LGAI

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Bellaterra: 30th May, 2018

File: **18/16498-502 Part 2 M1**

Petitioner's reference: **Synthesia Technology Europe, S.L.U.**
Argent, 3
08755 Castellbisbal (Barcelona)

Description of the modification: The petitioner's reference is modified due to a change of company name.

The present report replaces and cancels report 18/16498-502 Part 2 that was issued on 10th May 2018. The petitioner is responsible for replacing the original document and all the copies thereof.

CLASSIFICATION REPORT

1. – PRODUCT CHARACTERISTICS

Commercial product reference: POLIURETAN SPRAY S-303 HFO CON SYNTHEFOC.

Rigid spray polyurethane (PUR) foam protected with plastering mortar Synthefoc.

The product consists of 2 layers:

- Layer 1: Rigid spray polyurethane (PUR) foam with the commercial name Polyurethane Spray S-303 HFO, with a thickness of 55-60 mm, a density of 33-37 kg/m^3, y yellowish colour and orange peel appearance.

- Layer 2: SYNTHEFOC (one-component mortar), with a minimum thickness of 5 mm (5-7 mm), a density of 650 kg/m^3, dark grey colour and rough appearance.

Fixing system: The product was tested adhered by cohesion (to the substrate of fibre-cement according to the standard UNE-EN 13238:2011)

Manufacturer: Synthesia Technology Europe, S.L.U. Address: Argent, 3 – 08755 Castellbisbal (Barcelona).

2. - CLASSIFICATION AND DIRECT APPLICATION FIELD

This classification has been made in compliance with the procedures provided in Standard UNE-EN 13501-1:2007+A1:2010: "Fire classification of construction products and building elements. Part 1: Classification using data from reaction to fire tests".

2.1. – Test report

Name of the Laboratory	Applus – LGAI
Name of the Petitioner	SYNTESIA TECHNOLOGY EUROPE, S.L.U.
Test Report Number	18/16498-502 Parte 1 M1
Testing method	UNE-EN ISO 11925-2:2011 UNE-EN 13823:2012+A1:2016

2.2. – Test results

Testing method	**RESULTS – POLIURETAN SPRAY S-303 HFO CON SYNTHEFOC**			
	CRITERIA CLASS B	**Nº OF TESTS**	**AVERAGE**	**COMPLIANCE**
UNE-EN ISO 11925-2:2011	$F_s \leq 150$ mm en 60 s	6	$F_s < 150$ mm	**YES**
	Inflamación del papel		NO	**YES**
UNE-EN 13823:2012 +A1:2016	$FIGRA_{0.2\ MJ} \leq 120$ W/s	3	9.13	**YES**
	LFS < edge of sample	3	< to edge	**YES**
	$THR_{600s} \leq 7{,}5$ MJ	3	0.62	**YES**
	CRITERIA subclass 's1'	**Nº OF TESTS**	**AVERAGE**	**COMPLIANCE**
	SMOGRA ≤ 30 m^2/s^2	3	1.11	**YES**
	$TSP_{600s} \leq 50$ m^2	3	7.63	**YES**
	CRITERIA subclass 'd0'	**Nº OF TESTS**	**AVERAGE**	**COMPLIANCE**
	Fall of droplets/particles in flames within 600s	3	NO	**YES**

CLASSIFICATION

With regard to its behaviour when reacting to fire, the product POLIURETAN SPRAY S-303 HFO CON SYNTHEFOC is classified as follows:

Behaviour to fire		Smoke production			Droplets in flames	
B	-	s	1	,	d	0

Fire reaction classification: CLASS B-s1,d0

This classification is only valid for the final conditions of use described in the present report.

2.3. – Field of application

- This classification is valid for the following product parameters:

The classification is only valid for the product characteristics shown.

- This classification is valid for following final conditions of use:

Constructive insulation solutions in building that require a higher fire reaction than the one that offers the Poliuretan Spray S-303 HFO, like in ETICS systems (External Thermal Insulation Composite System).

2.4. - Restrictions

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

Digitally signed by Jordi Mirabent Junyent

Responsible of the Fire Laboratory
LGAI Technological Center S.A. (APPLUS)

Digitally signed by Salvador Suñol Gálvez

Responsible Technician of Reaction to Fire
LGAI Technological Center S.A. (APPLUS)