Reaction to fire classification report

Issuing laboratory: Warringtonfire Testing and Certification Limited

Classification standard:	EN 13501-1: 2018
Sponsor(s):	Metamark UK Ltd
Product(s):	"MD5-UB-100 - (70mic Gloss Polymeric solvent adhesive)", "MD5-UB-101M - (70mic Matt Polymeric solvent adhesive)", "MDU- (100mic Polymeric solvent adhesive)", "MD-WA-01UB (150mic Textured Polymeric solvent adhesive)"
Report number:	545341
Version:	1

Quality management

Version	Date	Summary of amendments including reasons		
1	15 November 2024	Description	Initial issue	
			Prepared by	Authorised by
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		Signature	Signed by: C928598AC83B458...	Signed by: 7C2F5D630B7D4C0...
			*Signed for and on behalf of Warringtonfire Testing and Certification Limited	

Contents

1. Introduction

This classification report defines the classification assigned to "MD5-UB-100 - (70mic Gloss Polymeric solvent adhesive)", "MD5-UB-101M - (70mic Matt Polymeric solvent adhesive)", "MDU- (100mic Polymeric solvent adhesive)", "MD-WA-01UB (150mic Textured Polymeric solvent adhesive)", in line with the procedures given in EN 13501-1: 2018.

Warringtonfire Testing and Certification Limited (Warringtonfire) issued the classification report at the request of the sponsor listed in Table 1.

Table 1 Sponsor details

Entity	Address
Sponsor	
Metamark UK Ltd	Luneside, New Quay Road, Lancaster, LA1 5QP, United Kingdom

2. Details of classified product

2.1 General

The product(s), "MD5-UB-100 - (70mic Gloss Polymeric solvent adhesive)", "MD5-UB-101M - (70mic Matt Polymeric solvent adhesive)", "MDU- (100mic Polymeric solvent adhesive)", "MD-WA-01UB (150mic Textured Polymeric solvent adhesive)", are defined as being suitable for construction applications excluding flooring and linear pipe thermal insulation applications.

2.2 Product description

The product(s), "MD5-UB-100 - (70mic Gloss Polymeric solvent adhesive)", "MD5-UB-101M - (70mic Matt Polymeric solvent adhesive)", "MDU- (100mic Polymeric solvent adhesive)", "MD-WA-01UB (150mic Textured Polymeric solvent adhesive)", are described in Table 2 and in the test reports listed in Section 3.1.

Table 2 Product description

Item	Detail
General description	A self-adhesive polyvinyl chloride (PVC) film tested adhered to a paper faced plasterboard substrate
Individual product references	"MD5-UB-100 - (70mic Gloss Polymeric solvent adhesive)" "MD5-UB-101M - (70mic Matt Polymeric solvent adhesive)" "MDU- (100mic Polymeric solvent adhesive)" "MD-WA-01UB - (150mic Textured Polymeric solvent adhesive)"
Name of manufacturer	Metamark UK
Overall thickness including substrate (average)	12.31mm (determined by Warringtonfire)
Overall weight per unit area including substrate (average)	10.78kg/m^2 (determined by Warringtonfire)

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Item		Detail
PVC Film (test face)	Generic type	Polyvinyl chloride film
	Product reference	“MD5-UB-100” (gloss finish) “MD5-UB-101M” (matt finish) “MDU” (matt finish) “MD-WA-01UB” (matt finish plus textured / embossed)
	Name of manufacturer	See Note 1 below
	Colour reference	See Note 2 below
	Colour	White
	Thickness	72.5 ± 2.5 microns (“MD5-UB-100”) 72.5 ± 2.5 microns (“MD5-UB-101M”) 97.5 ± 2.5 microns (“MDU”) 150 ± 5 microns (“MD-WA-01UB”)
	Weight per unit area / density	See Note 2 below
	Flame retardant details	See Note 3 below
Adhesive	Generic type	100% acrylic adhesive
	Product reference	See Note 1 below
	Name of manufacturer	See Note 1 below
	Colour reference	See Note 2 below
	Colour	Grey
	Number of coats	See Note 2 below
	Application thickness per coat	See Note 2 below
	Weight per unit area	See Note 1 below
	Application method	Knife on roller
	Curing process	See Note 2 below
	Flame retardant details	See Note 3 below
Brief description of manufacturing process		Transfer coating on reel to reel basis
Mounting and Fixing Details		The specimens were tested applied to a 12.5mm thick paper faced plasterboard substrate (as specified in EN 13238:2010) utilising the inherent self-adhesive backing
Substrate	Generic type	Paper faced plasterboard
	Product reference	“Paper faced plasterboard”
	Name of manufacturer	Gyproc
	Thickness	12.5mm
	Density	800kg/m^3
	Flame retardant details	See Note 4 below

Note 1: The sponsor of the test has provided this information but at the specific request of the sponsor, these details have been omitted from the report and are instead held on the confidential file relating to this investigation.

