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Testing. Advising. Assuring.



# Title:

CLASSIFICATION OF REACTION TO FIRE PERFORMANCE IN ACCORDANCE WITH EN 13501-1:2007+A1: 2009.

### **Notified Body No:**

0833

**Product Name:** 

"Lumex A"

**Report No:** 

WF 397680

Issue No:

1

# Prepared for:

Foamalite Limited Loch Gowan Co. Cavan Ireland

#### Date:

21<sup>st</sup> March 2018



0249

### 1. Introduction

This classification report defines the classification assigned to "Lumex A", a family of polyethylene terephthalate sheet products, in line with the procedures given in EN 13501-1:2007+A1: 2009.

### 2. Details of classified product

### 2.1 General

The product, "Lumex A", a family of polyethylene terephthalate sheet products, is defined as being suitable for construction applications, excluding flooring and linear pipe thermal insulation.

# 2.2 Product description

The product, "Lumex A", a family of polyethylene terephthalate sheet products, is fully described below and in the test reports provided in support of classification listed in Clause 3.1.

Generic type	Polyethylene terephthalate
Product reference	"Lumex A"
Name of manufacturer	Foamalite
Thickness	0.5mm to 6mm (stated by sponsor)
Density	1.33g/cm <sup>3</sup> (stated by sponsor)
Colour reference	"Clear"
Flame retardant details	See Note 1 below
Mounting and fixing details	The specimen was tested with the maximum depth airgap between the reverse face and the calcium silicate substrate (as specified in EN 13238: 2010)
Brief description of	Extrusion.
manufacturing process	The material enters the throat of the cylinder on to the flights of a rotating screw and travels through a heated cylinder, during this process the material is compressed to remove any remaining moisture or volatiles and mix the components. The material is then filtered and pumped through the rest of the melt pipes before passing through the feed-block and die. The cooled sheet is pulled down the line by a double set of rubber coated rolls and pushes it through the sizing saws. The required size of the sheet is achieved by the use of longitudinal circular saws for edge trimming and a cross cut circular saw for the required length.

**Note 1:** The sponsor of the test has confirmed that no flame retardant additives were utilised in the production of the product.

# 3. Test reports/extended application reports & test results in support of classification

3.1	Test reports/extended application reports	
3.1	lest reports/extended application reports	

Name of Laboratory	Name of sponsor	Test reports/extended application report Nos.	Test method / extended application rules & date
Exova warringtonfire	Foamalite Limited	WF 337617	EN ISO 11925-2
Exova warringtonfire	Foamalite Limited	WF 337615, WF 337616, WF 396458	EN 13823
Exova warringtonfire	Foamalite Limited	WF 337809	EN 13501
Exova warringtonfire	Foamalite Limited	WF 337808, WF 397679	EN/TS 15117

# 3.2 Test results

Test method & test number				Results		
		Parameter	No. tests	Continuous parameter - mean (m)	Compliance parameters	
5-2	30s	Fs		Nil	Compliant	
11925-2	exposure - surface	Flaming droplets/ particles	6	None	Compliant	
	30s	Fs		30.8	Compliant	
EN ISO	exposure – edge	Flaming droplets/ particles	6	None	Compliant	
			Formal test average	4.43		
		FIGRA <sub>0.2MJ</sub>	Indicative test 1	0.00	Compliant	
			Indicative test 2	4.53		
			Formal test average	4.43		
		FIGRA 0.4MJ	Indicative test 1	0.00	Compliant	
			Indicative test 2	4.53		
			Formal test average	0.72		
EN 13823		THR 600s	Indicative test 1	0.15	Compliant	
			Indicative test 2	0.40		
			Formal test average	None		
		LFS	Indicative test 1	None	Compliant	
			Indicative test 2	None		
			Formal test average	0.00		
		SMOGRA	Indicative test 1	0.00	Compliant Compliant	
			Indicative test 2	0.00		
		Formal test average		4.25		
		TSP <sub>600s</sub>	Indicative test 1	9.53		
			Indicative test 2	14.42		

Page 4 of 5

### 4. Classification and field of application

### 4.1 Reference of classification

This classification has been carried out in accordance with clause 8 of EN 13501-1:2007+A1: 2009.

### 4.2 Classification

The product, "Lumex A", a family of polyethylene terephthalate sheet products, in relation to its reaction to fire behaviour is classified:

В

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 is:

Fire Behaviour		Smoke P	roduction		Flaming	Droplets
В	-	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 the following end use applications:

- i) Construction applications used over any substrate with a density equal to or greater than 870kg/m<sup>3</sup>, having a minimum thickness of 12mm and a fire performance of A2 or better (excluding paper faced gypsum plasterboard).
- ii) Construction applications installed with an air gap.

Page 5 of 5

This classification is also valid for the following product parameters:

Product thickness Density Product colour/pattern Product composition 0.5mm to 6mm No variation allowed No variation allowed No variation allowed

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Matthew Dale Certification Engineer Technical Department

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Janet Murrell Technical Manager Technical Department on behalf of Exova warringtonfire

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