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

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| **Technical Document** | Article- | **Wordsworth** | Release Date- | 01 October 2025 |
|---|---|---|---|---|
| Description- | Half Panama | | Composition- | 100% Cotton |
| Applications- | Apparel | | | |

| | | | |
|---|---|---|---|
| Weight (g/m2) | | 215 | UNI 5114 |
| Weight Linear (g/m) | | 323 | |
| Warp Yarn per Inch | | 96 | UNI EN 1049/2 |
| Weft Yarn per Inch | | 72 | |
| Warp Yarn Count | | 2/40s | ISO 7211/5 |
| Weft Yarn Count | | 2/40s | |
| 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 | |
| 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 | 430N | UNI EN ISO 13934-2 |
| | Weft | 310N | |
| Tear Strength | Warp | 12N | UNI EN ISO 13937-2 |
| | Weft | 14N | |
| Seam Slippage (6mm) | Warp | >200N | UNI EN ISO 13936-1 |
| | Weft | >200N | |
| Abrasion Resistance (9kPa) | Face | 3/4 @ 5000 Rubs | UNI EN ISO 12947-2 |
| Pilling (2000 Revolutions) | Face | 4/5 @ 2000 Rubs | UNI EN ISO 12945-2 |
| Martindale | Face | Grade 3/4 | 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 | | | | | |
| | | | | WO | PC | PL | PA | CO | AC |
| Dry Cleaning | UNI EN ISO 105-D01 | | 4/5 | 4/5 | 4/5 | 4/5 | 4/5 | 4/5 | 4/5 |
| Dry Ironing | UNI EN ISO 105-X11 | | 4/5 | 4/5 | 4/5 | 4/5 | 4/5 | 4/5 | 4/5 |
| Wet Ironing | UNI EN ISO 105-X11 | | 4/5 | 4/5 | 4/5 | 4/5 | 4/5 | 4/5 | 4/5 |
| Acid Pers | UNI EN ISO 105-E04 | | 4/5 | 4/5 | 4/5 | 4/5 | 4/5 | 4/5 | 4/5 |
| Alkaline Pers | UNI EN ISO 105-E04 | | 4/5 | 4/5 | 4/5 | 4/5 | 4/5 | 4/5 | 4/5 |
| Water | UNI EN ISO 105-E01 | | 4/5 | 4/5 | 4/5 | 4/5 | 4/5 | 4/5 | 4/5 |
| Washing | UNI EN ISO 105-C06 | | 4/5 | 4/5 | 4/5 | 4/5 | 4/5 | 4/5 | 4/5 |
| 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 | | | | | |
| | | | | WO | PC | PL | PA | CO | AC |
| Dry Cleaning | UNI EN ISO 105-D01 | | 4/5 | 4/5 | 4/5 | 4/5 | 4/5 | 4/5 | 4/5 |
| Dry Ironing | UNI EN ISO 105-X11 | | 4/5 | 4/5 | 4/5 | 4/5 | 4/5 | 4/5 | 4/5 |
| Wet Ironing | UNI EN ISO 105-X11 | | 4/5 | 4/5 | 4/5 | 4/5 | 4/5 | 4/5 | 4/5 |
| Acid Pers | UNI EN ISO 105-E04 | | 4/5 | 4/5 | 4/5 | 4/5 | 4/5 | 4/5 | 4/5 |
| Alkaline Pers | UNI EN ISO 105-E04 | | 4/5 | 4/5 | 4/5 | 4/5 | 4/5 | 4/5 | 4/5 |
| Water | UNI EN ISO 105-E01 | | 4/5 | 4/5 | 4/5 | 4/5 | 4/5 | 4/5 | 4/5 |
| Washing | UNI EN ISO 105-C06 | | 4/5 | 4/5 | 4/5 | 4/5 | 4/5 | 4/5 | 4/5 |
| Dry Rubbing | UNI EN ISO 105-X12 | | | | | | | 4/5 | |
| Wet Rubbing | UNI EN ISO 105-X12 | | | | | | | 4 | |
| 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 |
| Okeo-Tex Standard 100 Certified | | 11-52140 Shirley |

**BV CPS TEST LABORATUVARLARI LTD. STI.**
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Test
TS EN ISO/IEC 17025
AB-0505-T

| |
|---|
| AB-0505-T |
| 72252820318 |
| 10-25 |

# TEST REPORT

**LAB LOCATION:TURKEY**
**SERVICE TYPE: Regular**
**LAB NUMBER: (7225)282-0318**
**THE DATE OF RECEIPT OF TEST ITEM: October 09, 2025**
**START DATE FOR TESTING: October 09, 2025**
**DATE END OF TEST: September 14, 2025**
**NUMBER OF WORKING DAYS: 4.0**

| | | |
|---|---|---|
| **CUSTOMER NAME / ADDRESS CONTACT NAME** | : | M CHAPMAN&SONS LTD<br>Address: Chapman Works, Manchester Road, Dunnockshaw,Burnley, BB121 5PW.)<br>(Attn: Paige Newham-Foulds) |
| **BUYER** | : | / |
| **SUPPLIER REFERENCE** | : | Style Number: /<br>PO Number: /<br>Unique Product Code: / |
| **SAMPLE DESCRIPTION** | : | Woven Fabric Samples (Wordsworth-Cotton Plain)<br>(Claimed Fiber Content: 100%Cotton)<br>(Claimed Fabric Weight: /) |
| **COLOUR** | : | Dark Brown 1419 |
| **SUBMITTED CARE INSTRUCTION** | : |  |
| **REASON FOR REVISION** | : | / |

***Date Out***
(14/10/2025)

**Demet Sinan**
**Senior Client Team Lead**

**Hasan Altingul**
**Deputy General Manager Operations**
(14/10/2025)

C/N/ ET/SD

## SUMMARY OF TEST RESULTS

| TEST PERFORMED | PASS | FAIL | DATA |
|---|---|---|---|
| Dimensional Stability To Washing * | | | X |
| Dimensional Stability to Wira Steam | | | X |
| Dimensional Stability Dry Cleaning* | | | X |
| Colorfastness To Domestic And Commercial Laundering* | | | X |
| Colourfastness To Water* | | | X |
| Colourfastness To Perspiration* | | | X |
| Colourfastness To Drycleaning * | | | X |
| Colourfastness To Hot Pressing | | | X |
| Colourfastness To Light* | | | X |
| Colorfastness To Rubbing* | | | X |
| Tear Properties Of Fabrics: Single Tear Method * | | | X |
| Tensile Properties Of Fabrics: Grab Method * | | | X |
| Slippage Resistance Of Yarns At Seam: Fixed Seam Opening Method* | | | X |
| Abrasion Resistance Of Fabrics By Martindale Method: Specimen Breakdown* | X | | |
| Fabric Propensity To Surface Fuzzing And To Pilling: Modified Martindale Method* | | | X |
| Flammability Of Clothing Textiles* | X | | |
| Ph Value* | | | X |
| Formaldehyde* | | | X |
| Azo-Amines And Arylamine Salts* | | | X |
| Alkylphenol (AP) and Alkylphenol Ethoxylates (APEOs), including all isomers* | | | X |
| Chlorophenols* | | | X |
| Quinoline | | | X |
| Organotin Compounds* | | | X |
| Flame Retardants * | | | X |
| Per- And Polyfluoroalkyl Substances (PFAS)* | | | X |
| Dimethylfumarate (Dmfu) | | | X |
| Extractable Heavy Metals | | | 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. |