Note 2 The sponsor was unwilling to provide this information.

Note 3: The sponsor of the test has confirmed that no flame retardant additives were utilised in the production of the product.

Note 4: The sponsor was unable to provide this information.

3. Test reports and test results in support of classification

3.1 Test reports

Table 3 details the test reports that have been used in support of classification.

Table 3 Test reports

Name of laboratory	Name of sponsor(s)	Test report no.	Test date	Test and extended application standard
Warringtonfire	Metamark UK Ltd	544862	27 June 2024	EN 13823: 2020 + A1: 2022
Warringtonfire	Metamark UK Ltd	544861	27 June 2024	
Warringtonfire	Metamark UK Ltd	544864	27 June 2024	
Warringtonfire	Metamark UK Ltd	544865	27 June 2024	
Warringtonfire	Metamark UK Ltd	544949	27 June 2024	EN ISO 11925-2: 2020
Warringtonfire	Metamark UK Ltd	544950	27 June 2024	
Warringtonfire	Metamark UK Ltd	544951	27 June 2024	
Warringtonfire	Metamark UK Ltd	544954	27 June 2024	
Warringtonfire	Metamark UK Ltd	545342	-	CEN/TS 15117:2005 & EN 15725:2023

3.2 Test results

3.2.1 Official test results used for the classification

Table 4 details the test results that have been used in support of classification. The fire performance parameters for class B - s1, d0 can be found in Table 7.

Table 4 Test data

Test method Report number	Parameter	Number of tests	Results	
			Continuous parameters	Compliance with parameters
EN 13823: 2020 + A1: 2022 544862 "MD5-UB-101M – (70mic Matt Polymeric solvent adhesive)"	FIGRA (THR(t) threshold of 0.2MJ)	3	83	-
	FIGRA (THR(t) threshold of 0.4MJ)		28	-
	THR_{600s} (MJ)		1.2	-
	LFS < edge of specimen		-	Compliant
	SMOGRA (m^2/s^2)		0	-
	TSP_{600s} (m^2)		25	-
	No flaming droplets/particles persisting shorter than 10 s in EN 13823 within 600s		-	Compliant
	No flaming droplets/particles persisting longer than 10 s in EN 13823 within 600s		-	Compliant

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Test method Report number	Parameter	Number of tests	Results	
			Continuous parameters	Compliance with parameters
EN ISO 11925-2: 2020 (30s exposure - Surface) 544949 "MD5-UB-100 – (70mic Gloss Polymeric solvent adhesive)"	Fs ≤ 150 mm within 60 s	6	-	Compliant
	No ignition of the paper		-	Compliant
EN ISO 11925-2: 2020 (30s exposure - Edge) 544949 "MD5-UB-100 – (70mic Gloss Polymeric solvent adhesive)"	Fs ≤ 150 mm within 60 s	6	-	Compliant
	No ignition of the paper		-	Compliant
EN ISO 11925-2: 2020 (30s exposure - Surface) 544950 "MD5-UB-101M – (70mic Matt Polymeric solvent adhesive)"	Fs ≤ 150 mm within 60 s	6	-	Compliant
	No ignition of the paper		-	Compliant
EN ISO 11925-2: 2020 (30s exposure - Edge) 544950 "MD5-UB-101M – (70mic Matt Polymeric solvent adhesive)"	Fs ≤ 150 mm within 60 s	6	-	Compliant
	No ignition of the paper		-	Compliant
EN ISO 11925-2: 2020 (30s exposure - Surface) 544951 "MDU – (100mic Matt Polymeric solvent adhesive)"	Fs ≤ 150 mm within 60 s	6	-	Compliant
	No ignition of the paper		-	Compliant
EN ISO 11925-2: 2020 (30s exposure - Edge) 544951 "MDU – (100mic Matt Polymeric solvent adhesive)"	Fs ≤ 150 mm within 60 s	6	-	Compliant
	No ignition of the paper		-	Compliant
EN ISO 11925-2: 2020 (30s exposure - Surface) 544954 "MD-WA-01UB (150mic Textured Polymeric solvent adhesive)"	Fs ≤ 150 mm within 60 s	6	-	Compliant
	No ignition of the paper		-	Compliant
EN ISO 11925-2: 2020 (30s exposure - Edge) 544954 "MD-WA-01UB (150mic Textured Polymeric solvent adhesive)"	Fs ≤ 150 mm within 60 s	6	-	Compliant
	No ignition of the paper		-	Compliant

Note: '-' symbol confirms this parameter is not applicable.

