



**BRISBANE
MOSS**

M Chapman & Sons Textiles Ltd
Chapman Works
Manchester Road
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BB11 5PW

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Technical Document		Article-	Lewis		Release Date-	01 May 2025	
Description-	Organic Poplin				Composition-	100% Organic Cotton	
Applications-	Apparel						
Weight (g/m2)	190				UNI 5114		
Weight Linear (g/m)	290						
Warp Yarn per Inch	133				UNI EN 1049/2		
Weft Yarn per Inch	76						
Warp Yarn Count	30/1 NE				ISO 7211/5		
Weft Yarn Count	30/1 NE						
Minimum Usable Width	146cm				UNI EN 1773		
Customs Tariff Code (HS)	52093100						
County of Origin	Turkey						
Yarn Origin	USA/Turkey						
Weaving Origin	Turkey						
Dyeing/Finishing Origin	Turkey						
Sample/Bulk Leadtime (Weeks)	Stock Supported						
<u>Manufacturing Features-</u>							
Piece Dye	Jig Dyeing Method		Reactive Dyestuffs				
Care Instructions-	Wash with Softener to maintain fabric hand feel					UNI EN ISO 3758	
							
<u>Dimensional Stability-</u>							
Domestic Washing	Warp	+/- 3%				ISO 6330:2021	
	Weft	+/- 3%					
Steam Ironing	Warp	+/- 3%				DIN 53894-2	
	Weft	+/- 3%					
Dry Cleaning	Warp	+/- 3%				UNI EN ISO 3175-2	
	Weft	+/- 3%					
<u>Physical Features-</u>							
Tensile Strength	Warp	3.5kg			UNI EN ISO 13934-1		
	Weft	6kg					
Tear Strength	Warp	1300g			UNI EN ISO 13927-2		
	Weft	1200g					
Seam Slippage (6mm)	Warp	> 20kg			UNI EN ISO 13935-1		
	Weft	> 20kg					
Abrasion Resistance (9kPa)	Face	Grade 4/5 @ 30,000 Rubs				UNI EN ISO 12947-2	
Pilling (2000 Revolutions)	Face	Grade 4/5				UNI EN ISO 12945-2	
Martindale	Face	Grade 4/5				20,000rpm	
Maximum Weft Skew			3%				
Stretch and Recovery at 30N Load	Extension	N/A				UNI EN 14704-1	
	Residual	N/A					

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Colour Fastness-		Grade	Change in Colour	Dark Colours					
				Cross Staining					
				Acetate	Cotton	Polyamide	Polyester	Acrylic	Wool
Dry Cleaning	UNI EN ISO 105-D01		3	3	3	3	3	3	
Dry Ironing	UNI EN ISO 105-X11		3	3	3	3	3	3	
Wet Ironing	UNI EN ISO 105-X11		3	3	3	3	3	3	
Acid Pers	UNI EN ISO 105-E04		3	3	3	3	3	3	
Alkaline Pers	UNI EN ISO 105-E04		3	3	3	3	3	3	
Water	UNI EN ISO 105-E01		3	3	3	3	3	3	
Washing	UNI EN ISO 105-C06		3	3	3	3	3	3	
Dry Rubbing	UNI EN ISO 105-X12				3/4				
Wet Rubbing	UNI EN ISO 105-X12				2/3				
Light	UNI EN ISO 105-B02	>4							

		Grade	Change in Colour	Light Colours					
				Cross Staining					
				Acetate	Cotton	Polyamide	Polyester	Acrylic	Wool
Dry Cleaning	UNI EN ISO 105-D01		4	4	4	4	4	4	
Dry Ironing	UNI EN ISO 105-X11		4	4	4	4	4	4	
Wet Ironing	UNI EN ISO 105-X11		3	4	4	4	4	4	
Acid Pers	UNI EN ISO 105-E04		4	4	4	4	4	4	
Alkaline Pers	UNI EN ISO 105-E04		4	4	4	4	4	4	
Water	UNI EN ISO 105-E01		4	4	4	4	4	4	
Washing	UNI EN ISO 105-C06		4	4	4	4	4	4	
Dry Rubbing	UNI EN ISO 105-X12				4				
Wet Rubbing	UNI EN ISO 105-X12				3				
Light	UNI EN ISO 105-B02	4							

Chemical and Ecotoxicological-		
pH-value Water Extract	4.0 - 7.5	UNI EN ISO 3071
Flammability	Class 1	16 CFR 1610
Formaldehyde	< 16 mg/kg	UNI EN ISO 14184/1
Cancer-causing Aromatic Amines	< 20 ppm	DIN EN ISO 14362/1
REACH Compliant	Yes	Reg.(UE) 1907/2006
Standard(s)-		
Compliant with the National Standard of the People's Republic of China		GB18401-2010
GOTS Available		GCL-303412-GOTS-2025
Okeo-Tex Standard 100 Certified		11-52140 Shirley

**BRISBANE
MOSS**



Test Report	No. 28515715	Date: 25th March 2025	Page 1 of 7
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Sample Description : Poplin
Customer : **Brisbane Moss; Bridgeroyd Works, Todmorden, OL14 6DF**
Product type : Apparel Fabric Lewis 100% Cotton 190 gsm
PO Number : 13686-64A
Colour : Khaki / 9008
Contact person : Stephen Newham, Joshua Barker-Lockwood

Test Performed : Selected test(s) as requested by applicant
 * * * * *
 Sample Receiving Date : 6th March 2025
 Testing Period : 6th March 2025 – 25th March 2025
 Test Result(s) : For further details, please refer to the following page(s).

