








**BRISBANE
MOSS**

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Technical Document		Article-	3101X		Release Date-	01 November 2024	
Description-	8 wale Heavyweight Corduroy			Composition-	100% Cotton		
Applications-	Apparel						
Weight (g/m2)		460		UNI 5114			
Weight Linear (g/m)		690					
Warp Yarn per Inch		46		UNI EN 1049/2			
Weft Yarn per Inch		230					
Warp Yarn Count		2/20s		ISO 7211/5			
Weft Yarn Count		16					
Minimum Usable Width		146cm		UNI EN 1773			
Customs Tariff Code (HS)		58012200					
County of Origin		Italy					
Yarn Origin		USA/Turkey					
Weaving Origin		Italy/Austria					
Dyeing/Finishing Origin		Italy					
Sample/Bulk Leadtime (Weeks)		Stock Supported					
Manufacturing Features-							
Piece Dye	Jig Dyeing Method		Reactive Dyestuffs				
Care Instructions-						UNI EN ISO 3758	
		    					
Dimensional Stability-							
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%					
Physical Features-							
Tensile Strength	Warp	45kg		UNI EN ISO 13934-1			
	Weft	45kg					
Tear Strength	Warp	2700g		UNI EN ISO 13927-2			
	Weft	2700g					
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	3
Dry Ironing	UNI EN ISO 105-X11		3	3	3	3	3	3	3
Wet Ironing	UNI EN ISO 105-X11		3	3	3	3	3	3	3
Acid Pers	UNI EN ISO 105-E04		3	3	3	3	3	3	3
Alkaline Pers	UNI EN ISO 105-E04		3	3	3	3	3	3	3
Water	UNI EN ISO 105-E01		3	3	3	3	3	3	3
Washing	UNI EN ISO 105-C06		3	3	3	3	3	3	3
Dry Rubbing	UNI EN ISO 105-X12				3/4				
Wet Rubbing	UNI EN ISO 105-X12				2				
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	4
Dry Ironing	UNI EN ISO 105-X11		4	4	4	4	4	4	4
Wet Ironing	UNI EN ISO 105-X11		4	4	4	4	4	4	4
Acid Pers	UNI EN ISO 105-E04		4	4	4	4	4	4	4
Alkaline Pers	UNI EN ISO 105-E04		4	4	4	4	4	4	4
Water	UNI EN ISO 105-E01		4	4	4	4	4	4	4
Washing	UNI EN ISO 105-C06		4	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
Better Cotton Available		1030682-1

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The following sample(s) was/were submitted and identified on behalf of the client as:

Sample Description : 8 Wale Heavyweight Corduroy
Customer : **Brisbane Moss; Bridgeroyd Works, Todmorden, OL14 6DF**
Product type : Apparel Fabric 3101X 100% Cotton 460 gsm
PO Number : 13360-61
Colour : Black/3213
Contact person : Stephen Newham, Joshua Barker-Lockwood

Test Performed : Selected test(s) as requested by applicant
* * * * *
Sample Receiving Date : 17th October 2024
Testing Period : 17th October 2024 – 7th November 2024
Test Result(s) : For further details, please refer to the following page(s).

Conclusion:

Test Property			
Colour Fastness to Washing	Data	Tear Strength	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	Formaldehyde*	Pass
Colour Fastness to Rubbing	Data	pH Value	Data
Dimensional Stability to Washing	Data	Bow & Skew**	Data
Dimensional Stability to Dry Cleaning**	Data	Azo Dyes*	Pass
Dimensional Stability to Free Steam (wira)*	Data		
Tensile Strength	Data		

*Sub Contracted tests withing TUV Group Laboratories (Turkey)

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Signed for and on behalf of
TÜV Rheinland UK LTD

Christopher
Clarke

Chris Clarke
Laboratory Supervisor

Digitally signed by
Christopher Clarke
Date: 2024.11.07 15:15:18 Z



8400

Test result is drawn according to the kind and extent of tests performed.