3.2.2 Comparative test results used for the worst case determinations

The tables below detail the test data that has been used to determine the worst case for each product parameter.

Table 5 EN 13823

Product name Report number	Parameter	Number of tests	Results	
			Continuous parameters	Compliance with parameters
"MD5-UB-101M – (70mic Matt Polymeric solvent adhesive)" 544862*	FIGRA (THR(t) threshold of 0.2MJ)	1	87	-
	FIGRA (THR(t) threshold of 0.4MJ)		28	-
	THR_{600s} (MJ)		1.1	-
	LFS < edge of specimen		-	Compliant
	SMOGRA (m^2/s^2)		0	-
	TSP_{600s} (m^2)		28	-
	No flaming droplets/particles persisting shorter than 10 s in EN 13823 within 600s		-	Compliant
	No flaming droplets/particles persisting longer than 10 s in EN 13823 within 600s		-	Compliant
"MD5-UB-100 – (70mic Gloss Polymeric solvent adhesive)" 544861	FIGRA (THR(t) threshold of 0.2MJ)	1	78	-
	FIGRA (THR(t) threshold of 0.4MJ)		0	-
	THR_{600s} (MJ)		1.2	-
	LFS < edge of specimen		-	Compliant
	SMOGRA (m^2/s^2)		0	-
	TSP_{600s} (m^2)		23	-
	No flaming droplets/particles persisting shorter than 10 s in EN 13823 within 600s		-	Compliant
	No flaming droplets/particles persisting longer than 10 s in EN 13823 within 600s		-	Compliant
"MDU – (100mic Matt Polymeric solvent adhesive)" 544864	FIGRA (THR(t) threshold of 0.2MJ)	1	86	-
	FIGRA (THR(t) threshold of 0.4MJ)		17	-
	THR_{600s} (MJ)		1.6	-
	LFS < edge of specimen		-	Compliant
	SMOGRA (m^2/s^2)		0	-
	TSP_{600s} (m^2)		26	-
	No flaming droplets/particles persisting shorter than 10 s in EN 13823 within 600s		-	Compliant
	No flaming droplets/particles persisting longer than 10 s in EN 13823 within 600s		-	Compliant

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Product name Report number	Parameter	Number of tests	Results	
			Continuous parameters	Compliance with parameters
"MD-WA-01UB (150mic Textured Polymeric solvent adhesive)" 544865	FIGRA (THR(t) threshold of 0.2MJ)	1	56	-
	FIGRA (THR(t) threshold of 0.4MJ)		36	-
	THR_{600s} (MJ)		1.4	-
	LFS < edge of specimen		-	Compliant
	SMOGRA (m^2/s^2)		0	-
	TSP_{600s} (m^2)		35	-
	No flaming droplets/particles persisting shorter than 10 s in EN 13823 within 600s		-	Compliant
	No flaming droplets/particles persisting longer than 10 s in EN 13823 within 600s		-	Compliant
(*) The results of this sample were re-used in the official test report No. 544862 (as test specimen 1).				

Note: '-' symbol confirms this parameter is not applicable.

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 products "MD5-UB-100 - (70mic Gloss Polymeric solvent adhesive)", "MD5-UB-101M - (70mic Matt Polymeric solvent adhesive)", "MDU- (100mic Polymeric solvent adhesive)", "MD-WA-01UB (150mic Textured Polymeric solvent adhesive)" in relation to their reaction to fire behavior are classified as:

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 applications excluding flooring and linear pipe thermal insulation applications products is:

Fire behaviour		Smoke production			Flaming droplets	
B	-	s	1	,	d	0

Alternatively shown:

Reaction to fire classification: B - s1, d0

4.3 Field of application

The classification for the product described in Section 2.2 of this report is valid for end-use applications described in Table 6.

