| UNI EN 343:2019 "Protective clothing - Protection against rain"   |    |
| Protective clothing against cold and rain   | 85 |
| UNI EN 14058:2018 "Single garments for protection against cold"   |    |
| Protective clothing against low-visibility risks  | 86 |
| UNI EN ISO 20471:2017 "High-visibility clothing"  |    |
| UNI EN 1150:2001 "Visibility clothing for non professional use"   | 87 |
| Protective clothing against electrostatic charges   | 87 |
| UNI EN 1149-5:2018 "Electrostatic properties Part 5: Material performance and design requirements"  |    |
| Protective clothing against entanglement  | 88 |
| UNI EN 510:1994 "Specification for protective clothing for use where there is a risk of entanglement with moving parts"   |    |
|   | 88 |
| Protective clothing against chemical risk   | 88 |
| UNI EN 13034:2009 "Protective clothing against liquid chemicals (type 6 and type PB 6 clothing)"  |    |
| Protective clothing against chemical risk   | 88 |
| UNI EN ISO 13982-1:2011 "Protective clothing for use against solid particulate (type 5 clothing)"   |    |
| Protective clothing against chemical risk   | 89 |
| UNI EN 14605:2009 "Protective clothing against liquid chemicals   |    |
| Performance Requirements for clothing with liquid-tight (Type 3 and Type PB 3) or spray-tight (Type 4 and Type PB 4)"   |    |
| Protective clothing against chemical risk   | 90 |
| UNI EN 943-1:2003 "Protective clothing against liquid and gaseous chemicals, including liquid aerosols and solid particles. Performance requirements for ventilated and non-ventilated "gas-tight" (Type 1) and "non-gas-tight" (Type 2) chemical protective suits" |    |
| Protective clothing against radioactive contamination   | 91 |
| UNI EN 1073-1:2000 "Requirements and test methods for ventilated protective clothing against particulate radioactive contamination"   |    |
| Protective clothing against radioactive contamination   | 91 |
| UNI EN 1073-2:2003 "Requirements and test methods for non-ventilated protective clothing against particulate radioactive contamination"   |    |
| Protective clothing against biological risk   | 92 |
| UNI EN 14126:2004 "Protective clothing - Performance requirements and tests methods for protective clothing against infective agents"   |    |
|   | 93 |
| Protective clothing for user of hand-held chain saws  | 93 |
| UNI EN 381-5:1996 "Requirement for leg"   |    |
| Protective clothing for user of hand-held chain saws  | 93 |
| UNI EN 381-11:2004 "Requirement for upper body protectors"  |    |
| Protective clothing for professional motorcycle rider   | 94 |
| UNI EN 13595-1:2004 "Protective clothing for professional motorcycle riders: jackets, trousers and one piece or divided suits. General requirements"  |    |
| Protective clothing for motorcyclists   | 94 |
| UNI EN 1621-1:2013 "Motorcyclists' protective clothing against mechanical impact. Part 1: Motorcyclists' limb joint impact protectors - Requirements and test methods"  |    |
| Protective clothing for professional motorcycle rider   | 95 |
| UNI EN 1621-2:2014 "Motorcyclists' protectives clothing against mechanical impact. Motorcyclists' back protectors: requirements and test methods"   |    |

