

Reference: T2221065 - POLYESTER/RAYON - yellow

Determination of the colour fastness to water

Date of ending the test 14-11-2022
 Standard used OEKO-TEX® (2022)
 Product standard Standard 100 by Oeko-Tex® (2022)_Appendix 4
 Deviation from the standard
 Apparatus Perspirometer

Results

Monofibre

Numerical rating	
Staining on polyester	5
Staining on viscose	5

Grading against grey scale for change in colour (ISO105 A02) and/or staining (ISO 105 A03):

Use of a 9 point scale from 5 to 1; where 5 is excellent and 1 is poor. Intermediate values like 2-3 are possible.



Reference: T2221065 - POLYESTER/RAYON - yellow

Determination of the colour fastness to perspiration

Date of ending the test 14-11-2022
 Standard used OEKO-TEX® (2022)
 Product standard Standard 100 by Oeko-Tex® (2022)_Appendix 4

Deviation from the standard
 Apparatus Perspirometer

Results

Monofibre, Alkaline solution

Numerical rating	
Staining on polyester	5
Staining on viscose	5

Monofibre, Acid solution

Numerical rating	
Staining on polyester	5
Staining on viscose	5

Grading against grey scale for change in colour (ISO105 A02) and/or staining (ISO 105 A03):

Use of a 9 point scale from 5 to 1; where 5 is excellent and 1 is poor. Intermediate values like 2-3 are possible.



Reference: T2221065 - POLYESTER/RAYON - yellow

Determination of the colour fastness to rubbing

Date of ending the test 14-11-2022
 Standard used OEKO-TEX® (2022)
 Product standard Standard 100 by Oeko-Tex® (2022)_Appendix 4
 Deviation from the standard -
 Apparatus Crockmeter
 Pressure on test specimen 9 N
 Number of cycles 10
 Direction Fabrics : direction 1 = warp - direction 2 = weft
 Non-woven : direction 1 = production - direction 2 = perpendicular to it
 Manufactured: direction 1 = length - direction 2 = width
 Yarn and print : only 1 direction

Results

Staining on cotton rubbing cloth (dry)	Numerical rating
Direction 1	5
Direction 2	5

Grading against grey scale for change in colour (ISO105 A02) and/or staining (ISO 105 A03):

Use of a 9 point scale from 5 to 1; where 5 is excellent and 1 is poor. Intermediate values like 2-3 are possible.



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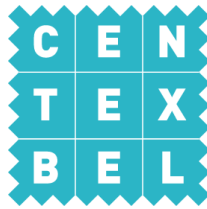
Determination of the pH of an aqueous extract

Date of ending the test 18-11-2022
Standard used OEKO-TEX® (2022)
Product standard Standard 100 by Oeko-Tex® (2022)_Appendix 4
Deviation from the standard
Electrode used Combined glass-electrode

Results

pH of the extraction liquid 5.7
Temperature of the extract in °C 23

Extract	pH
1	5.78
2	5.74
Average	5.8



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STANDARD 100 by OEKO-TEX® certification report

1. Subject of Analysis

STANDARD 100 by OEKO-TEX® Certificate – Appendix 4

Commission piece dyeing with natural colorants of 100% cotton, cotton/spandex, cotton/polyester, cotton/polyester/spandex, tencel/spandex, tencel/polyester, modal/spandex, modal/polyester, modal/tencel, 100% nylon, nylon/spandex, nylon/tencel, nylon/rayon, nylon/rayon/spandex, nylon/modal, nylon/modal/polyester, 100% polyester, polyester/cotton, polyester/rayon, polyester/modal, polyester/spandex

Class II



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2. Conclusion

The materials with reference

- COTTON - khaki
- MODAL/POLYESTER - brown
- TENCEL/POLYESTER - dark purple
- NYLON/RAYON/SPAN - purple
- POLYESTER/RAYON - yellow

meet the requirements of STANDARD 100 by OEKO-TEX® – Appendix 4, Class II.

Please fill in the attached declaration of conformity and send the signed version back to us.

We would like to ask you to indicate in which language(s) you require the certificate and provide us with the right description in the right language.

Please also make sure that the correct address, as it should be written on the certificate, is mentioned.

As soon as we receive the declaration of conformity, completed and signed, we can proceed with the creation of the certificate.