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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	Result
Acetate	4-5
Cotton	4
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
Polyamide	4
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: 2-3	% Soak: 100	Wet: 2-3 % Soak: 100
Atmospheric Conditions: 65% RH, 20°C			
Conditioning time of sample and rubbing cloth: 4 Hours			



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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: 3-4

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	52.9 kg
Weft	45.4 kg

Dimensional Change After Washing BS EN ISO 6330: 2012 3N @ 30°C Flat Dry	
Direction	%Change
Warp	-1.4
Weft	-2.9

Dimensional Change After Commercial Dry Cleaning (Commercial dry clean cycle)	
Direction	%Change
Warp	-0.3
Weft	-1.4

Dimensional Change to Free Steam (wira) BS 4323: 1979	
Direction	%Change
Warp	-1.0 %
Weft	-1.6 %



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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: 16.8, Ne: 9.9 Weft: Nm: 25.0, Ne: 14.7 Nm: Metric Count Ne: Cotton Count

Formaldehyde Content ISO 14184-1: 2011	
Sample	Result
	Not Detected <16 mg/kg

pH Value ISO 3071: 2005 (withdrawn)	
Sample	Result
	pH 7.30
pH value of Grade 3 water: 7.1	
Temperature of the Grade 3 water: 20.3	

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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	2753.2 g
Weft	2906.2 g

4. 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.				T001-1
		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-Toluylenediamine	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.
A23^	2,4-xylidine	95-68-1	mg/kg	5	30	n.d.
A24^	2,6-xylidine	87-62-7	mg/kg	5	30	n.d.
*2	2-Naphthyl-ammoniumacetate	553-00-4	mg/kg	5	30	n.d.
A26	4-chloro-o-toluidinium chloride	3165-93-3	mg/kg	5	30	n.d.
A25	4-chloro-o-toluidinium chloride	3165-93-3	mg/kg	5	30	n.d.
A27	4-Methoxy-m-phenylene diammonium sulphate	39156-41-7	mg/kg	5	30	n.d.
A28	2,4,5-trimethylaniline hydrochloride	21436-97-5	mg/kg	5	30	n.d.



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Softlines

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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.

-End of Test Report-



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Softlines

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The following sample(s) was/were submitted and identified on behalf of the client as:

Sample Description : 8 Wale Heavyweight Corduroy
Customer : **Brisbane Moss; Bridgeroyd Works, Todmorden, OL14 6DF**
Product type : Apparel 3101X 100% Cotton 460 gsm
PO Number : 13361-27
Colour : Fawn/200
Contact person : Stephen Newham, Joshua Barker-Lockwood

Test Performed : Selected test(s) as requested by applicant
* * * * *
Sample Receiving Date : 17th October 2024
Testing Period : 17th October 2024 – 6th November 2024
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)

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Signed for and on behalf of
TÜV Rheinland UK LTD

Christopher
Clarke

Digitally signed by
Christopher Clarke
Date: 2024.11.06 14:47:16 Z

Chris Clarke
Laboratory Supervisor



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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	Dry: 4-5	Wet: 4
Atmospheric Conditions: 65% RH, 20°C				
Conditioning time of sample and rubbing cloth: 4 Hours				

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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	<p>Immediately After Testing Colour Change</p> <p>Dry: 4-5 Damp: 4-5 Wet: 4-5</p> <p>After Conditioning Colour Change</p> <p>Dry: 4-5 Damp: 4-5 Wet: 4-5</p> <p>Colour Change</p> <p>Damp: 4-5 Wet: 3-4</p>

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	

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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 Report	No. 28515553	Date: 3rd February 2025	Page 1 of 7
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The following sample(s) was/were submitted and identified on behalf of the client as:

Sample Description : 8 Wale Heavy Corduroy
Customer : **Brisbane Moss; Bridgeroyd Works, Todmorden, OL14 6DF**
Product type : Apparel 3101X 100% Cotton
PO Number : 13309-46A
Colour : DK Navy / 986
Contact person : Stephen Newham, Joshua Barker-Lockwood

Test Performed : Selected test(s) as requested by applicant
 Sample Receiving Date : 22nd January 2025
 Testing Period : 22nd January 2025 – 3rd February 2025
 Test Result(s) : For further details, please refer to the following page(s).