Conclusion:

Test Property			
Colour Fastness to Washing	Data	Tear Strength - Trouser	Data
Colour Fastness to Dry Cleaning	Data	Seam Slippage	Data
Colour Fastness to Perspiration	Data	Pilling Resistance	Data
Colour Fastness to Water	Data	Abrasion Resistance	Data
Colour Fastness to Light*	Data	Yarn Count*	Data
Colour Fastness to Hot Pressing*	Data		
Colour Fastness to Rubbing	Data	pH Value	Data
Dimensional Stability to Washing	Data	Bow & Skew**	Data
Dimensional Stability to Dry Cleaning**	Data		
Dimensional Stability to Free Steam (wira)*	Data		
Tensile Strength	Data	Tear Strength - Elmendorf	Data

*Sub Contracted tests withing TUV Group Laboratories (Turkey)

**Not UKAS Accredited

Signed for and on behalf of
TÜV Rheinland UK LTD

Christopher
Clarke

Digitally signed by
Christopher Clarke
Date: 2025.03.25
12:08:29 Z

Chris Clarke
Laboratory Supervisor



Test Report	No. 28515715	Date: 25th March 2025	Page 2 of 7
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Test result is drawn according to the kind and extent of tests performed.

Without permission of the test centre this test report is not permitted to be duplicated in extracts. This test report does not entitle to carry any safety mark on this or similar products. This test report represents the test parameters as requested by the customer based on submitted samples only.

Results:

Colour Fastness to Washing	
Washing Condition: A2S, 30°C (Deviation) With ECE(B) + Sodium Perborate, 10 Steel Balls.	
Sample	Result
Colour Change	4-5
Self-Staining	-
Colour Staining	Result
Acetate	4-5
Cotton	4-5
Polyamide	4-5
Polyester	4-5
Acrylic	4-5
Wool	4-5
Remark: Grey Scale rating is based on the 5-step scale of 1 to 5, where 1 is bad and 5 is good	

Colour Fastness to Water	
BS EN ISO 105 E01: 2013	
Sample	Result
Colour Change	4-5
Self-Staining	-
Colour Staining	Result
Acetate	4-5
Cotton	4-5
Polyamide	4-5
Polyester	4-5
Acrylic	4-5
Wool	4-5
Remark: Grey Scale rating is based on the 5-step scale of 1 to 5, where 1 is bad and 5 is good	

Colour Fastness to Rubbing			
BS EN ISO 105 X12: 2016			
Sample	Result		
	Warp		Weft
	Dry: 4-5		Dry: 4-5
	Wet: 4	% Soak: 100	Wet: 4 % Soak: 100
Atmospheric Conditions: 65% RH, 20°C			
Conditioning time of sample and rubbing cloth: 4 Hours			

Test Report	No. 28515715	Date: 25th March 2025	Page 3 of 7
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Colour Fastness to Light BS EN ISO 105 B02 Method 3: 2013	
Sample	
	>4

Colour Fastness to Hot Pressing BS EN ISO 105 X11 @ 150°C: 1994	
Sample	
Sample	Immediately After Testing colour Change Dry: 4-5 Damp: 4-5 Wet: 4-5 After Conditioning Colour Change Dry: 4-5 Damp: 4-5 Wet: 4-5 Colour Staining Damp: 4-5 Wet: 4-5

Colour Fastness to Dry Cleaning BS EN ISO 105-D01: 2010	
	Result
Colour Change	4-5
Self-Staining	-
Colour Staining	Result
Acetate	4-5
Cotton	4-5
Polyamide	4-5
Polyester	4-5
Acrylic	4-5
Wool	4-5
Remark: Grey Scale rating is based on the 5-step scale of 1 to 5, where 1 is bad and 5 is good	

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Colour Fastness To Perspiration BS EN ISO 105-E04: 2013		
Sample	Result	
	Acid	Alkaline
Colour Change	4-5	4-5
Self-Staining		
Colour Staining	Result	Result
Acetate	4-5	4-5
Cotton	4-5	4-5
Polyamide	4-5	4-5
Polyester	4-5	4-5
Acrylic	4-5	4-5
Wool	4-5	4-5

Remark: Grey Scale rating is based on the 5-step scale of 1 to 5, where 1 is bad and 5 is good

Abrasion Resistance (BS EN ISO 12947-2:2016/AC:2006); Martindale Wear & Abrasion Tester; 9 kPa Pressure) The criterion for judging end point was Two Threads Broken			
Result			
	Specimen 1	Specimen 2	Specimen 3
No Two Thread Breakdown	30,000	30,000	30,000
Colour Change At 3000 (rubs)	4-5	4-5	4-5

Remarks: Grey Scale Rating is based on the step scale of 1 to 5, where 1 is bad and 5 is good
Observation Technique:40 fold magnification

Pilling Resistance (BS EN ISO 12945-2:2020; Martindale Abrasion & Pilling Tester; Tested against self No cleansing required)	
	Average Result
After 2000 Rubs Rating	P: 4-5 F: 4-5 M: 4-5

P=Pilling
F-Fuzzing
M=Matting

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Tensile Strength (BS EN ISO 13934-1:2013)	
Direction	Result
Warp	3.5 kg
Weft	6.0 kg

Dimensional Change After Washing BS EN ISO 6330: 2012 3N @ 30°C Flat Dry	
Direction	%Change
Warp	-2.5
Weft	-0.2

