

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

Classification no.	2021-Efectis-R000370
Sponsor	PPG Coatings Europe B.V. Technical Center AC-NL Amsterdamseweg 14 1422 AD UITHOORN THE NETHERLANDS
Product name	Sigmafloor Aqua 2K EP Satin
Prepared by	Efectis Nederland BV
Notified body no.	1234
Author(s)	G. van der Lee M.Sc. A. J. Lock B.R. Knottnerus B.Sc.
Project number	ENL-20-000969
Date of issue	March 2021
Number of pages	5

1. INTRODUCTION

This classification report defines the classification assigned to **Sigmafloor Aqua 2K EP Satin** in accordance with the procedures given in EN 13501-1:2018.

2. DETAILS OF CLASSIFIED PRODUCT

2.1 GENERAL

The product, **Sigmafloor Aqua 2K EP Satin**, is defined as a floor (wall) covering.

2.2 MANUFACTURER/IMPORTER

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

2.3 PRODUCT DESCRIPTION

According to the sponsor the product is a waterborne and solvent free two component epoxy based coating. The colour is referred as UYY. The Mix ratio of components in the two component epoxy is 1:3.

The product is applied in 3 layers with a total thickness of 90 µm, a density of approx. 1.3 kg/dm³ and a total mass per unit area of approx. 115 g/m².

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

3.1 APPLICABLE (PRODUCT) STANDARDS

EN 13238:2010	Reaction to fire tests for building products - Conditioning procedures and general rules for selection of substrates
EN ISO 1716:2018	Reaction to fire tests for products - Determination of the gross heat of combustion (calorific value)
EN ISO 9239-1:2010	Reaction to fire tests for floorings - Part 1: Determination of the burning behaviour using a radiant heat source
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 Efectis France France	PPG Coatings Europe B.V. Technical Center AC-NL THE NETHERLANDS	2021-Efectis-R000360 EFR-20-HC-004275 2021-Efectis-R000380	EN ISO 9239-1:2010 EN ISO 1716:2018

3.3 TEST RESULTS

Test method & test number	Parameter	No. tests	Results	
			Continuous parameter – mean (m)	Compliance Parameters
EN ISO 9239-1				
	Critical Heat Flux [kW/m ²]	3	≥11	-
	Smoke density [%..min]		3	-
EN ISO 1716				
The product is homogeneous				
External non-Substantial component(s)		[MJ/m ²]	2.3	Compliant
Product as a whole		[MJ/kg]	< 3*	Compliant
* In practice, the non-substantial external product applied on any A1 class substrate, will result in a total PCS per kg product less than 3 MJ/kg				

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	$\Delta T \leq 50$ °C; and $\Delta m \leq 50$ %; and $t_f \leq 20$ s	-
	Or		
	EN ISO 1716	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	-
	and		
	EN 9239-1	Critical Heat Flux ≥ 8 kW/m ²	-

^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/m², provided that the product satisfies the following criteria of EN 13823: FIGRA ≤ 20 W/s, and LFS < edge of specimen, and THR_{600s} ≤ 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.

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, **Sigmafloor Aqua 2K EP Satin**, in relation to its reaction to fire behaviour is classified:

A2_{fi}

The additional classification in relation to smoke production is:

s1

Reaction to fire classification: A2_{fi} – s1

4.3 FIELD OF APPLICATION

This classification is valid for the following product parameters:

Applied thickness (after drying)	90 µm
Applied surface density (after drying)	Total of 115 g/m ²
Colour	Yellow (UY), paint is applied in 3 layers.

This classification is valid for the following end use applications:

Substrate	Non-combustible (class A1 according to EN 13238:2010)
Air gap	None
Methods and means of fixing	Applied on the substrate with a roller.
Joints	None
Other aspects of end use conditions	Not applicable

4.4 DURATION OF THE VALIDITY OF THIS CLASSIFICATION REPORT

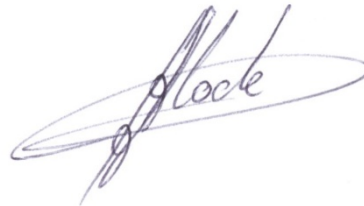
Consult classification standard and national laws and regulations for limitations on the period of validity of the classification.

5. LIMITATIONS

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



G. van der Lee M.Sc.
Junior project leader Reaction to Fire



A.J. Lock
Project leader Reaction to Fire



B.R. Knottnerus B.Sc.
Project leader Reaction to Fire