



Client: Polymark (GB) Ltd
Sopwith Way
Drayton Fields
Daventry
Northants
NN11 8PB

Entry No: 50737-02

TEST CERTIFICATE

Job Title: EN ISO 11611:2007

Date Received: 8th May 2012

Date Tests Completed: 12th June 2012

Client's Description: Polytrans FR ('3') applied to the following:
FABRIC: Megatec 250N
FINISH: Proban® flame retardant – WOR – Antistatic (0148 88)

Performance Standard: Testing to EN ISO 11611:2007
Clause 6.7 Flame spread procedure A (surface ignition)

Pre-treatment: Tests were made after 5 washing cycles at 75°C using Procedure 8 specified in ISO 15797:2002 Drying Procedure A. The tumble drying was carried out after the completion of each wash (subcontracted to another UKAS Accredited Laboratory).

N.B. The machine used for washing the above samples has a larger cage volume and cage diameter than the machine specified in ISO 15797:2002

In accordance with Annex C of EN ISO 11611 the uncertainty of measurement associated with the test methods was not taken into account

Clause	Test Method	EN ISO 11611 Requirement & Performance Levels	Results	Pass/Fail or Class
6.7 Flame spread (procedure A)	ISO 15025:2000	Class 1 & 2: No flaming to top or side edge No hole formation No flaming or molten debris Mean afterflame ≤ 2s Mean afterglow ≤ 2s	<u>Procedure A</u> No flaming to top or side edge No hole formation No flaming or molten debris No afterflame No afterglow	PASS Class1 & Class 2

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



H Mackereth

Helen Mackereth
Senior Technician
13th June 2012

- ❖ Unless instructed otherwise by the client sample remnants will be disposed of after 28 days
- ❖ Test marked (*) in this certificate are not included in the UKAS Accreditation Schedule for this Laboratory.
- ❖ Opinions and interpretations expressed herein are outside the scope of UKAS accreditation.
- ❖ 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.





Client: Polymark (GB) Ltd
Sopwith Way
Drayton Fields
Daventry
Northants
NN11 8PB

Entry No: 50737-03

TEST CERTIFICATE

Job Title: EN ISO 11612:2008

Date Received: 8th May 2012

Date Tests Completed: 12th June 2012

Client's Description: Polytrans FR ('3') applied to the following:
FABRIC: Megatec 250N
FINISH: Proban® flame retardant – WOR – Antistatic (0148 88)

Performance Standard: Testing to EN ISO 11612:2008
Clause 6.3 Limited flame spread (A1 surface ignition)

Pre-treatment: Tests were made before and after 5 washing cycles at 75°C using Procedure 8 specified in ISO 15797:2002 Drying Procedure A. The tumble drying was carried out after the completion of each wash (subcontracted to another UKAS Accredited Laboratory).

N.B. The machine used for washing the above samples has a larger cage volume and cage diameter than the machine specified in ISO 15797:2002

In accordance with Annex G of EN ISO 11612:2008 the uncertainty of measurement associated with the test methods was not taken into account.

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H Mackereth

Helen Mackereth
Senior Technician
13th June 2012

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**West Yorkshire
Materials Testing
Service**

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Nepshaw Lane South, Morley, Leeds
Tel 0113 253 0241 Fax 0113 252 7029
Head of Laboratory G. Briggs C. Text ATI

Client: Polymark (GB) Ltd
Sopwith Way
Drayton Fields
Daventry
Northants
NN11 8PB

Entry No: 50737-03

Clause	Test Method	EN ISO 11612 Requirement & Performance Levels	Results	Pass/Fail or Level
6.3 Limited flame spread (A1)	ISO 15025:2000	No flaming to top or side edge No hole formation No flaming, melting or molten debris Mean afterflame ≤ 2s Mean afterglow ≤ 2s	Surface ignition as received No flaming to top or side edge No hole formation No flaming, melting or molten debris Mean afterflame = 2 s No afterglow <u>Surface ignition after 5 washing cycles</u> No flaming to top or side edge No hole formation No flaming, melting or molten debris No afterflame No afterglow	PASS

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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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H Mackereth

Helen Mackereth
Senior Technician
13th June 2012

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Mrs. Laura Butlin
 Polymark (GB) Ltd
 14 Sopwith Way - Drayton Fields
 GB-NN11 8PB DAVEN TRY, NORTHANTS
 VERENIGD KONINKRIJK

Your notice of 2013-12-11	Your reference e-mail	our reference CR/206_2014	date 2014-01-21
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Certification report

1. Description of the tested article as indicated by the client:

quality name: Polytrans FR label on PBI material
 dimension: 4.5cm x 4.5cm
 description: yellow circle, black background with red flame symbol
 fabric : PBI Gold + Para-Aramid Grid
 composition fabric : 40% PBI - 58% Para-Aramid - 2% Antistatic
 weave fabric : Patterned Plain

2. Executed tests:

tests from EN ISO 14116	requirements	result	pass/fail and level
flame spread on logo after 5*(60°C 2A + <input checked="" type="checkbox"/> tumble dry) ISO 6330			
Index 1	No flaming to the top or either side edge No flaming debris No afterglow shall spread in the undamaged area	No flaming to the top or either side edge No flaming debris No afterglow	Pass Index 1
Index 2	No flaming to the top or either side edge No flaming debris No afterglow shall spread in the undamaged area No hole formation	No flaming to the top or either side edge No flaming debris No afterglow No hole formation	Pass Index 2

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Centexbel is authorised by decree of the Ministry of Employment and Labour AV/OA235/ST, dated 25/5/94 and identified under the number 0493 by the European Committee.

