

BRE Global Test Report

EN ISO 11925-2 Single-flame source test on ARMARK PUREZONE60

Prepared for: Armadillo Marketing Limited T/A Armadillo Lighting

Date: 26 January 2021

Report Number: P119024-1002 Issue 1

BRE Global Ltd
Watford, Herts
WD25 9XX

Customer Services 0333 321 8811

From outside the UK:
T + 44 (0) 1923 664000
F + 44 (0) 1923 664010
E enquiries@bre.co.uk
www.bre.co.uk

Prepared for:

Armadillo Marketing Limited T/A Armadillo
Lighting
Bigods Hall
Bigods Lane
Great Dunmow
Essex
CM6 3BE
England



0578



Prepared by

Name C A Rock

Position Senior Consultant

Signature

A handwritten signature in blue ink that reads 'CA Rock'.

Authorised by

Name J Hunter

Position Section Leader – Reaction to Fire

Date 26 January 2021

Signature

A handwritten signature in black ink that reads 'J Hunter'.

This report is made on behalf of BRE Global and may only be distributed in its entirety, without amendment, and with attribution to BRE Global Ltd to the extent permitted by the terms and conditions of the contract. Test results relate only to the specimens tested. BRE Global has no responsibility for the design, materials, workmanship or performance of the product or specimens tested. This report does not constitute an approval, certification or endorsement of the product tested and no such claims should be made on websites, marketing materials, etc. Any reference to the results contained in this report should be accompanied by a copy of the full report, or a link to a copy of the full report.

BRE Global's liability in respect of this report and reliance thereupon shall be as per the terms and conditions of contract with the client and BRE Global shall have no liability to third parties to the extent permitted in law.

Opinions and interpretations expressed herein are outside the scope of UKAS Accreditation.



Table of Contents

1	Objective	4
2	Sample	4
2.1	Traceability	4
2.2	Description of sample and test format	4
2.3	Test summary	6
2.4	Description of substrate and fixing	6
2.5	Mounting technique	6
3	Conditioning	6
4	Results	7
4.1	Ignition and flame spread data	7
4.2	Observations	7
5	Conclusion	7
6	Validity	7
7	Reference	8



1 Objective

To assess the performance of the sample described in Section 2 of this report when subjected to the tests specified in EN ISO 11925-2¹.

2 Sample

2.1 Traceability

The test sample was supplied by the test sponsor. BRE Global was not involved in the sample selection process and therefore cannot comment upon the relationship between the sample supplied for test and the product supplied to market. The results apply to the sample as received.

2.2 Description of sample and test format

Unless otherwise stated all measurements are nominal.

Parameter	Details
Test sponsor	Armadillo Marketing Limited T/A Armadillo Lighting Bigods Hall Bigods Lane Great Dunmow Essex, CM6 3BE England
Prepared for	Armadillo Marketing Limited T/A Armadillo Lighting Bigods Hall Bigods Lane Great Dunmow Essex, CM6 3BE England
Manufacturer of sample	Hexis S.A. ZI Horizons Sud 34110 Frontignan France
Place of manufacture	Note 1
Trade name	ARMARK PUREZONE60
Sample reference	ARMARK PUREZONE60
Sample description (as provided by test sponsor/manufacturer)	Self-adhesive anti-microbial film made of: <ul style="list-style-type: none">• Acrylic adhesive• PVC film
Description of sample (as received)	A transparent film applied to a nominal 2 mm-thick aluminium sheet.
Test sponsor's product data	
Generic type of product	Cast polymeric PVC containing antimicrobial agents coated with pressure-sensitive acrylic adhesive.