Dimensional Change After Commercial Dry Cleaning (Commercial dry clean cycle)	
Direction	%Change
Warp	0.0
Weft	0.0

Dimensional Change to Free Steam (wira) BS 4323: 1979	
Direction	%Change
Warp	+0.5 %
Weft	-0.5 %

Test Report	No. 28515715	Date: 25 th March 2025	Page 6 of 7
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Bow & Skewness ISO 13015: 2013	
Direction	
Bow	0.0 %
Skew	0.0 %

Yarn Count ISO 7211-5 Method A	
Sample	Result
	Warp: Nm: 46.4, Ne: 27.4 Weft: Nm: 48.3, Ne: 28.5 Nm: Metric Count Ne: Cotton Count

pH Value ISO 3071: 2005 (withdrawn)	
Sample	Result
	pH 7.38
pH value of Grade 3 water: 7.1	
Temperature of the Grade 3 water: 19.4	

Test Report	No. 28515715	Date: 25th March 2025	Page 7 of 7
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Seam Slippage

BS EN ISO 13936-1: 2004 6mm SO

Sample	Result
Warp	A 6mm seam opening was not found Seam breakdown > 20.0Kg
Weft	A 6mm seam opening was not found Seam breakdown > 20.0Kg
Remarks:	

Tearing Strength

BS EN ISO 13937-2: 2000

Sample	Result
Warp	1384 g
Weft	1294 g

Tearing Strength

(BS EN ISO 13937-1:2000; Elmendorf Tear)

Sample	Result
Warp	1488 g
Weft	958 g

-End of Test Report-

Test Report	No. 28515720	Date: 25th March 2025	Page 1 of 4
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The following sample(s) was/were submitted and identified on behalf of the client as:

Sample Description : Herringbone
Customer : **Brisbane Moss; Bridgeroyd Works, Todmorden, OL14 6DF**
Product type : Apparel Lewis 100% Cotton 265 gsm
PO Number : 13686-28B
Colour : Sand / 9003
Contact person : Stephen Newham, Joshua Barker-Lockwood

Test Performed : Selected test(s) as requested by applicant
 * * * * *
 Sample Receiving Date : 6th March 2025
 Testing Period : 6th March 2025 – 25th March 2025
 Test Result(s) : For further details, please refer to the following page(s).

Conclusion:

Test Property	
Colour Fastness to Washing	Data
Colour Fastness to Dry Cleaning	Data
Colour Fastness to Perspiration	Data
Colour Fastness to Water	Data
Colour Fastness to Light*	Data
Colour Fastness to Hot Pressing*	Data
Colour Fastness to Rubbing	Data

*Sub Contracted tests withing TUV Group Laboratories (Turkey)

**Not UKAS Accredited

Signed for and on behalf of
TÜV Rheinland UK LTD

**Christopher
Clarke**

Digitally signed by
Christopher Clarke
Date: 2025.03.25 10:35:23
Z

Chris Clarke
Laboratory Supervisor



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Test result is drawn according to the kind and extent of tests performed.
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Test Report	No. 28515720	Date: 25th March 2025	Page 2 of 4
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Results:

Colour Fastness to Washing	
Washing Condition: A2S, 30°C (Deviation) With ECE(B) + Sodium Perborate, 10 Steel Balls.	
Sample	Result
Colour Change	4-5
Self-Staining	-
Colour Staining	
Acetate	4-5
Cotton	4-5
Polyamide	4-5
Polyester	4-5
Acrylic	4-5
Wool	4-5
Remark: Grey Scale rating is based on the 5-step scale of 1 to 5, where 1 is bad and 5 is good	

Colour Fastness to Water	
BS EN ISO 105 E01: 2013	
Sample	Result
Colour Change	4-5
Self-Staining	-
Colour Staining	
Acetate	4-5
Cotton	4-5
Polyamide	4-5
Polyester	4-5
Acrylic	4-5
Wool	4-5
Remark: Grey Scale rating is based on the 5-step scale of 1 to 5, where 1 is bad and 5 is good	

Colour Fastness to Rubbing			
BS EN ISO 105 X12: 2016			
Sample	Result		
	Warp		Weft
	Dry: 4-5	Wet: 4-5	Dry: 4-5 Wet: 4-5
Atmospheric Conditions: 65% RH, 20°C			
Conditioning time of sample and rubbing cloth: 4 Hours			

Test Report	No. 28515720	Date: 25 th March 2025	Page 3 of 4
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Colour Fastness to Light BS EN ISO 105 B02 Method 3: 2013	
Sample	
	4

Colour Fastness to Hot Pressing BS EN ISO 105 X11 @ 150°C: 1994	
Sample	
Sample	Immediately After Testing Colour Change Dry: 4-5 Damp: 4-5 Wet: 4-5 After Conditioning Colour Change Dry: 4-5 Damp: 4-5 Wet: 4-5 Colour Change Damp: 4-5 Wet: 4-5

Colour Fastness to Dry Cleaning BS EN ISO 105-D01: 2010	
	Result
Colour Change	4-5
Self-Staining	-
Colour Staining	
Acetate	4-5
Cotton	4-5
Polyamide	4-5
Polyester	4-5
Acrylic	4-5
Wool	4-5
Remark: Grey Scale rating is based on the 5-step scale of 1 to 5, where 1 is bad and 5 is good	