| COMPONENT LIST / LIST OF MATERIALS | | |
| --- | --- | --- |
| **COMPONENT** | **DESCRIPTION** | **COMPOSITION** |
| I001 | Brown Base | / |
| I002 | Brown Base (Without Extraction) | / |

**ORIGINAL**
(SAMPLE IMAGE)

| TEST RESULTS | REQUIREMENTS |
|---|---|

**DIMENSIONAL STABILITY TO WASHING**
(BS EN ISO 6330, Wascator 3M@30C°, Flat Dry,Cool Iron)

| | Original (mm) | After Wash (mm) | Change (%) | / |
|---|---|---|---|---|
| LENGTH | 350 | 347 | -0.9 | |
| WIDTH | 350 | 347 | -0.9 | |

(+) Extension (-) Shrinkage

**DIMENSIONAL STABILITY TO DRY CLEANING**
(ISO 3175-1) 1 Cycle

| | Original (mm) | After 1 Dry Clean (mm) | Dimensional Change (%) | |
|---|---|---|---|---|
| Length | 350 | 349 | -0.3 | |
| Width | 350 | 349 | -0.3 | / |

(+) EXTENSION (-) SHRINKAGE

**DIMENSIONAL STABILITY TO WIRA STEAM**
(BS 4323)

| | Original (mm) | After Steam (mm) | Dimensional Change (%) | |
|---|---|---|---|---|
| Length | 254 | 250 | -1.6 | / |
| Width | 254 | 250 | -1.6 | |

(+) Extension (-) Shrinkage

| TEST RESULTS | | REQUIREMENTS |
|---|---|---|
| **COLOURFASTNESS TO DOMESTIC AND COMMERCIAL LAUNDERING** (ISO 105-C06:2010, TEST NO: A2S MECHANICAL WASH AT 30°C (MOD) IN 0.4% ECE DETERGENT AND 0.1% SODIUM PERBORATE SOLUTION WITH 10 STEEL BALLS), MULTIFIBRE DW) | | |
| | | |
| Colour Change | 4-5 | / |
| Self-Staining | / | / |
| | | |
| Colour Staining on Acetate | 4-5 | / |
| Colour Staining on Cotton | 4-5 | |
| Colour Staining on Polyamide | 4-5 | |
| Colour Staining on Polyester | 4-5 | |
| Colour Staining on Acrylic | 4-5 | |
| Colour Staining on Wool | 4-5 | |

| | | |
|---|---|---|
| **COLOURFASTNESS TO WATER** (ISO 105-E01:2013 MULTIFIBRE DW) | | |
| | | |
| Colour Change | 4-5 | / |
| Self-Staining | / | / |
| | | |
| Colour Staining on Acetate | 4-5 | / |
| Colour Staining on Cotton | 4-5 | |
| Colour Staining on Polyamide | 4-5 | |
| Colour Staining on Polyester | 4-5 | |
| Colour Staining on Acrylic | 4-5 | |
| Colour Staining on Wool | 4-5 | |

| TEST RESULTS | REQUIREMENTS |
|---|---|

**COLOURFASTNESS TO PERSPIRATION**
(ISO 105-E04:2013, MULTIFIBRE DW)

| | Acid | Alkaline | |
|---|---|---|---|
| Colour Change | 4-5 | 4-5 | / |
| Self-Staining | / | / | / |
| Colour Staining on Acetate | 4-5 | 4-5 | / |
| Colour Staining on Cotton | 4-5 | 4-5 | |
| Colour Staining on Polyamide | 4-5 | 4-5 | |
| Colour Staining on Polyester | 4-5 | 4-5 | |
| Colour Staining on Acrylic | 4-5 | 4-5 | |
| Colour Staining on Wool | 4-5 | 4-5 | |

**COLOURFASTNESS TO DRYCLEANING**
(ISO 105-D01: 2010, MULTIFIBRE DW)

| | | |
|---|---|---|
| Colour Change | 4-5 | / |
| Self-Staining | / | / |
| Colour Staining on Acetate | 4-5 | / |
| Colour Staining on Cotton | 4-5 | |
| Colour Staining on Polyamide | 4-5 | |
| Colour Staining on Polyester | 4-5 | |
| Colour Staining on Acrylic | 4-5 | |
| Colour Staining on Wool | 4-5 | |

**COLOURFASTNESS TO HOT PRESSING**
(ISO 105-X11:1994)
WARM IRON

| | DRY | DAMP | WET | |
|---|---|---|---|---|
| Colour Change – After Testing | 4-5 | 4-5 | 4-5 | / |
| Colour Staining - After Testing | 4-5 | 4-5 | 4-5 | / |
| Colour Change – After Conditioning For 4 Hrs | 4-5 | 4-5 | 4-5 | / |

| TEST RESULTS | REQUIREMENTS |
|---|---|

| **COLOURFASTNESS TO LIGHT** (ISO 105-B02:2014, METHOD 3, XENON-ARC LAMP, MODIFICATION: EXPOSURE UP TO CONTRAST OF GREY SCALE 4) | | |
|---|---|---|
| | | |
| RATING (NUMERICAL MEAN) | 4 | / |
| | | |

| **COLOURFASTNESS TO RUBBING** (ISO 105-X12:2016 / BS EN ISO 105-X12:2016 / DIN EN ISO 105-X12:2016) | | | |
|---|---|---|---|
| | | | |
| | LENGTHWISE | WIDTHWISE | |
| Dry | 4 | 4 | / |
| Wet | 2-3 | 2-3 | / |
| | | | |

| | |
|---|---|
| GRADE 5 NEGLIGIBLE OR NO CHANGE | GRADE 5 NEGLIGIBLE OR NO STAINING |
| GRADE 4 SLIGHTLY CHANGED | GRADE 4 SLIGHTLY STAINED |
| GRADE 3 NOTICEABLY CHANGED | GRADE 3 NOTICEABLY STAINED |
| GRADE 2 CONSIDERABLY CHANGED | GRADE 2 CONSIDERABLY STAINED |
| GRADE 1 MUCH CHANGED | GRADE 1 HEAVILY STAINED |

| TEST RESULTS | REQUIREMENTS |
|---|---|

**FABRIC PROPENSITY TO SURFACE PILLING, FUZZING OR MATTING: MODIFIED MARTINDALE METHOD** (BS EN ISO 12945-2, TESTED AS RECEIVED)

| | | | | | |
|---|---|---|---|---|---|
| **PILLING** | **1** | **2** | **3** | **AVERAGE** | |
| Grade at 2000 Rubs | 4-5 | 4-5 | 4-5 | 4-5 | / |
| **FUZZING** | **1** | **2** | **3** | **AVERAGE** | |
| Grade at 2000 Rubs | 4-5 | 4-5 | 4-5 | 4-5 | / |

