REPORT
issued by an Accredited Testing Laboratory

Contact person	Date	Reference	Page	1002
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Reaction to fire classification report

1   Introduction

This classification report defines the classification assigned to the product "Grafo Therm" in accordance with the procedure given in EN 13501-1:2007+A1:2009.

2   Details of classified product

2.1   General

The product "Grafo Therm" is defined as an anti-condensation coating. Its classification is valid for end use application as surface finish on steel.

2.2   Product description

The product, Grafo Therm, is fully described.

According to the client:

Anti-condensation coating called "GrafoTherm", consisting of water based styrene-acrylic resin and perlite. Painted on a galvanized steel sheet with a nominal thickness of 0.9 mm and a nominal density of 7.2 g/cm³.

The amount of paint on the galvanized sheet is 1.0 kg/m² (0.32 kg/m² dry basis). The paint has a nominal density of 1.1 g/cm³.

3   Test reports & test results in support of classification

3.1   Test reports

This classification is based on test reports listed below:

Name of laboratory	Name of sponsor	Test report ref no	Accredited test method
SP	Tikkurila Drytech AB	5P02939-01	EN ISO 1716
SP	Tikkurila Drytech AB	5P02939	EN 13823

SP 302

REPORT

Date
2015-05-27

Reference
5P02939-1

Page
2 (3)

3.2 Test results

Test method	Parameter	Number of tests	Continuous parameter mean (m)	Compliance with parameters
EN 13823		3		
	$FIGRA_{0,2MJ}$ (W/s)		96	Compliant
	$FIGRA_{0,4MJ}$ (W/s)		80	Compliant
	LFS < edge		(-)	Compliant
	THR_{600s}, (MJ)		0.9	Compliant
	$SMOGRA$, (m²/s²)		7	Compliant
	TSP_{600s}, (m²)		43	Compliant
	Flaming droplets/particles		(-)	No flaming droplets/particles
EN ISO 1716		3		
	PCS (MJ/m²) (2)		3.46	Compliant
	PCS (MJ/kg) (4)		0.51	Compliant

(-): not applicable

(2): the parameter for the product when applied on steel (external non-substantial component)

(4): the parameter for the combination as a whole when the product is applied on steel

4 Classification and field of application

4.1 Reference and direct field of application

This classification has been carried out in accordance with clause 11 and 15 of
EN 13501-1:2007+A1:2009.

4.2 Classification

The product called "Grafo Therm" 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 particles/droplets is:

d0

The format of the reaction to fire classification for construction products excluding floorings and linear pipe thermal insulation product is:

Fire Behaviour		Smoke Production			Flaming Droplets	
A2	-	s	1	,	d	0

Reaction to fire classification: *A2-s1,d0*

4.3 Field of application:

This classification is valid for the following product parameters:

Amount of coating 1.0 kg/m^2 (0.32 kg/m^2 dry basis).

Nominal density of coating: 1.1 g/cm^3.

This classification is valid for the following end use conditions:

Substrates
- Galvanized metal substrate with a melting point equal or greater than 1000 °C and thickness $\geq$ 0.9 mm.

The sample was delivered by the client. SP Fire Research was not involved in the sampling procedure.

5 Limitations

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

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