Parameter	Details
Nominal thickness (mm)	0.105
Nominal mass per unit area (kg/m ²)	0.120
Colour	Transparent
Flame retardant treatment added, or organic content limited during production (yes/no)	Note 1
European product standard, if applicable	Note 1
Film	
Generic type of film	Cast polymeric PVC containing antimicrobial agents
Manufacturer	Note 1
Finish	Gloss
Nominal thickness (µm)	60
Nominal density (kg/m ³)	Note 1
Nominal mass per unit area (kg/m ²)	Note 1
Colour	Transparent
Adhesive	
Generic type of adhesive	Solvent-based, pressure-sensitive, acrylic-based adhesive (present on the film).
Manufacturer	Note 1
Nominal thickness (µm)	40
Nominal density (kg/m ³)	Note 1
Nominal mass per unit area (g/m ²)	40
Colour	Transparent
Substrate and ventilation conditions	
Generic type of substrate	Aluminium sheet
Manufacturer	Note 1
Nominal thickness (mm)	2
Nominal density (kg/m ³)	2700
Nominal mass per unit area (kg/m ²)	5.4
Type of air gap	None
Measured sample data, determined by BRE Global, measured at a temperature of 23 ± 3 °C and at a relative humidity of 50 ± 5 %	
Mean sample thickness (mm)	EN 13823: 2.00 EN ISO 11925-2: 2.01 (range 2.00 to 2.01) Substrate: 1.91 Dry film: 0.10 (range 0.09 to 0.10)



Parameter	Details
Mean sample mass per unit area (kg/m ²)	EN 13823: 5.26 (range 5.26 to 5.27) EN ISO 11925-2: 5.27 (range 5.26 to 5.27) Substrate: 5.15 (range 5.14 to 5.15) Film: 0.12
Mean sample mass per unit area of dry film (g/m ²)	117.22 (range 116.37 to 118.08)
Test information	
Face to be tested	Film face
Orientation aspects	Not applicable
Test sponsor's sampling identification	Note 1
BRE Global sample number	E13164
Sample receipt date	02 November 2020
Date into conditioning	02 November 2020
Date of test	12 November 2020
Additional information	Purchase Order: PROD.:10527 dated 14/10/2020

Note 1: This information was not supplied by the test sponsor.

2.3 Test summary

There were no joints incorporated into the test specimens.

The following tests were conducted:

Set	Sample	Exposure condition	Flame application period (s)	Substrate / fixing	Facing
1	ARMARK PUREZONE60	Surface	30	Self-adhered to 2 mm-thick, 2700 kg/m ³ aluminium sheet	None

2.4 Description of substrate and fixing

The test specimen was self-adhered to a nominal 2 mm-thick, 2700 kg/m³ aluminium sheet using a solvent-based, pressure-sensitive, acrylic-based adhesive (present on the back face of the film).

2.5 Mounting technique

Each test specimen (sample and substrate) was mounted free-standing, without any material either in front or behind it.

3 Conditioning

The test specimens were conditioned as required by the test standard.



4 Results

4.1 Ignition and flame spread data

Table 1: 30s Surface Exposure

Temperature: 18.6 °C Relative humidity: 45.6 % Air velocity: 0.73 m/s
 Exposure condition: Surface Flame application time: 30 s Operator: C. A. Rock
 Number of test runs: Six Deviations from test standard: None

Run No.	Occurrence of ignition (Y/N)	Time to ignition (s)	Duration of flaming (s)*	Flame spread to 150 mm (Y/N)	Time to reach 150 mm (s)	Maximum flame spread (mm)	Ignition of filter paper (Y/N)
1	No	N/A	N/A	No	N/A	N/A	No
2	No	N/A	N/A	No	N/A	N/A	No
3	No	N/A	N/A	No	N/A	N/A	No
4	No	N/A	N/A	No	N/A	N/A	No
5	No	N/A	N/A	No	N/A	N/A	No
6	No	N/A	N/A	No	N/A	N/A	No

N/A Not applicable * Measured to end of the 60 s test duration

4.2 Observations

Set(s)	Run No.	Comments
1	All	There was no visible damage to the test specimen

5 Conclusion

EN ISO 11925-2 does not contain acceptance criteria and therefore this test report does not indicate a pass or fail of the product.

6 Validity

These test results relate to the behaviour of the sample in the form in which it was tested; the results do not necessarily relate to products produced as a result of further processing or refinement of the sample under test.

The test results relate only to behaviour of the test specimens of the product under the particular conditions of test, they are not intended to be the sole criteria for assessing the potential fire hazard of the product in use.

The information in section 2.2 and in Appendix A of this report, other than that indicated otherwise, was supplied by the test sponsor and was not independently verified by BRE Global. The validity of the results is conditional on the accuracy of that data.



7 Reference

- 1 EN ISO 11925-2: 2010. Reaction to fire tests - Ignitability of products subjected to direct impingement of flame - Part 2: Single-flame source test. CEN, Avenue Marnix 17, B-1000 Brussels. 2010.