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

Classification no.	2024-Efectis-R001471
Sponsor	Pretty Plastic Karperweg 41 1075 LB AMSTERDAM THE NETHERLANDS
Product name	**Basic Third recycled PVC tile** Onto pine wooden slats
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1. INTRODUCTION

This classification report defines the classification assigned to **Basic Third recycled PVC tile on Pine wood slats** in accordance with the procedures given in EN 13501-1:2018.

2. DETAILS OF CLASSIFIED PRODUCT

2.1 GENERAL

The product, **Basic Third recycled PVC tile on Pine wood slats**, is defined as a façade cladding.

2.2 MANUFACTURER

Pretty Plastic
Karperweg 41
1075 LB AMSTERDAM
THE NETHERLANDS

2.3 PRODUCT DESCRIPTION

According to the sponsor, the product is composed of:

- Recycled unplasticized rigid PVC supplied by PWR Trading BV (PVC-u pellets Grey coloured, stabilizer Ca/Zn/Pb);
- Compounded with 3% fire retardant additives containing 99.5 % Aluminium trihydrate ($Al(OH)_3$), 0.2 % sodium oxide (Na_2O), 0.01% iron oxide (Fe_2O_3).

The tiles are mechanically fixed onto Pine wood slats, dimensions 44x27 mm; density 450 kg/m^3 with a c.t.c. distance of approx. 500 mm.

The product has a total thickness of 30 mm, a density of 750 kg/m^3 and a mass per unit area of 13.3 kg/m^2. A single tile measures 569x329 mm and weighs 2.5 kg.
The type is referred to as “Basic Third”.

For further information see Appendix, “Data sheets” and are available at the sponsor.

3. STANDARDS, REPORTS, RESULTS AND CRITERIA IN SUPPORT OF THIS CLASSIFICATION

3.1 APPLICABLE (PRODUCT) STANDARDS

EN ISO 11925-2:2020	Reaction to fire tests - Ignitability of products subjected to direct impingement of flame - Part 2: Single-flame source test
EN 13823:2020+A1:2022	Reaction to fire tests for building products - Building products, excluding floorings exposed to the thermal attack by a single burning item
EN 13238:2010	Reaction to fire tests for building products - Conditioning procedures and general rules for selection of substrates
EN 13501-1:2018	Fire classification of construction products and building elements Part 1: Classification using data from reaction to fire tests

3.2 REPORTS

Name of Laboratories	Name of sponsor	Report ref. no.	Test method
Efectis Nederland BV THE NETHERLANDS	Pretty Plastic THE NETHERLANDS	2024-Efectis-R001469 2024-Efectis-R001470	EN ISO 11925-2:2020 EN 13823:2020+A1:2022

3.3 TEST RESULTS

Test method and test number	Parameter	No. tests	Results	
			Continuous parameter – maximum	Compliance with parameters
EN ISO 11925-2 Tile				
Surface flame impingement	Fs ≤150 mm	6	60	-
	Ignition of filter paper		-	Compliant
Edge flame Impingement	Fs ≤150 mm	6	65	-
	Ignition of filter paper		-	Compliant

Test method and test number	Parameter	No. tests	Results	
			Continuous parameter – mean (m)	Compliance with parameters
EN 13823				
	$FIGRA_{0.2MJ}$ [W/s]	3	93	-
	$FIGRA_{0.4MJ}$ [W/s]		82	-
	THR_{600s} [MJ]		7.4	-
	LFS < edge		-	Compliant
	SMOGRA [m^2/s^2]		65.1	-
	TSP_{600s} [m^2]		566	-
	Flaming debris - flaming ≤ 10 s - flaming > 10 s		 - -	 Compliant Compliant

3.4 CLASSIFICATION CRITERIA

Fire classification of construction products and building elements Excluding floorings and linear pipe thermal insulation products			
Classification criteria			
Class Test method(s)	**B**	**C**	**D**
EN ISO 11925-2 Exposure = 30 s	$F_s \leq 150$ mm within 60 s Ignition of the paper in EN ISO 11925-2 results in a d2 classification.		
EN 13823	$FIGRA_{0.2\ MJ} \leq 120$ W/s LFS < edge of specimen $THR_{600s} \leq 7.5$ MJ	$FIGRA_{0.4\ MJ} \leq 250$ W/s LFS < edge of specimen $THR_{600s} \leq 15$ MJ	$FIGRA_{0.4\ MJ} \leq 750$ W/s
Additional classification			
Smoke production	**s1** = SMOGRA ≤ 30 m^2/s^2 and $TSP_{600s} \leq 50$ m^2; **s2** = SMOGRA ≤ 180 m^2/s^2 and $TSP_{600s} \leq 200$ m^2; **s3** = not s1 or s2		
Flaming Droplets/particles	**d0** = no flaming droplets/ particles in EN 13823 within 600 s; **d1** = no flaming droplets/ particles persisting longer than 10 s in EN 13823 within 600 s; **d2** = not d0 or d1.		

4. CLASSIFICATION AND FIELD OF APPLICATION

4.1 REFERENCE OF CLASSIFICATION

This classification has been carried out in accordance with clause 11 of EN 13501-1:2018.

4.2 CLASSIFICATION

The product, **Basic Third recycled PVC tile on Pine wood slats**, in relation to its reaction to fire behaviour is classified:

B

The additional classification in relation to smoke production is:

s3

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

d0

Reaction to fire classification: B – s3, d0

4.3 FIELD OF APPLICATION

4.3.1 Direct field of application

This classification is valid for the following product parameters:

Thickness	30 mm
Surface density	13.3 kg/m^2 (a single tile measures 569x329 mm and weighs 2.5 kg)
Density tile	750 kg/m^3
Other properties	Portaflame® Mineral Flame Retardants Mounted against Pine wood slats, dimensions 44x27 mm; density 450 kg/m^3; c.t.c. 500 mm

This classification is valid for the following end use applications:

Substrate	Standard substrates density > 75% nominal density Non-combustible (class A1/A2, 870 kg/m^3, according to EN 13238:2010)
Application	Façade cladding
Air gap between tiles and substrate	40 mm, composed of Pine wood slates
Methods and means of fixing	Mechanically
Joints	Yes
Other aspects of end use conditions	Closed surface, no openings or gaps between components

4.4 DURATION OF THE VALIDITY OF THIS CLASSIFICATION REPORT

Consult classification standard and national laws and regulations for limitations on the period of validity of the classification.

5. LIMITATIONS

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

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