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CLASSIFICATION

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

Classification no.	2019-Efectis-R000569
Sponsor	PPG Coatings Europe B.V. Technical Center AC-NL Amsterdamseweg 14 1422 AD UITHOORN THE NETHERLANDS
Product name	**Sigmafix Universal Primer + Sigma Perfect Matt**
Prepared by	Efectis Nederland BV
Notified body no.	1234
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Project number	ENL-18-000588
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1. INTRODUCTION

This classification report defines the classification assigned to **Sigmafix Universal Primer + Sigma Perfect Matt** in accordance with the procedures given in EN 13501-1:2007+A1:2009.

2. DETAILS OF CLASSIFIED PRODUCT

2.1 GENERAL

The product, **Sigmafix Universal Primer + Sigma Perfect Matt**, will be used as a wall- and ceiling primer + paint

2.2 MANUFACTURER/IMPORTER

PPG Coatings Europe B.V.
Technical Center AC-NL
Amsterdamseweg 14
1422 AD UITHOORN
THE NETHERLANDS

2.3 PRODUCT DESCRIPTION

Product description:

Sigmafix Universal Primer:
Transparent wall paint primer based on an acrylic resin
- Density approx. 1.0 kg/dm^3;
- Painted in 1 layer;
- With a consumption of approx. 125 g/m^2;
- Dry layer thickness not determined (substrate absorbs the primer totally).

Sigma Perfect Matt:
Wall paint primer based on an acrylic resin in full shade yellow (UYY)
- Density approx. 1.3 kg/dm^3;
- Painted in 2 layers;
- With a consumption of approx. 325 g/m^2;
- In total dry layer thickness of approx. 70 µm (substrate absorbs the primer).

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

3.1 APPLICABLE (PRODUCT) STANDARDS

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
EN ISO 1716:2010	Reaction to fire tests for products - Determination of the gross heat of combustion (calorific value)
EN 13501-1:2007 +A1:2009	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	PPG Coatings Europe B.V. Technical Center AC-NL THE NETHERLANDS	2018-Efectis-R000067 2018-Efectis-R000068	EN 13823:2014 EN ISO 1716:2010

3.3 TEST RESULTS

Test method and test number	Parameter	No. tests	Results	
			Continuous parameter – mean (m)	Compliance with parameters
EN 13823				
Primer (1 layer) + Paint (2 layers)	$FIGRA_{0.2MJ}$ [W/s]	3	0	-
	$FIGRA_{0.4MJ}$ [W/s]		0	-
	THR_{600s} [MJ]		0.7	-
	LFS < edge		-	Compliant
	SMOGRA [m^2/s^2]		0.0	-
	TSP_{600s} [m^2]		36	-
	Flaming debris - flaming ≤ 10 s - flaming > 10 s		- 	 Compliant Compliant
EN ISO 1716				
The product is non-homogeneous				
External non-Substantial component(s)		[MJ/m^2]	3.28	Compliant
Substantial component (substrate CaSi)		[MJ/kg]	0.42	Compliant
Product as a whole		[MJ/kg]	0.38	Compliant

3.4 CLASSIFICATION CRITERIA

Fire classification of construction products and building elements Excluding floorings and linear pipe thermal insulation products			
Class	**Test method(s)**	**Classification criteria**	**Additional classification**
A2	EN ISO 1182 [a] Or	$\Delta T \leq 50$ °C; and $\Delta m \leq 50$ %; and $t_f \leq 20$ s	-
	EN ISO 1716 and	PCS ≤ 3.0 MJ/kg [a] and PCS ≤ 4.0 MJ/m^2 [b] and PCS ≤ 4.0 MJ/m^2 [d] and PCS ≤ 3.0 MJ/kg [e]	-
	EN 13823	FIGRA ≤ 120 W/s and LFS < edge of specimen and $THR_{600s} \leq 7.5$ MJ	Smoke production [f] and Flaming droplets/particles [g]

[a] For homogeneous products and substantial components of non-homogeneous products.
[b] For any external non-substantial component of non-homogeneous products.
[c] Alternatively, any external non-substantial component having a PCS ≤ 2.0 MJ/m^2 , provided that the product satisfies the following criteria of EN 13823: FIGRA ≤ 20 W/s, and LFS < edge of specimen, and $THR_{600s} \leq 4.0$ MJ, and s1, and d0.
[d] For any internal non-substantial component of non-homogeneous products.
[e] For the product as a whole.
[f] **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
[g] **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 13501-1:2007+ A1:2009.

4.2 CLASSIFICATION

The product, **Sigmafix Universal Primer + Sigma Perfect Matt**, in relation to its reaction to fire behaviour is classified:

A2

The additional classification in relation to smoke production is:

s1

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

d0

Reaction to fire classification: A2 – s1, d0

4.3 FIELD OF APPLICATION

This classification is valid for the following product parameters:

Total thickness	70 µm
Surface density (total primer+paint)	0.125 + 0.325 = 0.450 kg/m^2

This classification is valid for the following end use applications:

Substrate	Non-combustible (class A1/A2 according to EN 13238:2010); concrete / stone
Methods and means of fixing	Applied by brush, roller or (low pressure) spraying
Joints	Not applicable
Other aspects of end use conditions	Colour represents all colours

4.4 DURATION OF THE VALIDITY OF THIS CLASSIFICATION REPORT

There are no limitations in time on the validity of this report.

5. LIMITATIONS

This classification is only valid for end use application in combination with representative substrate.

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

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