|   |     |
|---|-----|
| FprEN 17092-2:2017 "Protective garments for motorcycle riders - Part 2: Class AAA garments - Requirements"                | 95  |
| FprEN 17092-3:2017 "Protective garments for motorcycle riders - Part 3: Class AA garments - Requirements"                 | 95  |
| FprEN 17092-4:2017 "Protective garments for motorcycle riders - Part 4: Class A garments - Requirements"                  | 96  |
| FprEN 17092-5:2017 "Protective garments for motorcycle riders - Part 5: Class B garments - Requirements"                  | 97  |
| FprEN 17092-6:2017 "Protective garments for motorcycle riders - Part 6: Class C garments - Requirements"                  | 97  |
| Protective clothing against heat and flame  | 98  |
| UNI EN ISO 14460:2003 "Protective clothing. Protection against heat and flame. Performance requirements and test methods" | 98  |
| <br>  |     |
| PROTECTIVE GLOVES   | 98  |
| UNI EN 420:2010 "Protective gloves - general requirements"  |     |
| PROTECTIVE GLOVES   | 98  |
| UNI EN 388:2019 "Protective gloves against mechanical risk"   |     |
| PROTECTIVE GLOVES   | 99  |
| UNI EN 407:2004 "Protective gloves against thermal risks (heat and/or fire)"  |     |
| PROTECTIVE GLOVES   | 99  |
| prEN 407:2017 "Protective gloves against thermal risks (heat and/or fire)"  |     |
| PROTECTIVE GLOVES   | 99  |
| UNI EN 12477:2006 "Protective gloves for welders"   |     |
| PROTECTIVE GLOVES   | 100 |
| UNI EN 659:2008 + EC 1-2009 "Protective gloves for firefighters"  |     |
| PROTECTIVE GLOVES   | 101 |
| UNI EN ISO 374-1:2018 "Protective gloves against dangerous chemicals and micro-organisms - Part 1 chemical risks"         |     |
| PROTECTIVE GLOVES   | 101 |
| UNI EN ISO 374-5:2017 "Protective gloves against dangerous chemicals and micro-organisms - Part 5 micro-organisms risks"  |     |
| PROTECTIVE GLOVES   | 101 |
| UNI EN 511:2006 "Protective gloves against cold"  |     |
| PROTECTIVE GLOVES   | 102 |
| UNI EN 16350:2014 "Protective gloves. Electrostatic properties"   |     |
| PROTECTIVE GLOVES FOR MOTORCYCLE RIDERS   | 102 |
| UNI EN 13594:2015 "Requirements and test methods"   |     |
| <br>  |     |
| PROTECTIVE CLOTHING FOR DRIVERS   | 103 |
| Homologation procedure CIK-FIA N2013-1 edition 12th February 2019   | 103 |
| Standard FIA 8856-2018 Overall for automobile drivers   | 104 |
| Standard FIA 8856-2018 Undergarments for automobile drivers   | 104 |
| Standard FIA 8856-2018 Balaclava hood for automobile drivers  | 105 |
| Standard FIA 8856-2018 Socks for automobile drivers   | 105 |
| Standard FIA 8856-2018 Shoes for automobile drivers   | 106 |
| Standard FIA 8856-2018 Rain-proof overgarments for automobile drivers   | 106 |
| Standard FIA 8856-2018 Protective cooling undergarments for automobile drivers  | 106 |
| <br>  |     |
| PROTECTIVE GLOVES FOR AUTOMOBILE DRIVERS  | 108 |
| Standard FIA 8856-2018 Protective gloves for automobile drivers   | 108 |
| <br>  |     |
| PROTECTIVE CLOTHING FOR MECHANICS   | 109 |
| Standard FIA 8867-2016 Protective clothing for mechanics  | 109 |
| <br>  |     |
| BIOMETRIC DEVICE  | 110 |
| Standard FIA 8868-2018 Biometric device   | 110 |



---

|  |     |
|--|-----|
| COMFORT TESTS  | 111 |
| General Costs  | 111 |
| Tests  | 111 |
| UV STANDARD 801 LABEL  | 112 |
| General costs  | 112 |
| Tests  | 112 |
| A category: apparel and fabrics for apparel                  |     |
| B category: fabrics for external use                         | 112 |
| LAT CALIBRATION CENTRE                                       | 113 |
| Spectrophotometer calibration                                | 113 |
| Calibration of reference samples or ceramic tiles            | 113 |
| From 2nd to 11th measurement (more geometries or more tiles) | 113 |
| Calibration set of ceramic tiles                             | 113 |
| Supply and calibration of ceramic tiles                      | 113 |
| CALIBRATION  | 115 |
|  | 115 |