Test Report	No. 28515720	Date: 25th March 2025	Page 4 of 4
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Colour Fastness To Perspiration BS EN ISO 105-E04: 2013		
Sample	Result	
	Acid	Alkaline
Colour Change	4-5	4-5
Self-Staining	-	-
Colour Staining	Result	Result
Acetate	4-5	4-5
Cotton	4-5	4-5
Polyamide	4-5	4-5
Polyester	4-5	4-5
Acrylic	4-5	4-5
Wool	4-5	4-5
Remark: Grey Scale rating is based on the 5-step scale of 1 to 5, where 1 is bad and 5 is good		

-End of Test Report-



Test
TS EN ISO/IEC 17025
AB-0342-T

AB-0342-T
144415417
03/25

TÜV Rheinland
Uluslararası Standartlar Sertifikasyon ve Denetim A.Ş.
Saniye Ermutlu Sokak Çolakoglu Plaza B Blok No :12 Kozyatağı-İSTANBUL

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Test Report

BRISBANE MOSS

Bridgeroyd Works, Halifax Rd, Todmorden OL14 6DF

Report No. 144415417
Buyer /
Test Item. : Poplin (190 gr/m2)
Job No. : 28515708
Manufacturer : /
Fiber Content. : 100% Cotton
Colour Name. : Khaki / 9008
Order No. : 13686-64B
End Use. : /
Test Scope. : Customer selected parameters
Test Specification. : Test results have been evaluated based on Reach Annex XVII requirements.

Applicant's Provided Care Instruction/Label:

Sample Receiving date: 2025-03-13
Testing Period: 2025-03-13 to 2025-03-19
Report Date: 2025-03-19
Test Result: Pass

TÜV Rheinland Uluslararası Standartlar Sertifikasyon ve Denetim A.Ş. accredited by TÜRKAK under registration number AB-0342-T for ISO/IEC 17025-2017 as test laboratory

The Turkish Accreditation Agency (TÜRKAK) is signatory to the multilateral agreements of the European co-operation for the Accreditation (EA) and of the International Laboratory Accreditation (ILAC) for the Mutual recognition of the test reports.

The test and/or measurement results, the uncertainties (if applicable) with confidence probability and test methods are given on the following, pages which are part of this report

For and on behalf of
TÜV Rheinland Uluslararası Standartlar Sertifikasyon ve Denetim A.Ş.

Elif Kocasalli / CR Assistant
Project Manager

Kivanc Karatas / Chemical
Laboratory Manager

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*The results given in this report belong to the received sample by vendor.
This test report shall not be reproduced other than in full except with the permission of the laboratory. Testing reports without signature and seal are not valid.
This test report is signed by digital signature.
TÜV Rheinland testing laboratories apply the Zero Guard band rule for statement of conformity evaluation, unless other decision rule is required by the customer.*

AB-0342-T
144415417
03/25

Test Result Summary :**Test Specification:**

- 1 Banned azo dyes
- 2 Aromatic Amine Salts
- 3 Dimethyl fumarate
- 4 Migration of Heavy Metals
- 5 Flame Retardants
- 6 Formaldehyde (EN ISO 14184-1)
- 7 AP + APEO (Alkylphenols, Alkylphenol Ethoxylates)
- 8 Quinoline
- 9 Polycyclic aromatic hydrocarbons (PAHs)
- 10 Pentachlorophenol (PCP) Content
- 11 Per-and polyfluoroalkyl substances (PFAS)
- 12 Organotin compounds content

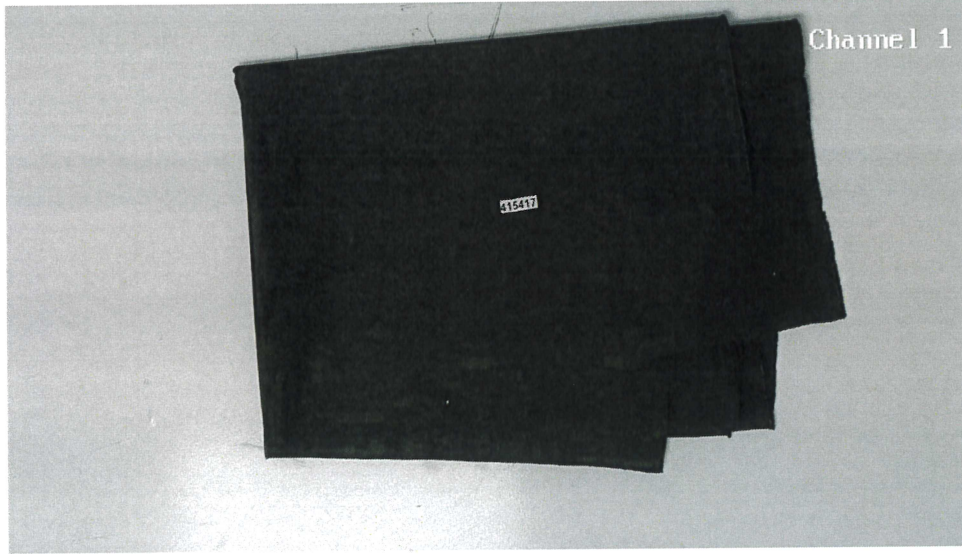
Test result:

PASS
PASS
PASS
PASS
PASS
PASS
PASS
PASS
PASS
PASS
PASS
PASS

Products

AB-0342-T
144415417
03/25

1. Photo



2. List of Materials

Material List:

Material No.	Material	Color	Location
M001	Textile	Khaki	Woven base



1. Banned azo dyes

Test Method: Method 1 - EN ISO 14362-1:2017 (Textiles) (Buffer extraction)
 Method 2 - EN ISO 14362-1:2017 (Textiles) (Xylene extraction)
 Method 3 - ISO 17234-1:2020 (Leather)
 Method 4 - EN ISO 14362-3:2017 (Textile, 4-aminoazobenzene confirmation)
 Method 5 - ISO 17234-2:2011 (Leather, 4-aminoazobenzene confirmation)

Test Results:

		Material No.				M001
		Test No.				T001
		Method No.				Method 1
		A22 Confirmation Method No.				--
ID	Test Parameter	CAS NO	Unit	RL	Regulatory Requirement	Result
A1	4-Aminobiphenyl	92-67-1	mg/kg	5	30	n.d.
A2	Benzidine	92-87-5	mg/kg	5	30	n.d.
A3	4-Chloro-o-toluidine	95-69-2	mg/kg	5	30	n.d.
A4	2-Naphthylamine	91-59-8	mg/kg	5	30	n.d.
A5*	o-Aminoazotoluene	97-56-3	mg/kg	5	30	n.d.
A6*	5-nitro-o-toluidine / 2-Amino-4-nitrotoluene	99-55-8	mg/kg	5	30	n.d.
A7	4-Chloroaniline	106-47-8	mg/kg	5	30	n.d.
A8	4-methoxy-m-phenylenediamine / 2,4-Diaminoanisole	615-05-4	mg/kg	5	30	n.d.
A9	4,4'-Diaminodiphenylmethane	101-77-9	mg/kg	5	30	n.d.
A10	3,3'-Dichlorobenzidine	91-94-1	mg/kg	5	30	n.d.
A11	3,3'-Dimethoxybenzidine	119-90-4	mg/kg	5	30	n.d.
A12	3,3'-Dimethylbenzidine	119-93-7	mg/kg	5	30	n.d.
A13	4,4'-methylenedi-o-toluidine / 3,3'-Dimethyl-4,4'-diaminodiphenylmethane	838-88-0	mg/kg	5	30	n.d.
A14	p-Cresidine	120-71-8	mg/kg	5	30	n.d.
A15	4,4'-Methylene-bis-(2-chloroaniline)	101-14-4	mg/kg	5	30	n.d.
A16	4,4'-Oxydianiline	101-80-4	mg/kg	5	30	n.d.
A17	4,4'-Thiodianiline	139-65-1	mg/kg	5	30	n.d.
A18	o-Toluidine	95-53-4	mg/kg	5	30	n.d.
A19	4-methyl-m-phenylenediamine / 2,4-Toluyldiamine	95-80-7	mg/kg	5	30	n.d.
A20	2,4,5-Trimethylaniline	137-17-7	mg/kg	5	30	n.d.
A21	O-Anisidine	90-04-0	mg/kg	5	30	n.d.
A22**	4-Aminoazobenzene	60-09-3	mg/kg	5	30	n.d.
*1	4-chloro-o-toluidinium chloride	3165-93-3	mg/kg	5	30	n.d.
*4	2,4,5-trimethylaniline hydrochloride	21436-97-5	mg/kg	5	30	n.d.
*2	2-Naphthyl-ammoniumacetate	553-00-4	mg/kg	5	30	n.d.
	2,4-Diaminoanisole sulphate	39156-41-7	mg/kg	5	30	n.d.

Abbreviation: < = less than
 RL = Reporting Limit
 mg/kg = milligram per kilogram

Products

AB-0342-T
144415417
03/25

Remark:

- * The CAS-number 97-56-3 (A5) and 99-55-8 (A6) are further reduced to CAS-number 95-53-4 (A18) and 95-80-7 (A19).
- ** Azo colorants that are able to form 4-aminoazobenzene (A22) CAS-number 60-09-3, generate under the condition of this method Aniline (CAS-number 62-53-3) and 1,4-phenylenediamine (CAS-number 106-50-3.)
- *** Azo colorants that are able to form 4-aminoazobenzene (A22), is confirmed by EN ISO 14362-3:2017 / ISO 17234-2:2011.
- **** Azo colorants are detected & quantified by GC/MS and confirmed by HPLC/DAD or HPLC/MSMS.

AB-0342-T
144415417
03/25

2. Aromatic Amine Salts

Test Method: DIN EN ISO 14362-1:2017
 DIN EN ISO 14362-3:2017
 Analyzed by GC-MSD

Test Result:

Test No.					T001
Material No.					M001
Test Parameter	CAS NO	Unit	RL	Regulatory Requirement	Result
4-chloro-o-toluidinium chloride	3165-93-3	mg/kg	5	30	n.d.
4-methoxy-m-phenylene diammonium sulphate; 2,4-diaminoanisole sulphate	39156-41-7	mg/kg	5	30	n.d.
2,4,5-trimethylaniline hydrochloride	21436-97-5	mg/kg	5	30	n.d.
2-Naphthyl-ammoniumacetate	553-00-4	mg/kg	5	30	n.d.
Conclusion				-	

Abbreviation: n.d. = Not Detected (< Reporting Limit)
 RL = Reporting Limit
 mg/kg = milligram per kilogram

Products

AB-0342-T
144415417
03/25

3.Dimethyl fumarate

Test Method: Organic solvent extraction, GCMS analysis

Test Result:

Test No.	Material No.	Test Parameter	Unit	RL	Regulatory Requirement	Test Result
T001	M001	Dimethyl fumarate	mg/kg	0.025	0.1	n.d.

