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TEST REPORT

| Client: | Gabriel Hjulmagervej 55 Postbox 59 DK-9100 Aalborg Denmark |
|-----------------------|---|
| Entry No: | 103561-02A |
| Date received: | 16/11/2018 |
| Client's Description: | Sample of fabric: CrissCross 1501 |
| Test Required: | Abrasion and Seam Slippage, Colour fastness to Perspiration, Colour fastness to Rubbing and Rubbing to Solvent, Colour fastness to Washing, Colour fastness to water spotting |
| Conditioning: | In accordance with BS EN ISO 139: 2005 for a minimum of 24 hours at 65+/-4%, Relative Humidity, 20+/-2°C |
| Date Tests Completed: | 24/01/2019 |

Abrasion Resistance: BS EN ISO 12947-2: 2016F

The tests were carried out using a pressure of 12 +/- 0.3 kPa The criterion for judging end point was three threads broken.

The Test was terminated after 200,000 rubs without an end point having been reached.

Change in colour after 6,000 rubs:

Observation Technique: Type of Fabric:

10 fold magnification Flat Woven

4-5

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This is hereby certified to be a correct return of the tests made of the items referred to herein

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Claire Saville Technologist 4th February 2019

Unless instructed otherwise by the client sample remnants will be disposed of after 28 days.

Tests marked ^N in this certificate are not included in the UKAS Accreditation Schedule for this Laboratory. Tests marked ^S in this certificate are performed under the Laboratory's Flexible Scope of Accreditation. Tests marked ^S in this certificate have been subcontracted to another ISO17025 Accredited Laboratory.

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- Opinions and interpretations expressed herein are outside the scope of UKAS accreditation. Uncertainty budgets for test methods contained within this report are available on request.

This Certificate relates only to the sample received and, unless that sample has been drawn by the staff of this laboratory, or its agent, and endorsed accordingly, any application of the result to a bulk quantity or other material is entirely the responsibility of the client.







Gabriel

Entry No: 103561-02A

Client:

Seam Slippage: BS EN ISO 13936-2: 2004

| | Mean Seam opening |
|---------------|-------------------|
| Warp Way Seam | 5 mm |
| Weft Way Seam | 5 mm |

Colour Fastness to Perspiration: BS EN ISO 105-E04: 2013

| Staining on: | | Acid | Alkaline |
|------------------|-----------|------|----------|
| | Acetate | 5 | 5 |
| | Cotton | 5 | 5 |
| | Nylon 6.6 | 5 | 5 |
| | Polyester | 5 | 5 |
| | Acrylic | 5 | 5 |
| | Wool | 4-5 | 5 |
| Change in Colour | | 4-5 | 5 |

Colour Fastness to Rubbing: BS EN ISO 105-X12: 2016F

| | Staining | | Change | in colour |
|----------|----------|-----|--------|-----------|
| | Dry | Wet | Dry | Wet |
| Warp Way | 5 | 5 | 5 | 5 |
| Weft Way | 5 | 4-5 | 5 | 5 |

Note: Change in colour is not a requirement of the method but was carried out at the request of the client.

Colour Fastness to Rubbing with Organic Solvents: BS EN ISO 105-D02: 2016^F

| | | <u>Tetrachloroethylene</u> | White Spirit |
|---------------------------------|-------------|----------------------------|-------------------|
| Staining: | Length Way | 4-5 | 5 |
| - | Width Way | 4-5 | 5 |
| | - | Tetrachloroethylene | White Spirit |
| Change in colour: | Length Way | 5 | 5 |
| - | Width Way | 5 | 5 |
| Note: Change in colour is not a | requirement | f the method but was | carried out at th |

Note: Change in colour is not a requirement of the method but was carried out at the request of the client.

Colour Fastness to Washing: BS EN ISO 105-C06: 2010 Procedure A2S at 40°C using 10 steel balls

Staining on:

| Acetate | 4-5 |
|------------------|-----|
| Cotton | 5 |
| Nylon 6.6 | 5 |
| Polyester | 5 |
| Acrylic | 5 |
| Wool | 4-5 |
| Change in Colour | 5 |



| West Yorkshire Material | s Testing Service | |
|--|--|--------------|
| Client: | Gabriel | |
| Entry No: | 103561-02A | |
| Colour Fastness to Wa | ter Spotting BS EN ISO 105 E16 : 2007 | |
| Inner circle Outer periphery No change | Result 5 4-5 | Requirements |
| Please note | The water was absorbed after 30 minutes. | |
| | End of Document | |

"Amended Report 103561-02A. This Report supersedes Test report 103561-02. Some of the results of the testing have been removed at the request of the client"