*REMARK

| PILLING GRADING SCHEME | |
|---|---|
| GRADE 5 | NO CHANGE |
| GRADE 4 | PARTIALLY FORMED PILLS |
| GRADE 3 | MODERATE PILLING |
| GRADE 2 | DISTINCT PILLING |
| GRADE 1 | SEVERE PILLING |

**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 | >20000 Revs<br>No Breakdown | >20000 Revs<br>No Breakdown | >20000 Revs<br>No Breakdown | >20000 Revs<br>No Breakdown | 20000 Revs |
| SHADE CHANGE @5000 Rubs | 3-4 | | | | / |

**TEAR PROPERTIES OF FABRICS: SINGLE TEAR METHOD**
(ISO 13937-2:2000)

| | | |
|---|---|---|
| ACROSS WARP (N) | 12.5 | / |
| ACROSS WEFT (N) | 14.6 | / |
| *REMARK | | |

**TENSILE PROPERTIES OF FABRICS: GRAB METHOD**
(ISO 13934-2:1999)

| | | |
|---|---|---|
| WARP (N) | 455 | / |
| WEFT (N) | 322 | / |
| *REMARK | | |

| TEST RESULTS | REQUIREMENTS |
|---|---|

**SLIPPAGE RESISTANCE OF YARNS AT SEAM: FIXED SEAM OPENING METHOD**
(ISO 13936-1:2004)

| | SEAM SLIPPAGE | SEAM STRENGTH(N) | / |
|---|---|---|---|
| WARP | NSS | >200 | |
| WEFT | NSS | >200 | |

| * REMARKS | |
|---|---|
| (A) FABRIC TEAR<br>(B) FABRIC TEAR AT THE JAWS<br>(C) FABRIC TEAR AT THE SEAM<br>(D) BREAKAGE OF SEWING THREADS<br>(E) THREAD PULL–OUT<br>(F) ANY COMBINATION OF THESE<br>(NSS) NO SEAM SLIPPAGE | |

| 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.<br>EXEMPT DUE TO FABRIC WEIGHT: 6.3 OZ/YD² THE SUBMITTED SAMPLE(S) IS(ARE) EXEMPT FROM FLAMMABILITY TESTING IN ACCORDANCE WITH 16 CFR 1610.1(D) WHICH STATES:<br>SPECIFIC EXEMPTIONS<br>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.<br>1. PLAIN SURFACE FABRICS, REGARDLESS OF FIBER CONTENT, WEIGHING 2.6 OUNCES PER SQUARE YARD OR MORE; AND<br>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. | CLASS 1 |

## TEST RESULT

### PH VALUE

**Test Method I** : Textiles and Artificial Leather: SASO ISO 3071:2014

**Test Method II** : Leather: EN ISO 4045:2018

| **Maximum Limit:** | / |
| --- | --- |

| - | **Unit** | **Result** |
| --- | --- | --- |
| **Test Item(s)** | - | I001 |
| **Test Method** | - | I |
| **Parameter** | - | - |
| pH Value of Extract Solution | - | - |
| Temp. of Aqueous Extract | deg. C | 23.2 |
| pH Value of Aqueous Extract | - | 6.1 |
| **Conclusion** | - | DATA |

Note / Key :

deg. C = degree Celsius (°C) Temp. = Temperature

Remark :

### Formaldehyde

**Test Method I** : All materials exceptLeather: JIS L 1041-2011 A (Japan Law 112) or EN ISO 14184-1:2011

**Test Method II** : Leather: EN ISO 17226-2:2019 with EN ISO 17226-1:2019 confirmation method in case of interferences. Alternatively, EN ISO 17226-1:2019 can be used on its own.

| **Maximum Limit:** | / |
| --- | --- |

| **Tested Item(s)** | **Result** | | | **Conclusion** |
| --- | --- | --- | --- | --- |
| | **Detected Analyte(s)** | **Conc.** | **Unit** | |
| 1001 | / | ND | mg/kg | DATA |

Note:

ND = Not detected "**>**" = More than
mg/kg = milligram per kilogram
Detection Limit (mg/kg): 5

## TEST RESULTS

**Azo-amines and Arylamine salts**

**Test Method I** : EN ISO 14362-1:2017

**Test Method II** : ISO 17234-1:2015

**Test Method III** : EN ISO 14362-3:2017 (For textile)/ ISO 17234-2:2011 (For leather)/ CPSD-AN-00107-MTHD/26

Quantification analysis by GC-MS and confirmation by LC-DAD.

| **Maximum Limit:** | / |
|---|---|

| **Tested Item(s)** | **Test Method** | **Result** | | | **Conclusion** |
|---|---|---|---|---|---|
| | | **Detected Analyte(s)** | **Conc.** | **Unit** | |
| I002 | I | / | ND | mg/kg | DATA |

Note:

ND = Not detected
mg/kg = milligram(s) per kilogram
10 000 mg/kg = 1 %
Detection Limit ( mg/kg ) - 5 each
Remark:

">" = Greater than
mg/kg = ppm = part(s) per million
% = percent

Conc. = Concentration

- The list of Azo-amines and Aryl Amine salts is summarized in table of Appendix.