Abbreviation: < = less than
RL = Reporting Limit
mg/kg = milligram per kilogram

Products

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4. Migration of Heavy Metals

Test Method: All materials except leather: DIN EN 16711-2:2016
Leather: DIN EN ISO 17072-1:2019

Test Result:

Test No.				T001
Material No.				M001
Test Parameter	Unit	RL	Customer Requirement	Result
Arsenic (As)	mg/kg	0.1	< 1 mg/kg each	n.d.
Cadmium (Cd)	mg/kg	0.05	< 1 mg/kg each	n.d.
Chromium (Cr)	mg/kg	0.5	< 1 mg/kg each	n.d.
Lead (Pb)	mg/kg	0.2	< 1 mg/kg each	n.d.
Conclusion				Pass

Abbreviation: < = less than
RL = Reporting Limit
mg/kg = milligram per kilogram

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5.Flame Retardants

Test Method: 1. Organic solvent extraction, GCMS/LCMSMS
 2. Acid digestion, analyzed by ICP-MS

Test No.					T001
Material No.					M001
Test Parameter	CAS No.	Unit	RL	Formulation Limit	Test Result
Octabromodiphenyl ether (OctaBDE)	32536-52-0	mg/kg	100	< 1000 mg/kg	n.d.
Tris(2-chloroethyl)phosphate (TCEP)	115-96-8	mg/kg	100	< 1000 mg/kg	n.d.
Tris(2,3-dibromopropyl)-phosphate (TRIS)	126-72-7	mg/kg	100	not used	n.d.
Decabromodiphenyl ether (DecaBDE)	1163-19-5	mg/kg	100	< 1000 mg/kg	n.d.
Pentabromodiphenyl ether (PentaBDE)	32534-81-9	mg/kg	100	< 500 mg/kg	n.d.
Tris(1-aziridinyl)phosphineoxide (TEPA)	545-55-1	mg/kg	100	not used	n.d.
Polybromobiphenyls (PBB)	59536-65-1	mg/kg	100	not used	n.d.
Hexabromocyclododecane(HBCDD)	3194-55-6	mg/kg	100	< 100 mg/kg	n.d.
Heptabromodiphenyl ether (HeptaBDE)	68928-80-3	mg/kg	100	< 500 mg/kg	n.d.
Hexabromodiphenyl ether (HexaBDE)	36483-60-0	mg/kg	100	< 500 mg/kg	n.d.
Tetrabromodiphenyl ether (TetraBDE)	40088-47-9	mg/kg	100	< 500 mg/kg	n.d.

Abbreviation: < = less than
 RL = Reporting Limit
 ppm = part per million

Products

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6. Formaldehyde (EN ISO 14184-1)**Test Method:** EN ISO 14184-1:2011**Test Result:**

Test No.	Material No.	Test Parameter	Unit	RL	Regulatory Requirement	Result
T001	M001	Formaldehyde content	mg/kg	10	75	n.d.

Abbreviation: < = less than
RL = Reporting Limit
mg/kg = milligram per kilogram
g = gram

Products

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7.AP + APEO (Alkylphenols, Alkylphenol Ethoxylates)

Test Method: ISO 18254-1:2016
NP and OP: Organic solvent extraction, GCMS
NPEO and OPEO: Organic solvent extraction, LC-MS

Test Result:

Test No.	Material No.	Test Parameter	Unit	RL	Regulatory Requirement	Test Result
T001	M001	Nonylphenols (NP)	mg/kg	5	-	n.d.
		Octylphenols (OP)	mg/kg	5	-	n.d.
		Nonylphenolethoxylates (NPEO)	mg/kg	20	< 100 mg/kg	n.d.
		Octylphenolethoxylates (OPEO)	mg/kg	20	< 100 mg/kg	n.d.

Abbreviation: n.d. = not detected (< Reporting Limit)
RL = Reporting Limit
mg/kg = milligram per kilogram
NA = Not Applicable

Products

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8.Quinoline

Test Method: Ref. to DIN 54231:2022

Test Result:

Test No.	Material No.	Test Parameter	CAS No.	Unit	RL	Regulatory Requirement	Test Result	Conclusion
T001	M001	Quinoline	91-22-5	mg/kg	10	50	n.d.	Pass

Abbreviation: < = less than
RL = Reporting Limit
mg/kg = milligram per kilograms

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9. Polycyclic aromatic hydrocarbons (PAHs)

Test Method: AfPS GS 2019:01

Test Result:

Test No.					T001
Material No.					M001
Test Parameter	CAS NO	Unit	RL	Regulatory Requirement	Result
Benzo[a]anthracene	56-55-3	mg/kg	0.2	< 1 mg/kg	n.d.
Benzo[a]pyrene(BaP)	50-32-8	mg/kg	0.2	< 1 mg/kg	n.d.
Benzo[b]fluoranthene	205-99-2	mg/kg	0.2	< 1 mg/kg	n.d.
Benzo[k]fluoranthene	207-08-9	mg/kg	0.2	< 1 mg/kg	n.d.
Benzo[j]fluoranthene	205-82-3	mg/kg	0.2	< 1 mg/kg	n.d.
Benzo[e]pyrene	192-97-2	mg/kg	0.2	< 1 mg/kg	n.d.
Chrysene	218-01-9	mg/kg	0.2	< 1 mg/kg	n.d.
Dibenzo[a,h]anthracene	53-70-3	mg/kg	0.2	< 1 mg/kg	n.d.
Naphthalene	91-20-3	mg/kg	0.2	< 1 mg/kg	n.d.
Anthracene	120-12-7	mg/kg	0.2	Sum 10	n.d.
Benzo[g,h,i]perylene	191-24-2	mg/kg	0.2		n.d.
Fluoranthene	206-44-0	mg/kg	0.2		n.d.
Indeno[1,2,3-cd]pyrene	193-39-5	mg/kg	0.2		n.d.
Phenanthrene	85-01-8	mg/kg	0.2		n.d.
Pyrene	129-00-0	mg/kg	0.2		n.d.