3. Test results

Quality name

- mix: COTTON - khaki / NYLON/RAYON/SPAN - purple
- mix: MODAL/POLYESTER - brown / TENCEL/POLYESTER - dark purple
- mix: COTTON - khaki / NYLON/RAYON/SPAN - purple / MODAL/POLYESTER - brown
- COTTON - khaki
- MODAL/POLYESTER - brown
- TENCEL/POLYESTER - dark purple
- NYLON/RAYON/SPAN - purple
- POLYESTER/RAYON - yellow

Detailed information is to be found in: Analysis report 22.05688.01, dd. 22-11-2022

REFERENCE	mix: COTTON - khaki / NYLON/RAYON/SPAN - purple	
Test of STANDARD 100 by OEKO-TEX® App. 4 – Class II	Requirements	Results
Organic tin compounds - TBT	< 1.0 mg/kg	< 0.10 mg/kg
Organic tin compounds - TPhT	< 1.0 mg/kg	< 0.10 mg/kg
Organic tin compounds - DBT	< 2.0 mg/kg	< 0.10 mg/kg
Organic tin compounds - DMT	< 2.0 mg/kg	< 0.10 mg/kg
Organic tin compounds - DOT	< 2.0 mg/kg	< 0.10 mg/kg
Organic tin compounds - DPhT	< 2.0 mg/kg	< 0.10 mg/kg
Organic tin compounds - DPT	< 2.0 mg/kg	< 0.10 mg/kg
Organic tin compounds - MBT	< 2.0 mg/kg	< 0.10 mg/kg
Organic tin compounds - MOT	< 2.0 mg/kg	< 0.10 mg/kg
Organic tin compounds - MMT	< 2.0 mg/kg	< 0.10 mg/kg
Organic tin compounds - MPhT	< 2.0 mg/kg	< 0.10 mg/kg
Organic tin compounds - TeBT	< 2.0 mg/kg	< 0.10 mg/kg
Organic tin compounds - TeET	< 2.0 mg/kg	< 0.10 mg/kg
Organic tin compounds - TCyHT	< 2.0 mg/kg	< 0.10 mg/kg
Organic tin compounds - TMT	< 2.0 mg/kg	< 0.10 mg/kg
Organic tin compounds - TOT	< 2.0 mg/kg	< 0.10 mg/kg
Organic tin compounds - TeOT	< 2.0 mg/kg	< 0.10 mg/kg
Organic tin compounds - TPT	< 2.0 mg/kg	< 0.10 mg/kg
BP, NP, OP, HpP, PeP – sum	< 10.0 mg/kg	< 2.00 mg/kg
BP, NP, OP, HpP, PeP, NP(EO), OP(EO) – sum	< 100.0 mg/kg	< 20.0 mg/kg

REFERENCE	mix: MODAL/POLYESTER - brown / TENCEL/POLYESTER - dark purple	
Test of STANDARD 100 by OEKO-TEX® App. 4 – Class II	Requirements	Results
Organic tin compounds - TBT	< 1.0 mg/kg	< 0.10 mg/kg
Organic tin compounds - TPhT	< 1.0 mg/kg	< 0.10 mg/kg
Organic tin compounds - DBT	< 2.0 mg/kg	< 0.10 mg/kg
Organic tin compounds - DMT	< 2.0 mg/kg	< 0.10 mg/kg
Organic tin compounds - DOT	< 2.0 mg/kg	< 0.10 mg/kg
Organic tin compounds - DPhT	< 2.0 mg/kg	< 0.10 mg/kg
Organic tin compounds - DPT	< 2.0 mg/kg	< 0.10 mg/kg



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Organic tin compounds - MBT	< 2.0 mg/kg	< 0.10 mg/kg
Organic tin compounds - MOT	< 2.0 mg/kg	< 0.10 mg/kg
Organic tin compounds - MMT	< 2.0 mg/kg	< 0.10 mg/kg
Organic tin compounds - MPhT	< 2.0 mg/kg	< 0.10 mg/kg
Organic tin compounds - TeBT	< 2.0 mg/kg	< 0.10 mg/kg
Organic tin compounds - TeET	< 2.0 mg/kg	< 0.10 mg/kg
Organic tin compounds - TCyHT	< 2.0 mg/kg	< 0.10 mg/kg
Organic tin compounds - TMT	< 2.0 mg/kg	< 0.10 mg/kg
Organic tin compounds - TOT	< 2.0 mg/kg	< 0.10 mg/kg
Organic tin compounds - TeOT	< 2.0 mg/kg	< 0.10 mg/kg
Organic tin compounds - TPT	< 2.0 mg/kg	< 0.10 mg/kg
BP, NP, OP, HpP, PeP – sum	< 10.0 mg/kg	< 2.00 mg/kg
BP, NP, OP, HpP, PeP, NP(EO), OP(EO) – sum	< 100.0 mg/kg	< 20.0 mg/kg