Table 6 End-use applications

End use	Description	Origin
Substrate	Any substrate with a density equal to or greater than 525 kg/m³, a minimum thickness of 12 mm and a fire performance of A2-s1, d0 or better.	As per EN 13238: 2010, clause 5.3 and EGOLF recommendation 045-2018.
Fixing to substrate	Valid for use fully adhered using inherent self-adhesive backing in end use conditions	N/A

This classification is valid for the following product parameters:

- PVC film thickness:

  72.5 ± 2.5 micron film (covering gloss and matt finishes – smooth) (no variation allowed)

  97.5 ± 2.5 micron film (covering matt finish – smooth) (no variation allowed)

  150 ± 5 micron film (covering matt finish with texture / embossing) (no variation allowed)
- PVC film weight per unit area: No variation allowed
- PVC film colour: White (no variation allowed)
- Adhesive thickness: No variation allowed
- Adhesive weight per unit area: No variation allowed
- Adhesive colour: No variation allowed
- Adhesive application method: Knife on roller (no variation allowed)
- Adhesive curing process: No variation allowed
- Use of flame retardants: No variation allowed
- Construction: No variation allowed
- Composition: No variation allowed

4.4 Fire performance parameters for B - s1, d0

All the products described in Section 2.2 and within the field of application defined in Section 4.3 comply with the fire performance parameters shown in Table 7. The test results can be found in Section 3.2.

Table 7 Fire performance parameters for B - s1, d0

Test method	Parameter	Continuous parameters	Compliance with parameters
EN 13823: 2020 + A1: 2022	FIGRA (THR(t) threshold of 0.2MJ)	$FIGRA_{0,2MJ}$ ≤ 120 W/s	-
	FIGRA (THR(t) threshold of 0.4MJ)	-	-
	THR_{600s} (MJ)	THR_{600s} ≤ 7,5 MJ	-
	Lateral flame spread to edge of test specimen?	-	LFS < edge of specimen
	SMOGRA (m^2/s^2)	SMOGRA ≤ $30m^2/s^2$	-
	TSP_{600s} (m^2)	TSP_{600s} ≤ $50m^2$	-
	Fall of flaming droplets/particles < 10s?	-	No flaming droplets/particles persisting shorter than 10 s in EN 13823 within 600s
	Fall of flaming droplets/particles > 10s?	-	No flaming droplets/particles persisting longer than 10 s in EN 13823 within 600s
EN ISO 11925-2: 2020 (30s exposure)	Extent of flame spread	-	Fs ≤ 150 mm within 60 s
	Flaming droplets / particles that ignite filter paper	-	No ignition of the paper

Note: '-' symbol confirms this parameter is not applicable.

5. Restrictions

At the time the standard EN 13501-1: 2018 was published, no decision was made about the duration of validity of a classification report.

When this report is used to support UKCA marking under the Construction Products Regulation 2011 (retained EU law EUR 2011/305) as amended by the Construction Products (Amendment etc.) (EU Exit) Regulations 2019 and the Construction Products (Amendment etc.) (EU Exit) Regulations 2020 and/or 'CE+UK(NI)' marking for Northern Ireland under the Regulation 305/2011/EU of the European Parliament and of the Council of 9 March 2011, the provisions of those regulations prevail over any conflicting provisions in the designated/harmonised standards and technical specifications.

6. Limitations

According to the information mentioned by the sponsor on the technical information sheet there was no harmonised product standard for UKCA or CE+UK(NI) marking available at the time the classification report for the tested material/product was drafted. When such a product standard is published, this report may be submitted again to the laboratory to evaluate the adequacy of the report for UKCA or CE+UK(NI) marking.

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

7. Validity

This document is the original version of this classification report and is written in English. In case of doubt the original version prevails over a translation.

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The classification results relate to the behaviour of a product under the particular conditions of the test(s); they are not intended to be the sole criterion for assessing the potential fire hazard of the product in use, nor can the classification results be extrapolated and applied to other products, or imply suitability for use in configurations not specifically detailed in the classification report. The classification is based on the information available to Warringtonfire at the time of the report. Should conflicting or contradictory evidence become available, Warringtonfire reserves the right to unconditionally withdraw the classification report forthwith upon giving written notice of the same.

Reports are statements of fact prepared in accordance with the referenced version of the standards stated in Section 3 of this report. Test, classification and extended application are based upon the information provided to Warringtonfire. Warringtonfire takes no responsibility for the accuracy or completeness of such information.

The results stated in this classification report apply to the test specimens as received and/or specified in the referenced/supporting test reports. Any differences in composition, production process, thickness, density or colour of the product may significantly affect the performance and will therefore invalidate the application of the test and classification results to the variant product. It is recommended that any proposed variation to the tested configuration or product should be referred to the sponsor. The sponsor should then obtain appropriate documentary evidence of compliance from Warringtonfire or another accredited testing authority. The supplier of the product is responsible for ensuring that the product which is supplied for use is identical to the test specimens that were tested.

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