## TEST RESULTS

### Alkylphenol (AP) and Alkylphenol Ethoxylates (APEOs), including all isomers

**Test Method I** : Textiles and Leather: EN ISO 21084:2019 Polymers and all other materials: 1 g sample/20 mL THF, sonication for 60 minutes at 70 degrees C, analysis according to EN ISO 21084:2019

**Test Method II** : All materials except Leather: EN ISO 18254-1:2016 with determination of APEO using LC/MS or LC/MS/MS

**Test Method III** : Leather: Sample prep and analysis using EN ISO 18218-1:2015 with quantification according to EN ISO 18254-1:2016

**Test Method IV** : GB/T 23322 mod.

| **Maximum Limit:** | / |
|---|---|

| **Tested Item(s)** | **Result** | | | | **Conclusion** |
|---|---|---|---|---|---|
| | **Test Method** | **Detected Analyte(s)** | **Conc.** | **Unit** | |
| I001 | I | / | ND | mg/kg | DATA |

Note:

ND = Not detected
">" = Greater than
Conc. = Concentration
mg/kg = milligram(s) per kilogram
mg/kg = ppm = part(s) per million
10 000 mg/kg = 1 %
% = percent
Detection Limit ( mg/kg ) - Each (NP & OP) 5; (NPEO & OPEO) 30

Remark:

- The list of Alkylphenol (AP) and Alkylphenol Ethoxylates (APEOs), including all isomers is summarized in table of Appendix.

## TEST RESULTS

### Chlorophenols

**Test Method I** : All materials: DIN 50009:2021
**Test Method II** : LFGB 64 B 82.02-8 / CEN/TS 14494 / DIN 53313

| **Maximum Limit:** | / |
|---|---|

| **Tested Item(s)** | **Result** | | | **Conclusion** |
|---|---|---|---|---|
| | **Detected Analyte(s)** | **Conc.** | **Unit** | |
| I001 | / | ND | mg/kg | DATA |

Note:

ND = Not detected
mg/kg = milligram(s) per kilogram
10 000 mg/kg = 1 %
Detection Limit ( mg/kg ) - 0.05 each

">" = Greater than
mg/kg = ppm = part(s) per million
% = percent

Conc. = Concentration

Remark:

- The list of Chlorophenols is summarized in table of Appendix.

### Quinoline

**Test Method I** : All materials: DIN 54231:2022 / CPSD-AN-00048-MTHD
**Test Method II** : 54231:2022 - LC-MS /MS 64LFGB 82.02-10Mod.

| **Maximum Limit:** | / |
|---|---|

| **Tested Item(s)** | **Result** | | | **Conclusion** |
|---|---|---|---|---|
| | **Detected Analyte(s)** | **Conc.** | **Unit** | |
| I001 | / | ND | mg/kg | DATA |

Note:

ND = Not detected
mg/kg = milligram(s) per kilogram
10 000 mg/kg = 1 %
Detection Limit ( mg/kg ) - 0.05 each

">" = Greater than
mg/kg = ppm = part(s) per million
% = percent

Conc. = Concentration

Remark: /

| TEST RESULTS | REQUIREMENTS |
|---|---|

**Organotin Compounds**

**Test Method** : All materials: CEN ISO/TS 16179:2012 or EN ISO 22744-1:2020 / DIN 38407-13 Mod ISO 17353
Quantification analysis by GC-MS

| **Maximum Limit:** | / |
|---|---|

| **Tested Item(s)** | **Result** | | | **Conclusion** |
|---|---|---|---|---|
| | **Detected Analyte(s)** | **Conc.** | **Unit** | |
| I001 | / | ND | mg/kg | DATA |

Note:

ND = Not detected
mg/kg = milligram(s) per kilogram
10 000 mg/kg = 1 %
Detection Limit ( mg/kg ) - 0.05

">" = Greater than
mg/kg = ppm = part(s) per million
% = percent

Conc. = Concentration

Remark:

- The list of Organotin Compounds is summarized in table of Appendix.

| TEST RESULTS | REQUIREMENTS |
|---|---|

## Flame Retardants

**Test Method I** : EN ISO 17881-1/2: 2006
Solvent extraction and analysis by Gas Chromatograph Mass Spectrometer (GC-MS) or Liquid Chromatograph Mass Spectrometer (LC-MS)

| **Maximum Limit:** | |
|---|---|

| **Tested Item(s)** | **Type** | **Result** | | | **Conclusion** |
|---|---|---|---|---|---|
| | | **Detected Analyte(s)** | **Conc.** | **Unit** | |
| I001 | I | / | ND | mg/kg | DATA |

<

Note:

ND = Not detected
mg/kg = milligram(s) per kilogram
10 000 mg/kg = 1 %
Detection Limit ( mg/kg ) - 5 each

">" = Greater than
mg/kg = ppm = part(s) per million
% = percent

Conc. = Concentration

Remark:

- The list of Flame Retardants is summarized in table of Appendix.

## Per- and Polyfluoroalkyl substances (PFAS)

**Test Method** : EN 17681-1:2025/ CPSD-AN-00668-MTHD

| **Maximum Limit:** | / |
|---|---|

| **Tested Item(s)** | **Result** | **Unit** | **Conclusion** |
|---|---|---|---|
| I001 | ND | mg/kg | DATA |

Note:

ND = Not detected

">" = More than

Conc. = Concentration

Remark:

- The list of Per- and Polyfluoroalkyl substances (PFAS) is summarized in table of Appendix.

| TEST RESULTS | REQUIREMENTS |
| --- | --- |

## Dimethylfumarate (DMFu)

**Test Method** : All materials: ISO 16186:2021 / ISO/TS 16186 and DIN EN 17130

Quantification analysis by GC-MS

| **Maximum Limit:** | / |
| --- | --- |

| Tested Item(s) | Result | Unit | Conclusion |
| --- | --- | --- | --- |
| I001 | ND | mg/kg | DATA |

Note:

ND = Not detected
mg/kg = milligram(s) per kilogram
10 000 mg/kg = 1 %
Detection Limit ( mg/kg ) - 0.03

">" = Greater than
mg/kg = ppm = part(s) per million
% = percent

Conc. = Concentration

Remark:

-

| TEST RESULTS | REQUIREMENTS |
|---|---|

## Extractable Heavy Metals

**Test Method** : All materials except Leather: DIN EN 16711-2:2016
Leather: DIN EN ISO 17072-1:2019
Quantification analysis by ICP-MS

| Limit: | Element (mg/kg) | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | As | Cd | Se | Hg | Pb | Sb | Co | Ba | Cu |
| | - | - | - | - | - | - | - | - | - |

| Limit: | Element (mg/kg) | | | | | |
|---|---|---|---|---|---|---|
| | Cr | Ni | Sn | Mn | Zn | Cr VI |
| | - | - | - | - | - | - |

| - | Unit | - |
|---|---|---|
| **Tested Item(s)** | - | I001 |
| **Parameter** | - | / |
| Antimony (Sb) | mg/kg | ND |
| Arsenic (As) | mg/kg | ND |
| Cadmium (Cd) | mg/kg | ND |
| Chromium (Cr) | mg/kg | ND |
| Chromium VI (Cr-VI) | mg/kg | ND |
| Cobalt (Co) | mg/kg | ND |
| Copper (Cu) | mg/kg | 24 |
| Lead (Pb) | mg/kg | ND |
| Nickel (Ni) | mg/kg | ND |
| Mercury (Hg) | mg/kg | ND |
| Selenium (Se) | mg/kg | ND |
| Tin (Sn) | mg/kg | ND |
| Manganese (Mn) | mg/kg | ND |
| Zinc (Zn) | mg/kg | ND |
| Barium (Ba) | mg/kg | ND |
| **Conclusion** | - | DATA |