REFERENCE	mix: COTTON - khaki / NYLON/RAYON/SPAN - purple / MODAL/POLYESTER - brown	
Test of STANDARD 100 by OEKO-TEX® App. 4 – Class II	Requirements	Results
Sum of all Arylamines	< 20.0 mg/kg	< 10.0 mg/kg
Aniline	< 50.0 mg/kg	< 10.0 mg/kg
2-Amino-5-nitrothiazole	Under observation	< 5.00 mg/kg
p-Phenetidine	Under observation	< 5.00 mg/kg
2-Methyl-p-phenylendiamine	Under observation	< 5.00 mg/kg
p-Anisidine	Under observation	< 5.00 mg/kg
3,3'-Diaminobenzidin (biphenyl-3,3',4,4'-tetrayltetraamine)	Under observation	< 5.00 mg/kg

REFERENCE	COTTON - khaki	
Test of STANDARD 100 by OEKO-TEX® App. 4 – Class II	Requirements	Results
pH	4.0 - 7.5	5.6
Metal: Sb	< 30.0 mg/kg	< 1.50 mg/kg
Metal: As	< 1.0 mg/kg	< 0.20 mg/kg
Metal: Pb	< 1.0 mg/kg	< 0.20 mg/kg
Metal: Cd	< 0.1 mg/kg	< 0.05 mg/kg
Metal: Cr	< 2.0 mg/kg	< 0.20 mg/kg
Metal: Co	< 4.0 mg/kg	< 0.10 mg/kg
Metal: Cu	< 50.0 mg/kg	< 1.50 mg/kg
Metal: Ni	< 4.0 mg/kg	< 0.10 mg/kg
Metal: Hg	< 0.02 mg/kg	< 0.02 mg/kg
Metal: Ba	< 1000.0 mg/kg	< 1.50 mg/kg
Metal: Se	< 100.0 mg/kg	< 1.50 mg/kg
Pentachlorophenol (PCP)	< 0.5 mg/kg	< 0.020 mg/kg
Tetrachlorophenol (TeCP, sum)	< 0.5 mg/kg	< 0.020 mg/kg
Trichlorophenol (TrCP, sum)	< 2.0 mg/kg	< 0.020 mg/kg
Dichlorophenol (DCP, sum)	< 3.0 mg/kg	< 0.020 mg/kg
Monochlorophenol (MCP, sum)	< 3.0 mg/kg	< 0.020 mg/kg
Orthophenylphenol (OPP)	< 25.0 mg/kg	< 1.0 mg/kg
Phenol	< 50.0 mg/kg	< 10 mg/kg
Colour fastness to water	3	4-5





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Colour fastness to perspiration - acid	3-4	4-5
Colour fastness to perspiration - alkaline	3-4	4-5
Colour fastness to rubbing - dry	4	4-5

