



Shirley
Technologies
Limited

Confidential Report

Our Ref: 29/02085C/01/17

Shirley Technologies Limited. Registered Office :
Wira House, West Park Ring Road, Leeds, LS16 6QL.
A company registered in England & Wales with company number 04669651.
VAT Number GB 816764800.
The supply of all goods and services is subject to our standard terms of
business, copies of which are available on request.
Our laboratories are accredited to EN ISO/IEC 17025





Shirley
Technologies
Limited

Shirley Technologies Limited
Wira House
West Park Ring Road
Leeds, LS16 6QL
United Kingdom

Tel: +44 (0)113 259 1999
Fax: +44 (0)113 274 8344
Web: <http://www.shirleytech.com>
Email: info@shirleytech.co.uk

6 February 2017

Page 1 of 2

Our Ref: 29/02085C/01/17
Your Ref:

Client: Gudbrandsdalens Uldvarefabrik as

Address: P.O. Box 836
NO-2626 Lillehammer
Norway

Job Title: Determination of Abrasion Resistance on One Sample

Client's Order Ref:

Date of Receipt: 3 January 2017

Description of Sample(s): One full width sample of woven fabric referenced by the Client:-
6488 Eikesdal

Work Requested: EN ISO 12947-2 Martindale abrasion, end point 2 threads broken, 12kPa
Colour change by abrasion at 3,000 and 15,000 rubs

Shirley Technologies Limited. Registered Office :
Wira House, West Park Ring Road, Leeds, LS16 6QL.
A company registered in England & Wales with company number 04669651.
VAT Number GB 816764800.
The supply of all goods and services is subject to our standard terms of
business, copies of which are available on request.
Our laboratories are accredited to EN ISO/IEC 17025



1066



Shirley
Technologies
Limited

Shirley Technologies Limited
Wira House
West Park Ring Road
Leeds, LS16 6QL
United Kingdom

Tel: +44 (0)113 259 1999
Fax: +44 (0)113 274 8344
Web: <http://www.shirleytech.com>
Email: info@shirleytech.co.uk

6 February 2017

Page 2 of 2

Our Ref: 29/02085C/01/17
Your Ref:

Client: Gudbrandsdalens Uldvarefabrik as

Testing atmosphere: Unless otherwise specified the sample(s) has been conditioned and tested, where appropriate, in the standard atmosphere for conditioning and testing textiles (BS EN ISO 139:2005 + A1:2011) of 65±4% r.h. and 20±2°C.

Determination of the Abrasion Resistance of Fabrics by the Martindale Method – Determination of Specimen Breakdown

Date of test start: 16.01.17. Four specimens from the sample were tested, under a nominal pressure of 12 kPa(795±7g), with foam backing as requested by the Client, in accordance with BS EN ISO 12947-2:1998, using a Martindale abrasion tester as described in BS EN ISO 12947-1:1998.

Specimen breakdown (end point) was reached when two separate threads had completely broken. The change of shade of the test specimens was assessed after both 3,000 rubs and 15,000 rubs, as requested by the Client, in accordance with ISO 105-A02. The tested specimens have been returned separately.

<u>No. of rubs to end point</u>
170,000
135,000
185,000
<u>165,000</u>
mean: 164,000

Observations during testing: pills formed at approximately 3,000 rubs and continued throughout the test; these were cut off at intervals

Assessment: maximum colour change at 3,000 rubs: grey scale 4
maximum colour change at 15,000 rubs: grey scale 4

Reported by:

..... *L I Butler*

L I Butler (Mrs)
Senior Technician - Textiles

Countersigned by:

..... *J. Bullers*

J M Bullers (Mrs)
Operational Head – Textiles

Shirley Technologies Limited. Registered Office :
Wira House, West Park Ring Road, Leeds, LS16 6QL.
A company registered in England & Wales with company number 04669651.
VAT Number GB 816764800.

The supply of all goods and services is subject to our standard terms of business, copies of which are available on request.
Our laboratories are accredited to EN ISO/IEC 17025