Conclusion:

Test Property – REACH Annex XVII	
Banned Azo Dyes*	Pass
Aromatic Amine Salts*	Pass
Dimethyl Fumarate*	Pass
Migration of Heavy Metals*	Pass
Flame Retardants*	Pass
Formaldehyde (EN ISO 14184-1)*	Pass
AP + APEO (Alkylphenols, Alkylphenol Ethoxylates)*	Pass
Quinoline*	Pass
Polycyclic Aromatic Hydrocarbons (PAHs)*	Pass
Pentachlorophenol (PCP) Content*	Pass
Per – and Polyfluoroalkyl Substances (PFAS)*	Pass
Organotin Compounds Content*	Pass

*Sub Contracted tests withing TUV Group Laboratories (Turkey)

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Signed for and on behalf of
TÜV Rheinland UK LTD

**Christopher
Clarke**

Chris Clarke
Laboratory Supervisor

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Christopher Clarke
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Test result is drawn according to the kind and extent of tests performed.

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Material No.	Material	Color	Location
M001	Textile	Navy	Woven base

Results:

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.				T001-1
		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-Toluylenediamine	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/ka = milligram per kilogram



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.

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

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



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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

5.Flame Retardants

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

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



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	Test Result	Conclusion
T001	M001	Formaldehyde content	mg/kg	10	75	n.d.	Pass

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

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.
		Nonylphenoethoxylates (NPEO)	mg/kg	20	< 100 mg/kg	n.d.
		Octylphenoethoxylates (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

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



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

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/m²	1	< 1 µg/m²	n.d.
Perfluorooctanoic acid (PFOA)	335-67-1	µg/m²	1	< 1 µg/m²	n.d.
Conclusion					Pass

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

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 (Tripropyltin) 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