Note:

ND = Not detected ">" = Greater than Conc. = Concentration
mg/kg = milligram(s) per kilogram mg/kg = ppm = part(s) per million
10 000 mg/kg = 1 % % = percent
Detection Limit ( mg/kg ) - (Sb) 2, (As) 0.05, (Cd) 0.05, (Cr) 0.25, (Cr-VI) 0.5, (Co) 0.25, (Cu) 5, (Pb) 0.1, (Ni) 0.25, (Hg) 0.02, (Se) 5, (Sn) 0.25, (Mn) 0.1, (Zn) 5, (Ba) 2

Remark:

-

**Indicates does not meet the requirements

| APPENDIX A –LIST OF MEASUREMENT UNCERTAINTIES | | |
|---|---|---|
| TEST NAME | STANDARD NAME | MEASUREMENT UNCERTAINTY |
| Colourfastness to Domestic and Commercial Laundering | BS EN ISO 105 C06<br>EN ISO 105 C06<br>ISO 105 C06<br>TS EN ISO 105 C06 | ±0.5 Grade |
| Colourfastness to Water | BS EN ISO 105 E01<br>ISO 105 E01<br>TS EN ISO 105 E01 | ±0.5 Grade |
| Colourfastness to Light | BS EN ISO 105 B02<br>ISO 105 B02<br>EN ISO 105 B02<br>TS EN ISO 105 B02 | ±0.5 Grade |
| Colourfastness to Drycleaning | ISO 105 D01<br>BS EN ISO 105 D01<br>TS EN ISO 105 D01 | ±0.5 Grade |
| Colourfastness to Perspiration | ISO 105 E04<br>BS EN ISO 105 E04<br>TS EN ISO 105 E04 | ±0.5 Grade |
| Colourfastness to Rubbing | ISO 105 X12<br>BS EN ISO 105 X12<br>TS EN ISO 105 X12 | ±0.5 Grade |
| Appearance Assessment And Dimensional Stability For Fabrics And Garments | CPSD-SL-31068-MTHD | ±0.5 Grade |
| Dimensional Stability To Washing | As a combination of 3 standards<br>BS EN ISO 6330<br>BS EN ISO 5077<br>BS EN ISO 3759 | ± 5.0 % |
| Tear Properties Of Fabrics: Single Tear Method | BS EN ISO 13937-2<br>TS EN ISO 13937-2 | ±10.8% |
| Tensile Properties Of Fabrics: Grab Method | BS EN ISO 13934-2<br>EN ISO 13934-2<br>ISO 13934-2<br>TS EN ISO 13934-2 | ±17.2% |
| Slippage Resistance Of Yarns At Seam: Fixed Seam Opening Method | BS EN ISO 13936-1<br>EN ISO 13936-1<br>ISO 13936-1<br>TS EN ISO 13936-1 | ±4.9% |
| Abrasion Resistance Of Fabrics By Martindale Method: Specimen Breakdown | BS EN ISO 12947-2<br>EN ISO 12947-2,AC<br>ISO 12947-2, Cor1<br>TS EN ISO 12947-2, AC | ±4.5% |
| Fabric Propensity To Surface Pilling Fuzzing or Matting: Modified Martindale Method | BS EN ISO 12945-2<br>EN ISO 12945-2<br>ISO 12945-2<br>TS EN ISO 12945-2 | ±0.5 Grade |
| pH Value | ISO 4045 | ±2.08% |
| Formaldehyde Content | BS EN ISO 14184-1 | ±4.85% |
| Azo-amines and Arylamine salts | EN ISO 14362-1 | ± % 21,04 |

# APPENDIX

| List of Azo-amines and Arylamine salts: | | | | | |
|---|---|---|---|---|---|
| **No.** | **Name of Analytes** | **CAS-No.** | **No.** | **Name of Analytes** | **CAS-No.** |
| 1 | 4-Aminodiphenyl | 92-67-1 | 15 | 4,4'-Methylene-bis-(2-chloraniline) | 101-14-4 |
| 2 | Benzidine | 92-87-5 | 16 | 4,4'-Oxydianiline | 101-80-4 |
| 3 | 4-Chloro-o-toluidine | 95-69-2 | 17 | 4,4'-Thiodianiline | 139-65-1 |
| 4 | 2-Naphthylamine | 91-59-8 | 18 | o-Toluidine | 95-53-4 |
| 5 | o-Aminoazotoluene | 97-56-3 | 19 | 4-Methyl-m-phenylenediamine (2,4-Toluenediamine) | 95-80-7 |
| 6 | 5-nitro-o-toluidine (2-Amino-4-nitrotoluene) | 99-55-8 | 20 | 2,4,5-Trimethylaniline | 137-17-7 |
| 7 | 4-Chloroaniline (p-Chloroaniline) | 106-47-8 | 21 | o-Anisidine | 90-04-0 |
| 8 | 4-Methoxy-m-phenylenediamine (2,4-Diaminoanisole) | 615-05-4 | 22 | 4-Aminoazobenzene (p-Aminoazobenzene) | 60-09-3 |
| 9 | 4,4'-Diaminodiphenylmethane (4,4'-Methylenedianiline) | 101-77-9 | 23 | 2,4-Xylidine | 95-68-1 |
| 10 | 3,3'-Dichlorobenzidine | 91-94-1 | 24 | 2,6-Xylidine | 87-62-7 |
| 11 | 3,3'-Dimethoxybenzidine (o-Dianisidine) | 119-90-4 | 25 | 4-chloro-o-toluidinium chloride | 3165-93-3 |
| 12 | 3,3'-Dimethylbenzidine (4,4'-Bi-o-tolidine) | 119-93-7 | 26 | 2-Naphthylammoniumacetate | 553-00-4 |
| 13 | 4,4'-Methylenedi-o-toluidine (3,3'-Dimethyl-4,4'-diaminodiphenylmethane) | 838-88-0 | 27 | 4-methoxy-m-phenylene diammonium sulphate; 2,4-diaminoanisole sulphate | 39156-41-7 |
| 14 | p-Cresidine | 120-71-8 | 28 | 2,4,5-trimethylaniline hydrochloride | 21436-97-5 |

