

Ir. Ron Verlouw
VESCOM BV
P.O. Box 70
NL-5753 AV DEURNE
NEDERLAND

Your notice of
2008-10-30

your reference

our reference
WVW/5137

date
Zwijnaarde, 2009-06-02

Analysis Report 65668/N

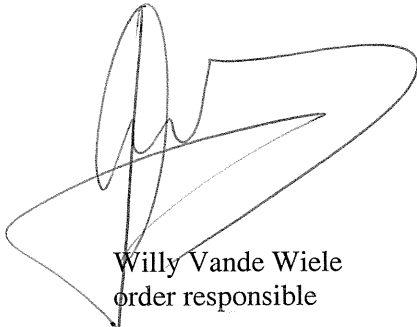
Modification of analysis report 65668/G, made on 2008-11-25

Required tests :

Determination of the abrasion resistance - Martindale
Determination of the resistance to pilling - Martindale

Identification number	Information given by the client	Date of receipt
T809674	Yuma	2008-10-06

24



Willy Vande Wiele
order responsible

For further information, please contact our sectorial advisor Daniel Verstraete

This report runs to 3 pages and may be reproduced, as long as it is presented in its entire form, without written permission of Centexbel. The results of the analysis cover the received samples. Centexbel is not responsible for the representativeness of the samples.

VAT BE 0459.218.289
CENTEXBEL-GENT
Technologiepark 7
BE-9052 Zwijnaarde
Tel. + 32 9 220 41 51 • Fax + 32 9 220 49 55
e-mail gent@centexbel.be

Fin. Acc. 210-0472965-45

IBAN BE44 2100 4729 6545

CENTEXBEL-BRUSSELS
Montoyerstraat 24 B2
BE-1000 Brussels
Tel. + 32 2 287 08 30 • Fax + 32 2 230 68 15

Reference : T809674 - Yuma

Determination of the abrasion resistance - Martindale

1. Method:

Applied standard : EN ISO 12947 part 2 (year: 1998)
on conditioned material (20°C and 65% rel. hum.)
Deviations of the standard : assessment according EN 14465 annex A (year:2003)
Apparatus : Martindale Abrasion Machine
Pressure on test specimen : 12 kPa
Reference abrasant : crossbred worsted spun, plain woven fabric
Type of the felt : woven felt
Number of test specimens : 4 circular test specimens to the end point
Observation : 8-fold magnification

2. Results:

Date of ending the test: 25-11-2008

Change in colour after 3 000 cycles: grade 4-5

Physically significant end point: three yarns broken

specimen	number of rubs at which specimen breakdown occurs	final result
1	80 000	70 000
2	90 000	80 000
3	100 000	90 000
4	100 000	90 000
lowest value		70 000

See test specimens enclosed.

Performed in the physical lab under the responsibility of Willy Vande Wiele.

Reference : T809674 - Yuma

Determination of the resistance to pilling - Martindale

1. Method:

Applied standard : EN ISO 12945 part 2 (year: 2000)
on conditioned material (20°C and 65% rel. hum.)

Deviations of the standard : -

Pre-treatment : none

Apparatus : Nu-Martindale

Pressure on the specimen : 415g

Abradant : crossbred worsted spun, plain woven fabric

Number of specimens : 3

Number of assessors : 2

2. Results:

Date of ending the test: 12-11-2008

specimen	assessment after ... cycles:			
	500	1000	2000	5000
1	4	4	4	4
2	4	4	4	4
3	4	4	4	4

See tested specimens enclosed.