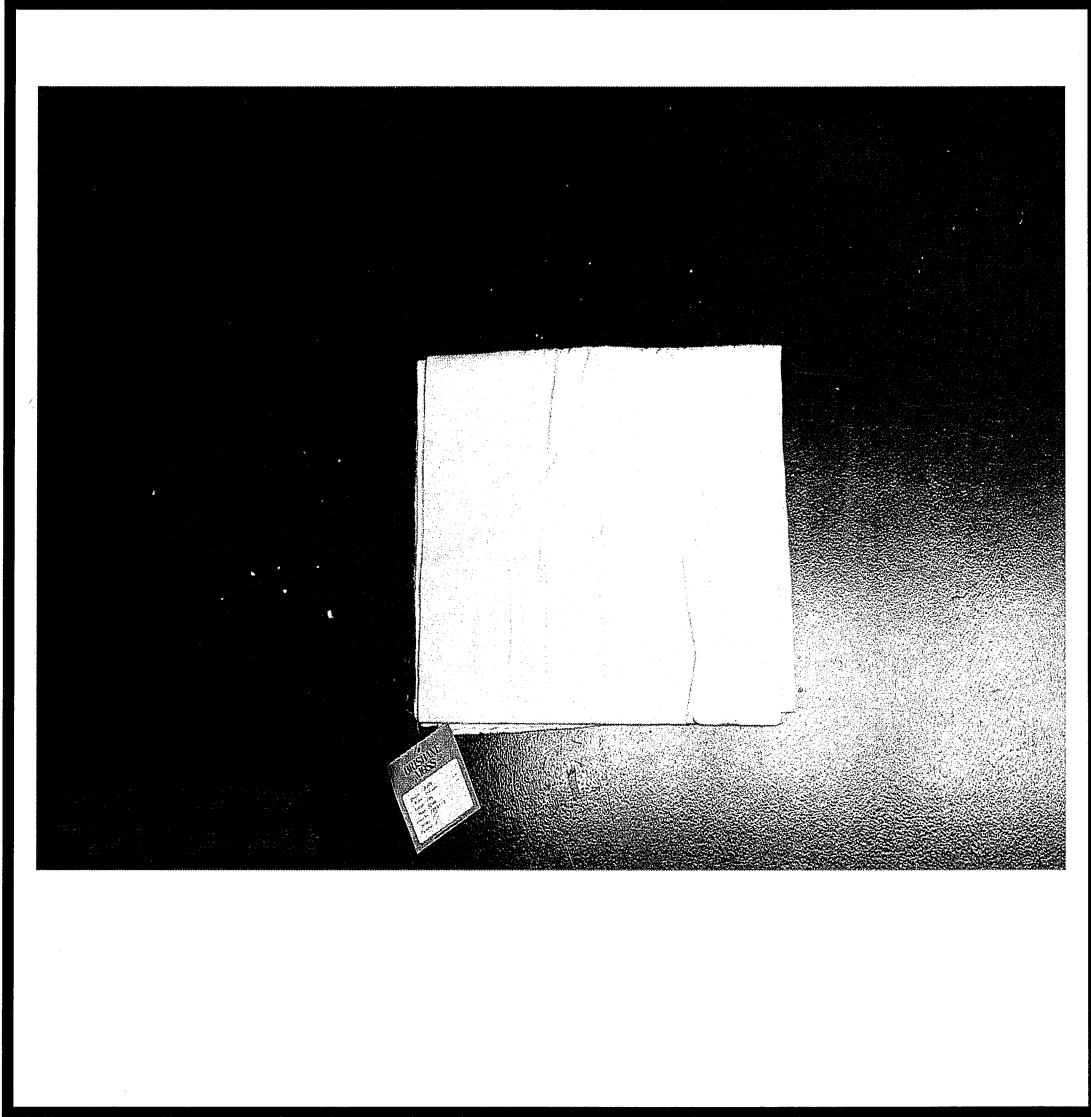
-End of Test Report-

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)

SAMPLE DESCRIPTION: WOVEN FABRIC

FIBER CONTENT: 100% COTTON

FABRIC WEIGHT: /

FABRIC SURFACE: RAISED FIBER SURFACE

DIRECTION TO BE TESTED: FACE / LENGTHWISE
(FROM PRELIMINARY TEST)

AS RECEIVED
AFTER REFURBISHING

TIME OF FLAME SPREAD (S)	BURN CODE	TIME OF FLAME SPREAD (S)	BURN CODE
1	1 SF POI	P1	P1 SF POI
2	2 SF POI	P2	P2 SF POI
3	3 SF POI	P3	P3 SF POI
4	4 SF POI	P4	P4 SF POI
5	5 SF POI	P5	P5 SF POI
AVG. ____ SECONDS FOR# ____ SPECIMENS		AVG. ____ SECONDS FOR# ____ SPECIMENS	
DNI	DID NOT IGNITE.		
IBE	IGNITED, BUT EXTINGUISHED.		
SF UC	SURFACE FLASH, UNDER THE STOP THREAD, BUT DOES NOT BREAK THE STOP THREAD.		
SF PW	SURFACE FLASH, PART WAY. NO TIME SHOWN BECAUSE THE SURFACE FLASH DID NOT REACH THE STOP THREAD.		
SF POI	SURFACE FLASH, AT THE POINT OF IMPINGEMENT ONLY. (EQUIVALENT TO "DID NOT IGNITE" FOR PLAIN SURFACES.)		
0.0 SEC.	ACTUAL BURN TIME MEASURED AND RECORDED BY THE TIMING DEVICE.		
0.0 SF ONLY	TIME IN SECONDS, SURFACE FLASH ONLY. NO DAMAGE TO THE BASE FABRIC.		
0.0 SFBB	TIME IN SECONDS, SURFACE FLASH BASE BURN STARTING AT PLACES OTHER THAN THE POINT OF IMPINGEMENT AS A RESULT OF SURFACE FLASH.		
0.0 SFBB POI	TIME IN SECONDS, SURFACE FLASH BASE BURN STARTING AT THE POINT OF IMPINGEMENT. THIS RESULT DOES NOT QUALIFY AS A BASE BURN UNDER THE CURRENT INTERPRETATION OF PART OF 16 CFR PART 1610.		
0.0 SFBB POI*	TIME IN SECONDS, SURFACE FLASH BASE BURN POSSIBLY STARTING AT THE POINT OF IMPINGEMENT. THE ASTERISK (*) IS ACCOMPANIED BY THE FOLLOWING STATEMENT: "UNABLE TO MAKE ABSOLUTE DETERMINATION AS TO SOURCE OF BASE BURNS." THIS STATEMENT IS ADDED TO THE RESULT OF ANY SPECIMEN IF THERE IS A QUESTION AS TO ORIGIN OF THE BASE BURN.		