| List of Alkylphenol (AP) and Alkylphenol Ethoxylates (APEOs), including all isomers: | | | | | |
|---|---|---|---|---|---|
| **No.** | **Name of Analytes** | **CAS-No.** | **No.** | **Name of Analytes** | **CAS-No.** |
| 1 | Nonylphenol (NP) | 104-40-5 | 3 | Nonylphenol ethoxylated (NPEO) | 68412-54-4 |
| 2 | Octylphenol (OP) | 140-66-9 | 4 | Octylphenol ethoxylated (OPEO) | 9002-93-1 |

| List of Chlorophenols: | | | | | |
|---|---|---|---|---|---|
| **No.** | **Name of Analytes** | **CAS-No.** | **No.** | **Name of Analytes** | **CAS-No.** |
| 1 | Pentachlorophenol (PCP) | 87-86-5 | 2 | Tetrachlorophenol (TeCP):<br>2,3,5,6- Tetrachlorophenol<br>2,3,4,6- Tetrachlorophenol<br>2,3,4,5- Tetrachlorophenol | <br>935-95-5<br>58-90-2<br>4901-51-3 |

| Organotin Compounds: | | | |
|---|---|---|---|
| **No.** | **Name** | **No.** | **Name** |
| 1 | Tributyltin (TBT) | 4 | Triphenyltin (TPhT) |
| 2 | Dibutyltin (DBT) | 5 | Dioctyltin (DOT) |
| 3 | Monobutyltin (DBT) | - | - |

| List of Flame Retardants: | | | | | |
|---|---|---|---|---|---|
| **No.** | **Name of Analytes** | **CAS-No.** | **No.** | **Name of Analytes** | **CAS-No.** |
| 1 | Polybromobiphenyles (PBBs) | 59536-65-1 | 4 | Polybromodiphenyl ethers (PBDEs) | Various |
| 2 | Tris(2,3-dibromopropyl) phosphate (TRIS) | 126-72-7 | 5 | Hexabromocyclododecane (HBCDD) | Various |
| 3 | Tris-(aziridinyl)-phosphineoxide (Tris (1-aziridinyl) phosphine oxide) or (TEPA) | 545-55-1 | - | - | - |

| Perfluorinated Compounds (PFC) By Lcmsms | | | | | |
|---|---|---|---|---|---|
| **No.** | **Name of Analytes** | **CAS-No.** | **No.** | **Name of Analytes** | **CAS-No.** |
| 1 | Perfluorobutyric acid | 375-22-4 | 31 | Perfluoro-1-heptanesulfonic acid | 375-92-8 |
| 2 | Perfluoropentanoic acid | 2706-90-3 | 32 | Perfluoro-1-heptanesulfonic acid potassium salt | 60270-55-5 |
| 3 | Perfluoro-n-hexanoic acid | 307-24-4 | 33 | Perfluorooctanesulfonic acid | 1763-23-1 |
| 4 | Perfluoro-n-heptanoic acid | 21615-47-4 | 34 | Perfluorooctanesulfonic acid potassium salt | 2795-39-3 |
| 5 | 7H-Perfluoroheptanoic acid | 375-85-9 | 35 | Ammonium perfluorooctanesulfonate | 29081-56-9 |
| 6 | Perfluoro-n-octanoic acid | 335-67-1 | 36 | Perfluorooctanesulfonic acid lithium salt | 29457-72-5 |
| 7 | Perfluorooctanoyl fluoride | 335-66-0 | 37 | Perfluoro-1-octanesulfonyl fluoride | 307-35-7 |
| 8 | Methyl perfluorooctanoate | 376-27-2 | 38 | Perfluorooctane sulfonate diethanolamine salt | 70225-14-8 |
| 9 | Ethyl perfluorooctanonate | 3108-24-5 | 39 | 1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-heptadecafluoro-1-octanesulfonate NDecyl-N,N-dimethyl-1-decanaminium salt | 251099-16-8 |
| 10 | Sodium perfluorooctanoate | 335-95-5 | 40 | Perfluorodecane sulfonic acid | 335-77-3 |
| 11 | Potassium perfluorooctanoate | 2395-00-8 | 41 | Perfluorodecane sulfonic acid sodium salt | 335-77-3 |
| 12 | Silver perfluorooctanoate | 335-93-3 | 42 | Perfluorodecane sulfonic acid sodium salt | 2806-15-7 |
| 13 | Ammonium pentadecafluorootanoate | 3825-26-1 | 43 | Perfluorodecane sulfonic acid potassium salt | 2806-16-8 |
| 14 | Perfluoro-n-nonanoic acid | 375-95-1 | 44 | 1H,1H,2H,2H-perfluorohexane sulfonate acid | 757124-72-4 |
| 15 | Ammonium perfluorononanoate | 4149-60-4 | 45 | 1H,1H,2H,2H-perfluorohexane sulfonate acid sodium salt | - |
| 16 | Sodium perfluorononanoate | 21049-39-8 | 46 | 1H,1H,2H,2HPerfluorooctanesulphonic acid | 27619-97-2 |
| 17 | Perfluoro-n-decanoic acid | 335-76-2 | 47 | 1H,1H,2H,2HPerfluorodencane sulfonate acid | 39108-34-4 |
| 18 | 2H,2H-Perfluorodecanoic acid | 27854-31-5 | 48 | 1H,1H,2H,2HPerfluorodencane sulfonate acid, Sodium salt | - |
| 19 | Perfluoro-3,7-dimethyloctanoic acid | 172155-07-6 | 49 | 1H,1H,2H,2H-Perfluorododecane sulfonic acid | 120226-60-0 |
| 20 | Perfluoroundecanoic acid | 2058-94-8 | 50 | Perfluorooctane sulfonamide | 754-91-6 |
| 21 | 2H,2H,3H,3H-Perfluoroundecanoic acid | 34598-33-9 | 51 | N-Methylperfluoro-1-octanesulfonamide | 31506-32-8 |
| 22 | Perfluorododecanoic acid | 307-55-1 | 52 | N-Ethylperfluoro-1-octanesulfonamide | 4151-50-2 |
| 23 | Perfluorotridecanoic acid | 72629-94-8 | 53 | 2-(N-methylperfluoro-1-octanesulfonamido)-ethanol | 24448-09-7 |
| 24 | Perfluorotetradecanoic acid | 376-06-7 | 54 | 2-(N-Ethylperfluoro-1-octanesulfonamido)-ethanol | 1691-99-2 |
| 25 | Perfluorobutanesulfonic acid | 375-73-5 | 55 | Perfluorooctane sulfonamidoacetic acid | 17527-29-6 |
| 26 | Perfluorobutanesulfonic acid potassium salt | 29420-49-3 | 56 | 2-(N-Methylperfluorooctane sulfoamido) acetic acid | 2355-31-9 |
| 27 | Perfluorobutanesulfonic acid hydrate | 59933-66-3 | 57 | N-Ethylperfluorooctane sulfonamidoacetate | 2991-50-6 |
| 28 | Perfluorohexanesulfonic acid | 355-46-4 | 58 | 2,3,3,3-tetrafluoro-2-(heptafluoropropoxy) propanic acid | 13252-13-6 |
| 29 | Perfluorohexanesulfonic acid potassium salt | 3871-99-6 | | | |
| 30 | Perfluorohexanesulfonic acid sodium salt | 82382-12-15 | | | |
| | CAS-No. = Chemical Abstracts Service registry number | | | | |