Abbreviation: < = less than
 RL = Reporting Limit
 NA = Not Applicable
 mg/kg = milligram per kilogram

Products

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10.Pentachlorophenol (PCP) Content

Test Method: Ref. to 64 LFGB B82.02-8:2001

Test result

Test No.	Material No.	Test Parameter	Unit	RL	Regulatory Requirement	Test Result
T001	M001	Pentachlorophenol (PCP)	mg/kg	0.1	≤ 5 mg/kg	n.d.

Abbreviation: < = less than
RL = Reporting Limit
mg/kg = milligram per kilogram

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11.Per-and polyfluoroalkyl substances(PFAS)

Test Method: Reference EN 17681-1:2022/EN 17681-2:2022, determination by CI-GCMS, GC-MSMS and LC-MSMS.

Test Result:

Test No.					T001
Material No.					M001
Test Parameter	CAS NO	Unit	RL	Customer's requirement	Result
Perfluorooctanesulfonic acid (PFOS)	1763-23-1	µg/m ²	1	< 1 µg/m ²	n.d.
Perfluorooctane sulfonamide (PFOSA)	754-91-6	µg/m ²	1	< 1 µg/m ²	n.d.
Perfluorooctanoic acid (PFOA)	335-67-1	µg/m ²	1	< 1 µg/m ²	n.d.
Sodium perfluorooctanoate (PFOA-Na)	335-95-5	µg/m ²	1	< 1 µg/m ²	n.d.
Potassium perfluorooctanoate (PFOA-K)	2395-00-8	µg/m ²	1	< 1 µg/m ²	n.d.
Silver perfluorooctanoate (PFOA-Ag)	335-93-3	µg/m ²	1	< 1 µg/m ²	n.d.
Perfluorooctanoyl fluoride (PFOA-F)	335-66-0	µg/m ²	1	< 1 µg/m ²	n.d.
Ammonium pentadecafluorooctanoate (APFO)	3825-26-1	µg/m ²	1	< 1 µg/m ²	n.d.
Perfluorohexane sulfonic acid (PFHxS)	355-46-4	µg/m ²	1	< 1 µg/m ²	n.d.
1H,1H,2H,2H-Perfluorododecanol (10:2 FTOH)	865-86-1	µg/m ²	1	< 1 µg/m ²	n.d.
Perfluorocylethanol 8:2 (8:2 FTOH)	678-39-7	µg/m ²	1	< 1 µg/m ²	n.d.
Conclusion					Pass

Abbreviation: < = Less than
 RL = Reporting Limit
 mg/kg = milligram per kilogram
 µg/m² = microgram per square metre

Products

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12.Organotin compounds content

Test Method: Organic solvent extraction, GCMS
Ref. to ISO/TS 16179:2012

Test No.				T001
Material No.				M001
Test Parameter	Unit	RL	Regulatory Requirement	Result
TBT(Tributyltin) by weight of tin	%	0.01	< 0.1 %	n.d.
TPT(Triphenyltin) by weight of tin	%	0.01	< 0.1 %	n.d.
TOT(Trioctyltin) by weight of tin	%	0.01	< 0.1 %	n.d.
TCyT(Tricyclohexyltin) by weight of tin	%	0.01	< 0.1 %	n.d.
TPrT(Tripopyltin) by weight of tin	%	0.01	< 0.1 %	n.d.
Sum of Tin of tri-substituted organotins	%	NA	< 0.1 %	n.d.
DBT(Dibutyltin) by weight of tin	%	0.01	< 0.1 %	n.d.
DOT(Dioctyltin) by weight of tin	%	0.01	< 0.1 %	n.d.

Abbreviation: < = less than
RL = Reporting Limit
% = percentage
NA = Not Applicable