COMMENTS: PASS CLASS 1, NORMAL FLAMMABILITY OF COMMERCIAL STANDARD 16 CFR 1610, FORMERLY 191-53 OF UNITED STATES FLAMMABILITY FABRIC ACT.

**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-

C/N/ET/SD



**BV CPS TEST LABORATUVARLARI LTD. STI.
BUREAU VERITAS CONSUMER PRODUCTS
SERVICES**

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TEST REPORT

LAB LOCATION: TURKEY

SERVICE TYPE: Regular

LAB NUMBER: (7225)150-0403

THE DATE OF RECEIPT OF TEST ITEM: May 30, 2025

START DATE FOR TESTING: May 30, 2025

DATE END OF TEST: June 03, 2025

NUMBER OF WORKING DAYS: 3.0

CUSTOMER NAME / ADDRESS CONTACT NAME : M CHAPMAN&SONS LTD
(Address: Bridgeroyd Works, Halifax Rd, Todmorden, Lancashire, OL14 6DF)
(Attn: Paige/Josh)

BUYER : /

SUPPLIER REFERENCE : Style Number: /
PO Number: 13027

SAMPLE DESCRIPTION : Woven Panel Sample (3101X)
(Claimed Fiber Content: /)
(Claimed Fabric Weight: /)

COLOUR : Black 3213

SUBMITTED CARE INSTRUCTION: :

REASON FOR REVISION : /



Date Out
(03/06/2025)

Furkan Yilmaz
Client Team Lead

Hasan Altıngül
Deputy General Manager Operation
(03/06/2025)

C/N/ ET/SD

This report is governed by, and incorporates by reference, the Conditions of Testing as posted at the date of issuance of this report at <http://www.bureauveritas.com/home/about-us/our-business/cps/about-us/terms-conditions/> and is intended for your exclusive use. Any copying or replication of this report to or for any other person or entity, or use of our name or trademark, is permitted only with our prior written permission. This report sets forth our findings solely with respect to the test samples identified herein. The results set forth in this report are not indicative or representative of the quality or characteristics of the lot from which a test sample was taken or any similar or identical product unless specifically and expressly noted. Our report includes all of the tests requested by you and the results thereof based upon the information that you provided to us. Measurement uncertainty is only provided upon request for accredited tests. 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. Statements of conformity are based on simple acceptance criteria without taking measurement uncertainty into account, unless otherwise requested in writing. You have 60 days from the date of issuance of this report to notify us of any material error or omission caused by our negligence or if you require measurement uncertainty, provided, however, that such notice shall be in writing and shall specifically address the issue you wish to raise. A failure to raise such issue within the prescribed time shall constitute your unqualified acceptance of the completeness of this report, the tests conducted and the correctness of the report contents. Testing reports without signature are not valid. BV CPS Test Laboratories is not responsible for deviations for the accuracy of the information provided by the customer that may affect the validity of the test results. Test results given in this test report represent only the sample(s) delivered to the laboratory, as sent to BV CPS Test Laboratories by the client/vendor via courier, cargo and/or manual delivery. No sampling is performed by BV CPS Test Laboratories.

SUMMARY OF TEST RESULTS

TEST PERFORMED	PASS	FAIL	DATA
Abrasion Resistance Of Fabrics By Martindale Method: Specimen Breakdown*	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.