**-END OF REPORT-**

**BV CPS TEST LABORATUVARLARI LTD. STI.**
**BUREAU VERITAS CONSUMER PRODUCTS SERVICES**
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Test TS EN ISO/IEC 17025 AB-0505-T

| |
|---|
| AB-0505-T |
| 72252820321 |
| 10-25 |

# TEST REPORT

**LAB LOCATION:TURKEY**
**SERVICE TYPE: Regular**
**LAB NUMBER: (7225)282-0321**
**THE DATE OF RECEIPT OF TEST ITEM: October 09, 2025**
**START DATE FOR TESTING: October 09, 2025**
**DATE END OF TEST: October 13, 2025**
**NUMBER OF WORKING DAYS: 3.0**

| | | |
|---|---|---|
| **CUSTOMER NAME / ADDRESS CONTACT NAME** | : | M CHAPMAN&SONS LTD<br>(Address: Chapman Works, Manchester Road, Dunnockshaw, Burnley, BB121 5PW)<br>(Attn: Paige Newham-Foulds) |
| **BUYER** | : | / |
| **SUPPLIER REFERENCE** | : | Style Number: /<br>PO Number: 13621<br>Unique Product Code: / |
| **SAMPLE DESCRIPTION** | : | Woven Fabric Sample (Wordsworth – Cotton Plain)<br>(Claimed Fiber Content: 100% Cotton)<br>(Claimed Fabric Weight: /) |
| **COLOUR** | : | Stone 01 |
| **SUBMITTED CARE INSTRUCTION** | : |  |
| **REASON FOR REVISION** | : | / |

| | | |
|---|---|---|
| ***Date Out*** | **Ayşegül Karayılan** | **Hasan Altingul** |
| (13/10/2025) | **Senior Client Team Lead** | **Deputy General Manager Operation** |
| | | (13/10/2025) |

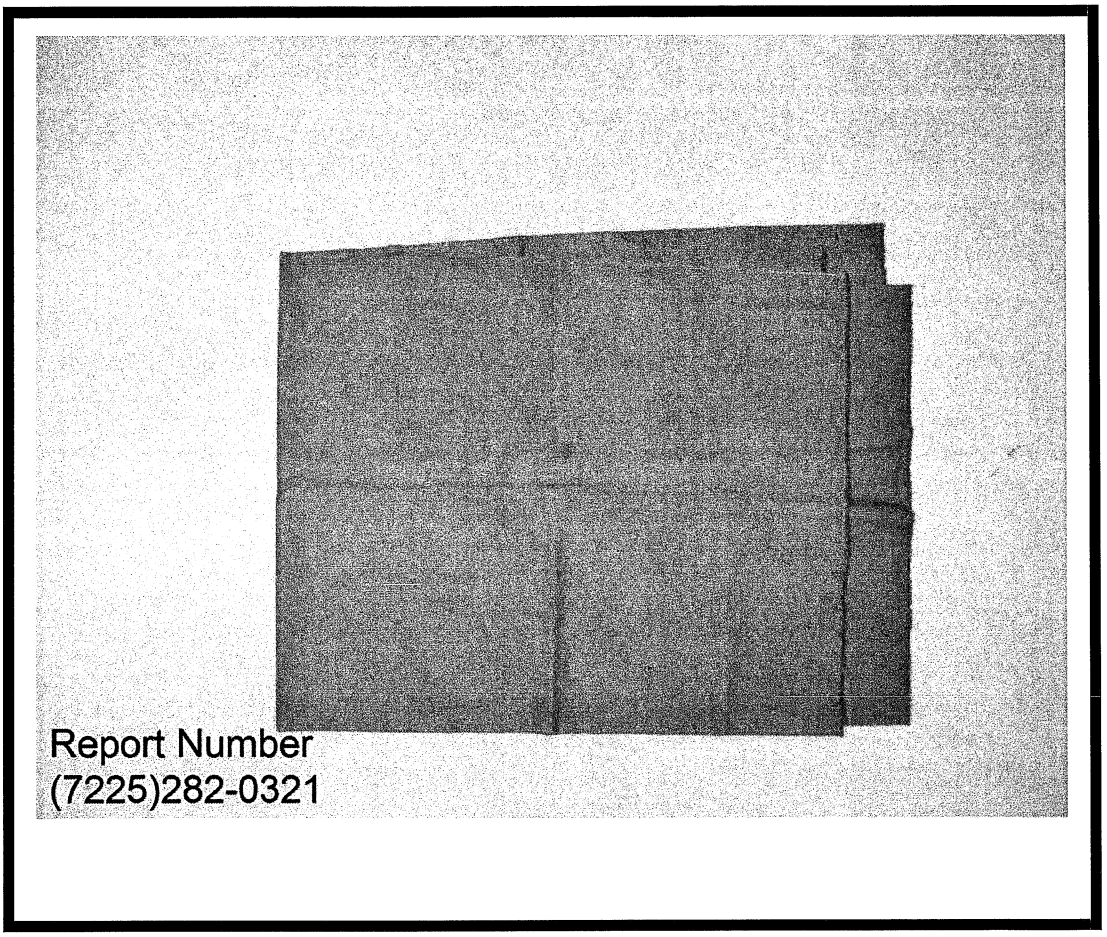
C/N/ ET/SD

## SUMMARY OF TEST RESULTS

| TEST PERFORMED | PASS | FAIL | DATA |
|---|---|---|---|
| Colorfastness To Domestic And Commercial Laundering* | | | X |
| Colourfastness To Water* | | | X |
| Colourfastness To Perspiration* | | | X |
| Colourfastness To Drycleaning * | | | X |
| Colourfastness Light* | | | X |
| Colourfastness To Hot Pressing | | | X |
| Colorfastness To Rubbing* | | | 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 |
|---|---|

