



Confidential Report

Our Ref: 60/00457/1



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Notified Body
for PPE Directive,
Construction Products Regulation
& Marine Equipment Directive
I.D. No. 0338 & 0339



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Date: 18 January 2017

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Client: Flamesafe Maxisoft Ltd
Royal Road
Tombeau Bay
Mauritius

Job Title: Testing of retro-reflective tape
Supplement to Confidential Report 60/00457 dated 13 January 2016.
This supplementary report amends the sample description in accordance with an instruction provided by the client.

Client's Order No: Email dated 7th December 2016

Date of Receipt: 9th December 2016
Date of Test Start: 10th January 2017

Description of Sample(s): One sample of retro-reflective tape, laminated to a navy coloured, knitted fabric, identified as follows, was received for testing:

Taped sample

Work Requested: We were asked to make tests according to the following standard:
ISO 11612: 2015
(a) Clause 6.2.1 Heat resistance (at 180°C)
(b) Clause 6.3.2 Limited flame spread – Face ignition



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Flamesafe Maxisoft Ltd

Sample: Taped sample

Performance Standard: ISO 11612: 2015
(a) Clause 6.2.1 Heat resistance (at 180°C)
(b) Clause 6.3.2 Limited flame spread – Face ignition

Cleansing Pretreatment: Sample supplied pre-treated by Solvay.

Summary of Results: See pages 3 and 4.

ISO 11612: 2015 states the following:

- “All the individual results of the specimens of a test shall meet the performance requirement”
- “The average result shall be given”.
- “The estimate of uncertainty shall be applied when it may affect the rating or classification of a property”

For the purposes of assessing the sample, BTTG™ uses the following parameters:

1. The worst individual test result.
2. The mean result after uncertainty of measurement has been applied.



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Flamesafe Maxisoft Ltd

Sample: Taped sample

Performance Standard: ISO 11612: 2015 Clause 6.2.1 Heat resistance

Test Method: ISO 17493: 2000
Test temperature: 180±5°C
Exposure time: 5 minutes

Cleansing Pretreatment: Sample supplied pre-treated by Solvay

Summary of Results:

Specimen Number	Ignition?	Melting?	Pass/Fail
1.	No	No	PASS
2.	No	No	PASS
3.	No-	No	PASS

PROPERTY	TEST METHOD	ISO 11612 REQUIREMENTS	RESULTS OBTAINED	PASS/FAIL OR LEVEL
6.2.1 Heat resistance (at 180°C)	ISO 17493: 2000 at 180°C	Shall not ignite or melt	Specimens did not ignite or melt.	PASS



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Sample: Taped sample

Performance Standard: ISO 11612: 2015 Clause 6.3.2 Limited flame spread – Face ignition

Test Method: ISO 15025: 2000 Procedure A – Surface ignition
Flame application time = 10s; Propane gas
Test flame applied to retro-reflective tape

Cleansing Pretreatment: Sample supplied pre-treated by Solvay.


Summary of Results:

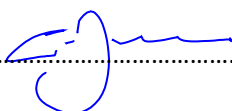
Date of test: 10 January 2017 Laboratory temperature: 20°C Laboratory relative humidity: 46%

Specimen	1↑	2↓	3↑	Mean
Flaming to edge	No	No	No	--
Afterflame time, sec	0	0	0	0
Afterglow spreads	No	No	No	--
Afterglow time, sec	0	0	0	0
Debris observed	No	No	No	--
Flaming debris	No	No	No	--
Hole formed	No	No	No	--
Holing to edge	No	No	No	--

Property	ISO 11612 Requirements	Results Obtained	Pass/Fail
6.3.2.4 Limited flame spread – Face ignition (A1) (tested after cleansing pretreatment)	No flaming to edge No holing No flaming or molten debris No afterflame ≤ 2s No afterglow ≤ 2s	No flaming to edge No holing No flaming or molten debris No afterflame No afterglow	PASS A1

An estimation of uncertainty of measurement has been taken into account when making a judgement to any pass/fail criteria. Refer to Appendix A for further information.

Reported by:  P M Collinson, Laboratory Technician

Countersigned by:  C Dean, Laboratory Manager



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Appendix A

ISO 11612: 2015 Annex E: Uncertainty of Measurement:

ISO 11612 Clauses	Test Method	95% Confidence limit
6.2.1 Heat resistance	ISO 17493: 2000 (180°C)	± 2.8%
6.3.2 Flame spread – Face (A1)	ISO 15025: 2000 (A)	± 5.0%

* These uncertainty value are based on a standard uncertainty multiplied by a coverage factor k=2, which provides for a confidence level of approximately 95%.



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