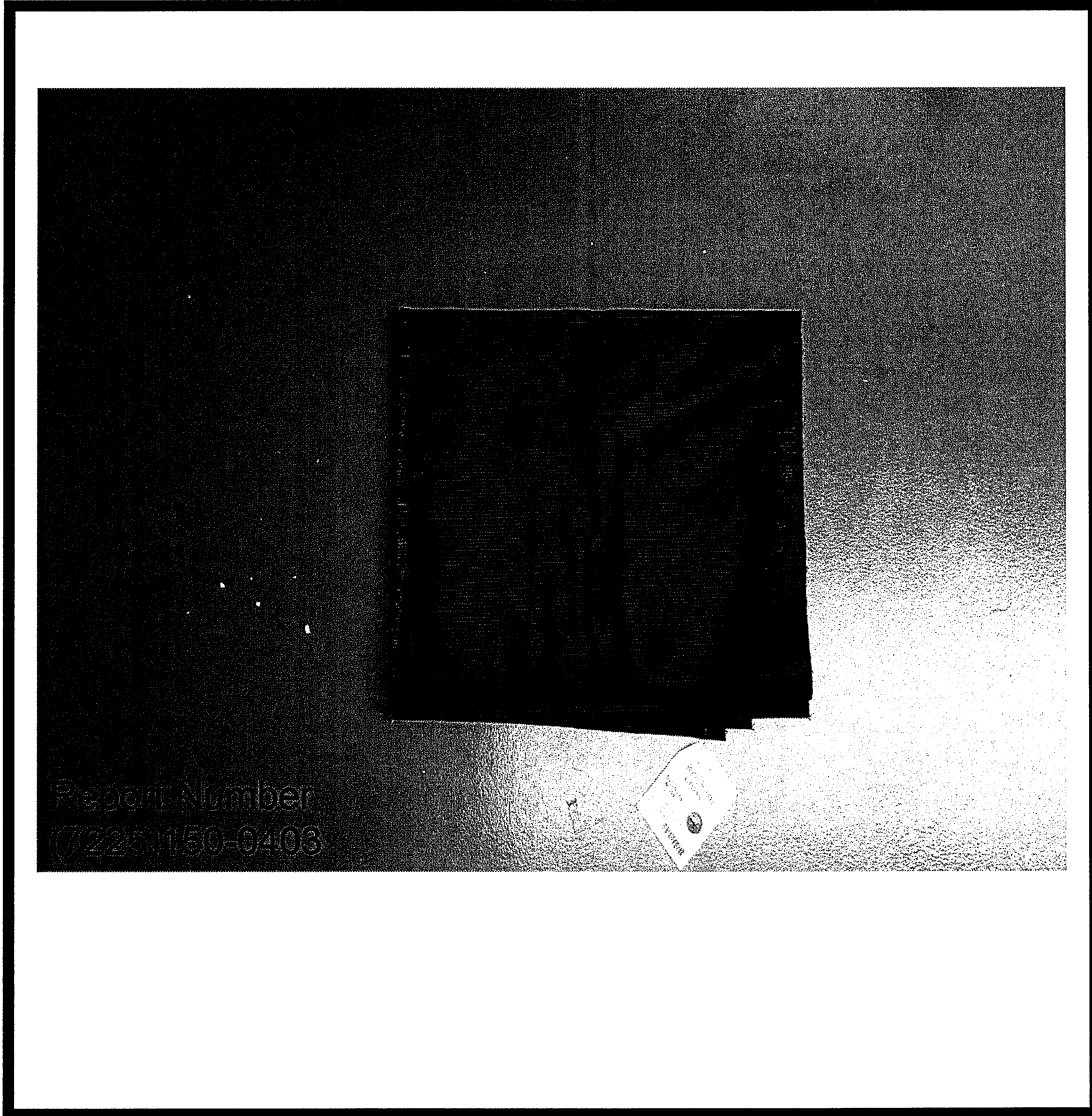
REMARK:

If there are questions or concerns on this report, please contact:

+90 212 494 35 35

furkan.yilmaz@bureauveritas.com

ORIGINAL
(SAMPLE IMAGE)



<u>TEST RESULTS</u>	<u>REQUIREMENTS</u>
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ABRASION RESISTANCE OF FABRICS BY MARTINDALE METHOD: SPECIMEN BREAKDOWN (BS EN ISO 12947-2 / Pressure Used 795g- 12 kPa)					
	Sample 1	Sample 2	Sample 3	Lowest Result	
NO. OF RUBS	>40.000 No Breakdown	>40.000 No Breakdown	>40.000 No Breakdown	>40.000 No Breakdown	>40.000 REVS
SHADE CHANGE @6000 Rubs	4.5				/

** Indicates below the requirement.

APPENDIX A –LIST OF MEASUREMENT UNCERTAINTIES		
TEST NAME	STANDARD NAME	MEASUREMENT UNCERTAINTY
Abrasion Resistance Of Fabrics By Martindale Method: Specimen Breakdown	BS EN ISO 12947-2	±4.5%

-End of Report-