**COLOURFASTNESS TO DOMESTIC AND COMMERCIAL LAUNDERING**
(ISO 105-C06:2010, TEST NO: A2S MECHANICAL WASH AT 30°C (MOD) IN 0.4% ECE DETERGENT AND 0.1% SODIUM PERBORATE SOLUTION WITH 10 STEEL BALLS), MULTIFIBRE DW)

| | | |
|---|---|---|
| Colour Change | 4-5 | / |
| Self-Staining | / | / |
| | | |
| Colour Staining On Acetate | 4-5 | / |
| Colour Staining On Cotton | 4-5 | |
| Colour Staining On Nylon/Polyamide | 4-5 | |
| Colour Staining On Polyester | 4-5 | |
| Colour Staining On Acrylic | 4-5 | |
| Colour Staining On Wool | 4-5 | |
| | | |

**COLOURFASTNESS TO WATER**
(ISO 105-E01:2013 MULTIFIBRE DW)

| | | |
|---|---|---|
| Colour Change | 4-5 | / |
| Self-Staining | / | / |
| | | |
| Colour Staining On Acetate | 4-5 | / |
| Colour Staining On Cotton | 4-5 | |
| Colour Staining On Nylon/Polyamide | 4-5 | |
| Colour Staining On Polyester | 4-5 | |
| Colour Staining On Acrylic | 4-5 | |
| Colour Staining On Wool | 4-5 | |

| TEST RESULTS | REQUIREMENTS |
|---|---|

**COLOURFASTNESS TO PERSPIRATION**
(ISO 105-E04:2013, MULTIFIBRE DW)

| | Acid | Alkaline | |
|---|---|---|---|
| Colour Change | 4-5 | 4-5 | / |
| Self-Staining | / | / | / |
| | | | |
| Colour Staining On Acetate | 4-5 | 4-5 | / |
| Colour Staining On Cotton | 4-5 | 4-5 | |
| Colour Staining On Nylon/Polyamide | 4-5 | 4-5 | |
| Colour Staining On Polyester | 4-5 | 4-5 | |
| Colour Staining On Acrylic | 4-5 | 4-5 | |
| Colour Staining On Wool | 4-5 | 4-5 | |
| | | | |

**COLOURFASTNESS TO HOT PRESSING**
(ISO 105-X11:1994/ 150 DEGREE CELSIUS @ 10 SECONDS)

**110 DEGREE**

| | DRY | DAMP | WET | |
|---|---|---|---|---|
| COLOUR CHANGE – AFTER TESTING | 4-5 | 4-5 | 4-5 | / |
| COLOUR CHANGE – AFTER FOR 4 HRS | 4-5 | 4-5 | 4-5 | / |
| COLOUR STAINING - AFTER TESTING | 4-5 | 4-5 | 4-5 | / |
| | | | | |
| *REMARK | | | | |

**150 DEGREE**

| | DRY | DAMP | WET | |
|---|---|---|---|---|
| COLOUR CHANGE – AFTER TESTING | 4-5 | 4-5 | 4-5 | / |
| COLOUR CHANGE – AFTER FOR 4 HRS | 4-5 | 4-5 | 4-5 | / |
| COLOUR STAINING - AFTER TESTING | 4-5 | 4-5 | 4-5 | / |
| | | | | |
| *REMARK | | | | |

**200 DEGREE**

| | DRY | DAMP | WET | |
|---|---|---|---|---|
| COLOUR CHANGE – AFTER TESTING | 4-5 | 4-5 | 4-5 | / |
| COLOUR CHANGE – AFTER FOR 4 HRS | 4-5 | 4-5 | 4-5 | / |
| COLOUR STAINING - AFTER TESTING | 4-5 | 4-5 | 4-5 | / |
| | | | | |
| *REMARK | | | | |

| TEST RESULTS | | REQUIREMENTS |
|---|---|---|
| **COLOURFASTNESS TO DRYCLEANING** (ISO 105-D01: 2010, MULTIFIBRE DW) | | |
| Colour Change | 4-5 | / |
| Self-Staining | / | / |
| Colour Staining On Acetate | 4-5 | / |
| Colour Staining On Cotton | 4-5 | |
| Colour Staining On Nylon/Polyamide | 4-5 | |
| Colour Staining On Polyester | 4-5 | |
| Colour Staining On Acrylic | 4-5 | |
| Colour Staining On Wool | 4-5 | |

| | | |
|---|---|---|
| **COLOURFASTNESS TO LIGHT** (ISO 105-B02:2014, METHOD 3, XENON-ARC LAMP, MODIFICATION: EXPOSURE UP TO CONTRAST OF GREY SCALE 4) | | |
| RATING (NUMERICAL MEAN) | 4 | / |

| **COLOURFASTNESS TO RUBBING** (ISO 105-X12:2016 / BS EN ISO 105-X12:2016 / DIN EN ISO 105-X12:2016) | | | |
|---|---|---|---|
| | LENGTHWISE | WIDTHWISE | |
| Dry | 4-5 | 4-5 | / |
| Wet | 4-5 | 4-5 | / |

| | |
|---|---|
| GRADE 5 NEGLIGIBLE OR NO CHANGE | GRADE 5 NEGLIGIBLE OR NO STAINING |
| GRADE 4 SLIGHTLY CHANGED | GRADE 4 SLIGHTLY STAINED |
| GRADE 3 NOTICEABLY CHANGED | GRADE 3 NOTICEABLY STAINED |
| GRADE 2 CONSIDERABLY CHANGED | GRADE 2 CONSIDERABLY STAINED |
| GRADE 1 MUCH CHANGED | GRADE 1 HEAVILY STAINED |

| APPENDIX A –LIST OF MEASUREMENT UNCERTAINTIES | | |
|---|---|---|
| TEST NAME | STANDARD NAME | MEASUREMENT UNCERTAINTY |
| Colourfastness to Domestic and Commercial Laundering | BS EN ISO 105 C06<br>EN ISO 105 C06<br>ISO 105 C06<br>TS EN ISO 105 C06 | ±0.5 Grade |
| Colourfastness to Water | BS EN ISO 105 E01<br>ISO 105 E01<br>TS EN ISO 105 E01 | ±0.5 Grade |
| Colourfastness to Light | BS EN ISO 105 B02<br>ISO 105 B02<br>EN ISO 105 B02<br>TS EN ISO 105 B02 | ±0.5 Grade |
| Colourfastness to Drycleaning | ISO 105 D01<br>BS EN ISO 105 D01<br>TS EN ISO 105 D01 | ±0.5 Grade |
| Colourfastness to Perspiration | ISO 105 E04<br>BS EN ISO 105 E04<br>TS EN ISO 105 E04 | ±0.5 Grade |
| Colourfastness to Rubbing | ISO 105 X12<br>BS EN ISO 105 X12<br>TS EN ISO 105 X12 | ±0.5 Grade |

**-END OF REPORT-**