REFERENCE	MODAL/POLYESTER - brown	
Test of STANDARD 100 by OEKO-TEX® App. 4 – Class II	Requirements	Results
pH	4.0 - 7.5	6.0
Metal: Sb	< 30.0 mg/kg	< 1.50 mg/kg
Metal: As	< 1.0 mg/kg	< 0.20 mg/kg
Metal: Pb	< 1.0 mg/kg	< 0.20 mg/kg
Metal: Cd	< 0.1 mg/kg	< 0.05 mg/kg
Metal: Cr	< 2.0 mg/kg	< 0.20 mg/kg
Metal: Co	< 4.0 mg/kg	< 0.10 mg/kg
Metal: Cu	< 50.0 mg/kg	< 1.50 mg/kg
Metal: Ni	< 4.0 mg/kg	< 0.10 mg/kg
Metal: Hg	< 0.02 mg/kg	< 0.02 mg/kg
Metal: Ba	< 1000.0 mg/kg	< 1.50 mg/kg
Metal: Se	< 100.0 mg/kg	< 1.50 mg/kg
Pentachlorophenol (PCP)	< 0.5 mg/kg	< 0.020 mg/kg
Tetrachlorophenol (TeCP, sum)	< 0.5 mg/kg	< 0.020 mg/kg
Trichlorophenol (TrCP, sum)	< 2.0 mg/kg	< 0.020 mg/kg
Dichlorophenol (DCP, sum)	< 3.0 mg/kg	< 0.020 mg/kg
Monochlorophenol (MCP, sum)	< 3.0 mg/kg	< 0.020 mg/kg
Orthophenylphenol (OPP)	< 25.0 mg/kg	< 1.0 mg/kg
Phenol	< 50.0 mg/kg	< 10 mg/kg
Colour fastness to water	3	4-5
Colour fastness to perspiration - acid	3-4	4-5
Colour fastness to perspiration - alkaline	3-4	4-5
Colour fastness to rubbing - dry	4	4-5
Octamethylcyclotetrasiloxane (D4)	< 0.1 %	< 0.010 %
Decamethylcyclopentasiloxane (D5)	< 0.1 %	< 0.010 %
Dodecamethylcyclohexasiloxane (D6)	< 0.1 %	< 0.010 %

REFERENCE	TENCEL/POLYESTER - dark purple	
Test of STANDARD 100 by OEKO-TEX® App. 4 – Class II	Requirements	Results
pH	4.0 - 7.5	5.9
Formaldehyde	< 75.0 mg/kg	< 16.0 mg/kg
Colour fastness to water	3	5
Colour fastness to perspiration - acid	3-4	4-5
Colour fastness to perspiration - alkaline	3-4	5
Colour fastness to rubbing - dry	4	4-5

REFERENCE	NYLON/RAYON/SPAN - purple	
Test of STANDARD 100 by OEKO-TEX® App. 4 – Class II	Requirements	Results
Metal: Sb	< 30.0 mg/kg	< 1.50 mg/kg
Metal: As	< 1.0 mg/kg	< 0.20 mg/kg





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Metal: Pb	< 1.0 mg/kg	< 0.20 mg/kg
Metal: Cd	< 0.1 mg/kg	< 0.05 mg/kg
Metal: Cr	< 2.0 mg/kg	< 0.20 mg/kg
Metal: Co	< 4.0 mg/kg	< 0.10 mg/kg
Metal: Cu	< 50.0 mg/kg	< 1.50 mg/kg
Metal: Ni	< 4.0 mg/kg	< 0.10 mg/kg
Metal: Hg	< 0.02 mg/kg	< 0.02 mg/kg
Metal: Ba	< 1000.0 mg/kg	< 1.50 mg/kg
Metal: Se	< 100.0 mg/kg	< 1.50 mg/kg
Pentachlorophenol (PCP)	< 0.5 mg/kg	< 0.020 mg/kg
Tetrachlorophenol (TeCP, sum)	< 0.5 mg/kg	< 0.020 mg/kg
Trichlorophenol (TrCP, sum)	< 2.0 mg/kg	< 0.020 mg/kg
Dichlorophenol (DCP, sum)	< 3.0 mg/kg	< 0.020 mg/kg
Monochlorophenol (MCP, sum)	< 3.0 mg/kg	< 0.020 mg/kg
Orthophenylphenol (OPP)	< 25.0 mg/kg	< 1.0 mg/kg
Phenol	< 50.0 mg/kg	< 10 mg/kg
Colour fastness to water	3	4-5
Colour fastness to perspiration - acid	3-4	4
Colour fastness to perspiration - alkaline	3-4	4-5
Colour fastness to rubbing - dry	4	5

REFERENCE	POLYESTER/RAYON - yellow	
Test of STANDARD 100 by OEKO-TEX® App. 4 – Class II	Requirements	Results
pH	4.0 - 7.5	5.8
Colour fastness to water	3	5
Colour fastness to perspiration - acid	3-4	5
Colour fastness to perspiration - alkaline	3-4	5
Colour fastness to rubbing - dry	4	5





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4. Annex

- Analysis report 22.05688.01, dd. 22-11-2022
- Declaration of conformity

Best regards,

Jolien De Lepeleire – Coordinator OEKO-TEX®