- END -

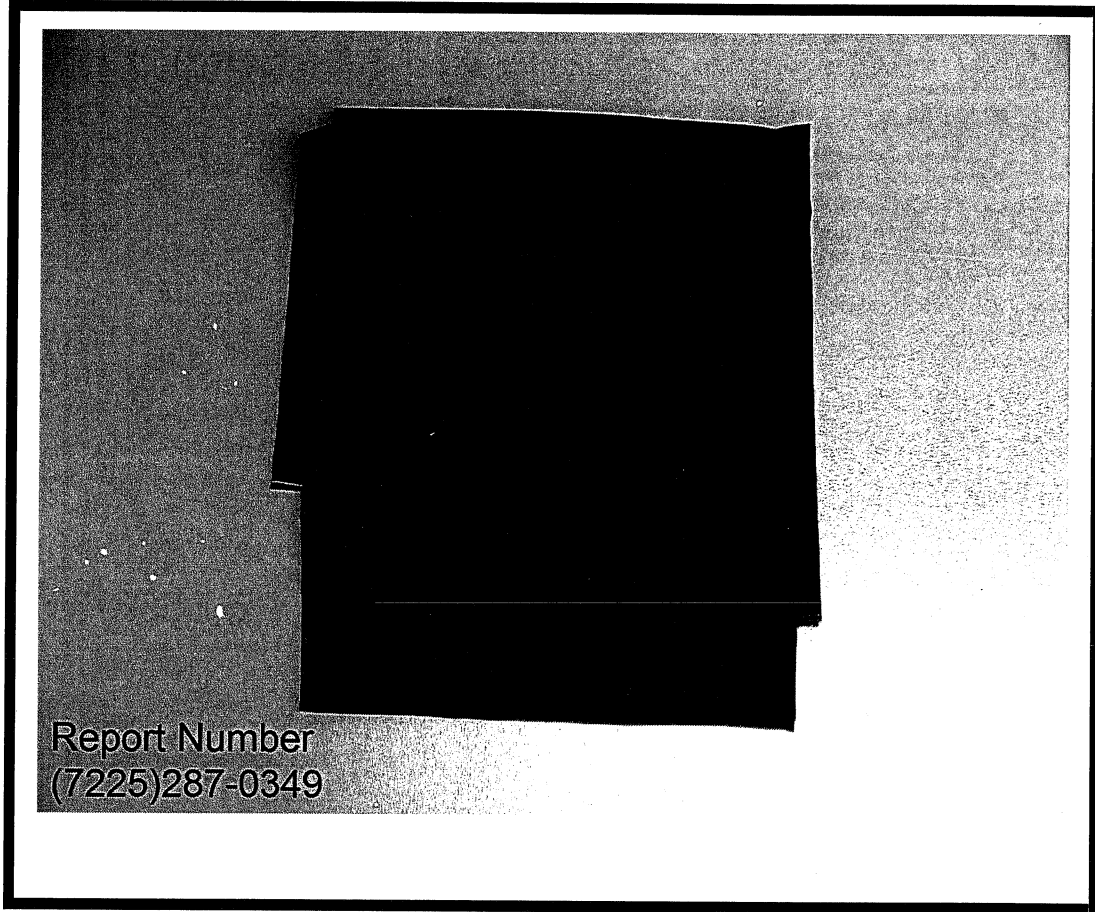
SUMMARY OF TEST RESULTS

TEST PERFORMED	PASS	FAIL	DATA
Flammability Of Clothing Textiles*	X		
* TURKAK Accredited- See Appendix A			

REMARKS

1	:	P: Pass, F: Fail, DATA: No Evaluation, N/A: Not Applicable
2	:	*The reported expanded uncertainty is based on the standard uncertainty multiplied by a coverage factor of k=2, providing a level of confidence of approximately 95%. Unless otherwise is specified, the uncertainty of measurement has not been taken into account when assessing pass/fail of the sample against the requirements of the standard. In case consideration of measurement uncertainties when assessing pass/ fail limits, some results may be in borderline. Information on uncertainty is contained in appendix A on this report.
3	:	The test and/or measurement results, the uncertainties (if applicable) with confidence probability and test methods are given on the following pages which are part of this report.

ORIGINAL
(SAMPLE IMAGE)



TEST RESULTS
REQUIREMENTS
FLAMMABILITY OF CLOTHING TEXTILES(16 CFR 1610)

CLASSIFICATION

IF SAMPLE FALLS UNDER SPECIFIC EXEMPTIONS AS LISTED BELOW, THE REPORT SHOULD BE RATED AS A PASS AND THE SPECIFIC EXEMPTION SHOULD BE NOTED IN THE REPORT.

CLASS 1

EXEMPT DUE TO FABRIC WEIGHT: 5.4 OZ/YD² THE SUBMITTED SAMPLE(S) IS(ARE) EXEMPT FROM FLAMMABILITY TESTING IN ACCORDANCE WITH 16 CFR 1610.1(D) WHICH STATES:

SPECIFIC EXEMPTIONS

EXPERIENCE GAINED FROM YEARS OF TESTING IN ACCORDANCE WITH THE STANDARD DEMONSTRATES THAT CERTAIN FABRICS CONSISTENTLY YIELD ACCEPTABLE RESULTS WHEN TESTED IN ACCORDANCE WITH THE STANDARD. THEREFORE, PERSONS AND FIRMS ISSUING AN INITIAL GUARANTY OF ANY OF THE FOLLOWING TYPES OF FABRICS, OR OF PRODUCTS MADE ENTIRELY FROM ONE OR MORE OF THESE FABRICS ARE EXEMPT FROM ANY REQUIREMENT FOR TESTING TO SUPPORT GUARANTIES OF THOSE FABRICS.

1. PLAIN SURFACE FABRICS, REGARDLESS OF FIBER CONTENT, WEIGHING 2.6 OUNCES PER SQUARE YARD OR MORE; AND
2. ALL FABRICS, BOTH PLAIN SURFACE AND RAISED-FIBER SURFACE, REGARDLESS OF WEIGHT, MADE ENTIRELY FROM ANY OF THE FOLLOWING FIBERS OR ENTIRELY FROM COMBINATION OF THE FOLLOWING FIBERS: ACRYLIC, MODACRYLIC, NYLON, OLEFIN, POLYESTER, WOOL.

****Indicates does not meet the requirements**

APPENDIX A –LIST OF MEASUREMENT UNCERTAINTIES

TEST NAME	STANDARD NAME	MEASUREMENT UNCERTAINTY
Flammability of Clothing Textiles	16 CFR 1610	±7,9 %

-END OF REPORT-