

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

Sponsor	: PULVER KİMYA SAN. VE TİC. A.Ş. GOSB Tembelova Alanı 3200 Sok. No:3201 Gebze, Kocaeli / TÜRKİYE
Tested and prepared by	: EFFECTIS ERA AVRASYA TEST VE BELGELENDİRME A.Ş. Dilovası OSB Mah. Fırat Cad. No: 18 Dilovası, Kocaeli / TÜRKİYE
Product name	: Polyester Powder Coating
Classification Report no.	: ERA – 21 – 091 – REV2
Issue Number	: 1/2
Date of Issue	: 23.08.2023
Remarks	: This report supersedes the report numbered ERA-21-091-REV1 due to its validity period has been extended.

This classification report consists of 5 pages and may only be used or reproduced in its entirety.

1. INTRODUCTION

This classification report defines the classification assigned to “*Polyester Powder Coating*” in accordance with the procedures given in EN 13501-1:2018.

2. DETAILS OF CLASSIFIED PRODUCT

2.1. General:

Polyester Powder Coating is defined as a “type of classified product”.

2.2. Description:

Polyester Powder Coating is fully described in the test reports in support of the classification listed in clause 3.1.

Manufacturing plant: PULVER KİMYA SAN. VE TİC. A.Ş.
GOSB Tembelova Alanı 3200 Sok. No:3201 Gebze, Kocaeli / TÜRKİYE

Tested product types:

Product Name	Density (g/cm ³)	Amount of consumption (kg/m ²)	Application thickness (mm)	Color	Content
<i>Polyester Powder Coating</i>	1,18	0,094	0,08	Black	Polyester paint

3. REPORTS AND RESULTS IN SUPPORT OF CLASSIFICATION

3.1. Reports

Name of laboratory	Name of sponsor	Report ref. no.	Test method and date Field of application rules and date
EFFECTIS ERA AVRASYA TEST VE BELGELENDİRME A.Ş.	PULVER KİMYA SAN. VE TİC. A.Ş.	FTST21421	EN 13823:2020
		FTST21422	EN ISO 1716:2018

3.2. Results

Test method	Parameter	Number of test	Results	
			Continuous parameter mean	Continuous parameter mean
EN 13823+A1	FIGRA _{0,2 MJ} (W/s)	3	44,2	(-)
	FIGRA _{0,4 MJ} (W/s)	3	6,3	(-)
	LFS > edge	3	No	No
	THR _{600 s} (MJ)	3	0,7	(-)
	SMOGRA (m ² /s ²)	3	2,9	(-)
	TSP _{600 s} (m ²)	3	20,7	(-)
	Flaming droplet(s)/particle (s)	3	None	None
EN ISO 1716	PCS (MJ/kg) ⁽¹⁾	3	(-)	(-)
	PCS (MJ/kg) ⁽²⁾	3	26,34	(-)
	PCS (MJ/m ²) ⁽²⁾	3	2,48	(-)
	PCS (MJ/kg) ⁽³⁾	3	0,89	(-)
(-): Not applicable		(1):Aluminium plate (2):The paint component (external non-substantial component) (3):The product as a whole		

Test method	Parameter	Classification result	Compliance parameters
EN 13823+A1	FIGRA _{0,2 MJ} [W/s]	44,2	≤ 120 (A2)
	LFS >edge	No	Hayır (A2)
	THR _{600 s} (MJ)	0,7	≤ 7,5 (A2)
	SMOGRA [m ² /s ²]	2,9	≤ 30 (s1)
	TSP _{600s} [m ²]	20,7	≤ 50 (s1)
	Flaming droplet(s)/particle (s)	None	Yok (d0)
EN ISO 1716	PCS [MJ/kg] ⁽¹⁾	(-)	(-)
	PCS [MJ/m ²] ⁽²⁾	2,48	≤ 4 (A2)
	PCS [MJ/kg] ⁽³⁾	0,89	≤ 3 (A2)
(-): Not applicable		(1):Aluminium plate (2):The paint component (external non-substantial component) (3):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 the clauses 11.7.1, 11.7.3, 11.9.2 and 11.10.1 of EN 13501-1:2018.

4.2. Classification

Polyester Powder Coating in relation to their 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

The format of the reaction to fire classification for *Polyester Powder Coating* is:

Fire behaviour		Smoke production			Flaming droplets	
A2	-	s	1	,	d	0

Reaction to fire classification: A2-s1,d0

4.3. Field of application

The classification is valid for the following end use applications;

Product Name	Density (g/cm ³)	Consumption (kg/m ²)	Application thickness (mm)	Color	Content
<i>Polyester Powder Coating</i>	1,18	0,094	0,08	Black RAL 9005	Polyester paint
	1,45	0,116	0,08	Grey DB 703	Polyester paint
	1,34	0,107	0,08	Light yellow RAL 1001	Polyester paint
	1,56	0,124	0,08	Yellow RAL 1013	Polyester paint
	1,24	0,099	0,08	Dark Grey RAL 7016	Polyester paint

This classification is valid for the followin end use applications;

- Application directly on the metal substrates of reaction to fire class A1.

5. LIMITATIONS

5.1. Restrictions

This classification document does not represent type approval or certification of the product. This classification report is valid provided that the technical specifications of product are within the limits in accordance with the field of application clause 4.3. This report is initially valid until **23rd of August 2028** providing that no significant modifications are made in technical specification of the specimen and related test and classification standards.

Signed:



Approved:

e-signed

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Tuğçe AKOĞLAN
Person in charge of tests

e-signed

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Ali BAYRAKTAR
Laboratory manager