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Polymark (GB) Ltd

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CR/206_2014

date
2014-01-21

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tests from EN ISO 14116	requirements	result	pass/fail and level
Index 3	No flaming to the top or either side edge No flaming debris No afterglow shall spread in the undamaged area No hole formation After flame of each individual specimen $\leq 2s$	No flaming to the top or either side edge No flaming debris No afterglow No hole formation No after flame	Pass Index 3

tests from EN ISO 11611	requirements	result	pass/fail and level
flame spread on logo after 5*(60°C 2A + ☐ tumble dry) ISO 6330	Mean after flame ($\leq 2s$) Mean afterglow ($\leq 2s$) in the undamaged area No flaming debris No molten debris No flaming to the top or either side edge No hole formation	No after flame No afterglow No flaming debris No molten debris No flaming to the top or either side edge No hole formation	Pass

tests from EN ISO 11612	requirements	result	pass/fail and level
flame spread on logo after 5*(60°C 2A + ☐ tumble dry) ISO 6330	Mean after flame, ($\leq 2s$) Mean afterglow ($\leq 2s$) in undamaged area No flaming debris No melting or molten debris No flaming to the top or either side edge No hole formation	No after flame No afterglow No flaming debris No molten debris No flaming to the top or either side edge No hole formation	Pass

Detailed results can be found in:

Centexbel: analysis report 13.05561.01 of 2013-12-05

Kristina De Temmerman
By order of Inge De Witte
Certification Manager

Firm: Polymark GB Limited
14 Sopwith Way
Drayton Fields
Daventry
Northants
NN11 8PB

For the attention of: Mr P York

Technical Services Report

Subject: Effects of heat applied transfers on
the EN 1149 parts 1 & 2 properties of a
fabric

Our ref: 63639/0539/SPC-0/DMcK

Your ref:

Date: 13th October 2005

Conditions of Issue:

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Results given in this report refer only to the samples submitted for analysis and tested by SATRA. Comments are for guidance only and are not part of the reported results. All comments and interpretations are outside the scope of UKAS accreditation and are based on current SATRA knowledge.

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Tests marked † are not UKAS accredited.

Introduction

Samples of transfers were supplied in order to assess the effects of heat application on the surface and vertical resistance of a fabric. Test methods EN 1149 parts 1 and 2 were used to measure the surface and vertical resistances of fabric both in the fresh state and after application of the transfers.

Testing was carried out between the 6th and 11th October.

Transfer references:-

- A) "Wurth"
- B) "Culinary theme"
- C) "Large Michelin"
- D) "Small Michelin"

The transfer were applied to a fabric known to have a surface resistivity which complies with EN 1149-1. Application was carried out using a heated press supplied by the client, at a temperature of 180°C and a dwell time of 10 seconds.

Results

Table 1 – Surface resistivity

Specimen	Surface resistance MΩ	Surface resistivity GΩ	Overall Result – against requirements of EN 1149-1:1995 clause 4.1 >50 GΩ
Fabric – no transfers applied	179.9 110.4 7.85 15.4 12.1	3.5 2.1 0.15 0.30 0.23	PASS
Fabric in the proximity of A)	182.6 5.86 25.5 8.54	3.5 0.11 0.50 0.17	PASS
Fabric in the proximity of B)	219 176.3 40.8 7.06 6.22	4.3 3.4 0.79 0.14 0.12	PASS
Fabric in the proximity of C)	8.18 4.25 1.66 22.5 34.5	0.16 0.08 0.03 0.44 0.67	PASS
Fabric in the proximity of D)	15.97 4.90 6.03 15.33 2.82	0.31 0.09 0.12 0.30 0.05	PASS

Table 2 – Vertical resistance

Specimen	Vertical resistance MΩ
Fabric – no transfers applied	112.2
	98.3
	134.5
	98.0
	69.9
	92.7
Fabric in the proximity of A)	139.5
	113.5
	127.6
	105.7
Fabric in the proximity of B)	118.5
	172.4
Fabric in the proximity of C)	82.6
	75.4
	82.2
Fabric in the proximity of D)	64.0
	63.6
	59.5

Conclusions

The presence of the heat applied transfer appears to have had no significant effect on the surface resistivity and the vertical resistance of the fabric used in the exercise.