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BRE Global Classification Report

Classification of reaction to fire performance in accordance with EN 13501-1: 2018 on ARMARK PUREZONE60

Prepared for: Armadillo Marketing Limited T/A Armadillo Lighting

Date: 26 January 2021

Report Number: P119024-1001 Issue 1

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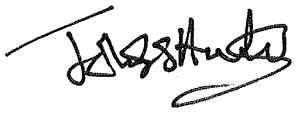
Signature 

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1 Introduction

This classification report defines the classification assigned to 'ARMARK PUREZONE60' in accordance with the procedures given in EN 13501-1: 2018[1].

BRE Global

CLASSIFICATION OF REACTION TO FIRE IN ACCORDANCE WITH EN 13501-1: 2018

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:	Hexis S.A., ZI Horizons Sud, 34110 Frontignan, France
Place of Manufacture:	This information was not supplied by the test sponsor
Prepared by:	BRE Global, Bucknalls Lane, Garston, Watford, Hertfordshire, WD25 9XX, UK
Notified Body No.:	0832
Product name:	ARMARK PUREZONE60
Classification report No.:	P119024-1001
Issue number:	One
Date of issue:	26 January 2021

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2 Details of classified product

2.1 General

The product, 'ARMARK PUREZONE60', is defined by the test sponsor as a cast polymeric PVC containing antimicrobial agents coated with pressure-sensitive acrylic adhesive.

2.2 Product description

The product, ARMARK PUREZONE60', is described in section 2.2.2.

2.2.1 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.

2.3 Sample details

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: • 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/m²)	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/m³)	Note 1
Nominal mass per unit area (kg/m²)	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/m³)	Note 1
Nominal mass per unit area (g/m²)	40
Colour	Transparent
Substrate and ventilation conditions	
Generic type of substrate	Aluminium sheet
Manufacturer	Note 1
Nominal thickness (mm)	2
Nominal density (kg/m³)	2700
Nominal mass per unit area (kg/m²)	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/m²)	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/m²)	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	E13163 and E13164
Additional information	Purchase Order: PROD.:10527 dated 14/10/2020

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

3 Reports & results in support of this classification

3.1 Reports

Name of Laboratory	Name of test sponsor	Test reports Nos.	Test method/field of application rules
BRE Global	Armadillo Marketing Limited T/A Armadillo Lighting	P119024-1000 Issue 1	EN 13823[2]
BRE Global	Armadillo Marketing Limited T/A Armadillo Lighting	P119024-1002 Issue 1	EN ISO 11925-2[3]

3.2 Results

Test method & test number	Parameter	No. test runs	Results	
			Continuous parameter - mean (m)	Compliance with parameters Criterion / Compliance status B-s1, d0
EN 13823 P119024-1000 Tested: 18/11/2020 E13163	FIGRA $_{0.2MJ}$ FIGRA $_{0.4MJ}$ LFS THR $_{600s}$	3	19.90 W/s 0.00 W/s (-) 0.93 MJ	≤ 120 W/s / Compliant - / - ≤ edge of specimen / Compliant ≤ 7.5 MJ / Compliant
	SMOGRA TSP_{600s}		0.00 m²/s² 13.72 m²	≤ 30 m²/s² / Compliant ≤ 50 m² / Compliant
	Flaming droplets/particles ≤ 10s Flaming droplets/particles > 10s		Not observed Not observed	Flaming ≤ 10s / Compliant Flaming > 10s / Compliant
EN ISO 11925-2 P119024-1002 Tested: 12/11/2020 E13164	F_s Flaming droplets/particles	6	Not observed Not observed	≤ 150 mm within 60s / Compliant No ignition of paper / Compliant

4 Classification and field of application

4.1 Reference of classification

This classification has been carried out in accordance with EN 13501-1: 2018.

4.2 Classification

The product, 'ARMARK PUREZONE60', in relation to reaction to fire behaviour is classified:

B

The additional classification in relation to smoke production is:

s1

The additional classification in relation to flaming droplets / particles is:

d0

The format of the reaction to fire classification for construction products excluding floorings and linear pipe thermal insulation products is:

Fire Behaviour		Smoke Production			Flaming Droplets	
B	-	s	1	,	d	0

i.e. B-s1, d0

Reaction to fire classification: B-s1, d0

4.3 Field of application

This classification is valid for:

i) Cast polymeric PVC containing antimicrobial agents coated with pressure-sensitive acrylic adhesive

And the following product and mounting and fixing parameters:

Parameter	Field of application
Generic type of product	Cast polymeric PVC containing antimicrobial agents coated with pressure-sensitive acrylic adhesive
Colour	Clear, transparent. No variation in colour allowed.
Finish	Smooth. No variation in finish allowed.
Overall thickness of product	Nominal 0.105 mm. No variation in thickness allowed outside of the manufacturing tolerances. 0.10 mm measured by BRE Global.
Overall mass per unit area of product	Nominal 0.120 kg/m². No variation allowed outside of the manufacturing tolerances. 117.2 g/m² measured by BRE Global at 23 ± 3 °C and 50 ± 5 % RH.
Composition	As tested. No variation in composition allowed.

Parameter	Field of application
Build-up and ordering of layers	As tested, no variation in the build-up or the ordering of the layers allowed.
Adhesive	
Generic type of adhesive	Solvent-based, pressure-sensitive, acrylic-based adhesive (present on the film). No variation in the type of adhesive allowed.
Adhesive thickness	Nominal 40 µm. No variation in adhesive thickness outside of the manufacturing tolerances.
Nominal mass per unit area of adhesive	Nominal 40 g/m². No variation in adhesive thickness outside of the manufacturing tolerances.
PVC film	
Generic type of film	Cast polymeric PVC containing antimicrobial agents
Dry film thickness of PVC film	Nominal 60 µm. No variation in dry film thickness allowed outside of the manufacturing tolerances.
Orientation, joints and exposed edges	
Product orientation and geometry	Tested with the PVC film outermost.
Joints and exposed edges	Valid for protected joints and edges.

This classification is valid for the following end-use applications:

i) 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) applied at a nominal thickness of 40 µm and a nominal application rate of 40 g/m².

5 Limitations

This classification document does not represent type approval or certification of the product.

The classification assigned to the product in this report is appropriate to a declaration of conformity by the manufacturer within the context of system 3 of AVCP and CE marking under the Regulation 305/2011/EU of the European Parliament and of the Council of 9 March 2011 laying down harmonised conditions for the marketing of construction products.

The manufacturer has made a declaration, which is held on file. This confirms that the product's design requires no specific processes, procedures, or stages (e.g. no addition of flame-retardants, limitation of organic content, or addition of fillers) that are aimed at enhancing the fire performance in order to obtain the classification achieved. As a consequence, the manufacturer has concluded that system 3 attestation is appropriate.

The test laboratory has, therefore, played no part in sampling the product for the test, although it holds appropriate references, supplied by the manufacturer, to provide for traceability of the samples tested.

The information in section 2.2.2 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.

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6 References

1. EN 13501-1: 2018. Fire classification of construction products and building elements. Part 1: Classification using data from reaction to fire tests. CEN, Rue de la Science 23, B-1040 Brussels. 2018.

2. EN 13823: 2010 + A1: 2014. Reaction to fire tests for building products - Building products excluding floorings exposed to the thermal attack by a single burning item'. CEN, Avenue Marnix 17, B-1000 Brussels. 2014.

3. 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.

Appendix A Product description

Figure A.1: EN 13823 pre-test photographs

Report Ends