Test report ID 20341-3

Customer

Teknos Oy
Takkatie 3, 00370 Helsinki, Finland
Contact person: Mikko Hakala

Assignment

Measurlabs provided services as requested by the customer. Classification of reaction to fire in accordance with EN 13501-1:2018 was performed by an ISO/IEC 17025 accredited external service provider for product INFRALIT PE 8350. A summary report is presented below:

Product

The customer gave the following information about the product:

Product name: INFRALIT PE 8350
Manufacturer: Teknos Oy
Product description: Polyester powder coating on a metal substrate

- polyester powder coating with a thickness of 100 – 120 microns and a density in powder form of 1430 kg/m³

INFRALIT PE 8350 powder coating in black RAL 9005 colour. According to the customer this colour contains higher organic content than other colours of the product series and is considered the worst case colour tone in fire testing.

Test reports

The classification is based on test reports (Measurlabs test report ID and test lab ID):

- 20341-1 (660-1/2025, EN 13823:2020+A1:2022)
- 20341-2 (660-2/2025, EN ISO 1716:2018)

Field of application

This classification is valid for the following product end-use applications: The product primary use: intended to be used as a protective coating on metal substrates.

This classification is also valid for the following product parameters:

- valid only for product coating with consumption up to 155 g/m²
- valid only for product composition as tested
- product performance determined on standard aluminium sheet substrate and classification valid for product application on any metal substrate of reaction to fire class A1 having a density at least 2 700 kg/m³ and with a thickness of at least 1 mm and a melting point 500 °C and greater
- product has no orientation limitation
- valid for all colours. *

* According to the information provided by the customer INFRALIT PE 8350 powder coating in black colour (RAL9005) contains the highest organic content from all colours, and black colour was considered the worst case colour tone in fire testing.

The full classification report (K97/2025) with detailed information including results, field of application, validity and limitations are presented in annex 1 of this report.

Classification

This classification has been carried out in accordance with clause 11 of EN 13501-1:2018.

INFRALIT PE 8350

Reaction to fire classification: A2-s1, d0

No restrictions on the duration of validity of this classification report as long as the product specifications remain unchanged.

On Friday, 22 August 2025, issued by

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EN ISO/IEC 17025
T-316

Classification of reaction to fire in accordance with EN 13501-1:2018

Issue number: K97/2025

Date of issue: 13.08.2025.

Sponsor: Measur Oy.

Address: Teollisuuskatu 33, 00510 Helsinki, Finland.
Reg. No. 2820461-1.

Manufacturer and owner of classification report: Teknos Oy.

Address: Takkatie 3, 00370 Helsinki, Finland.
Reg. No. 2203752-5.

Prepared by: SIA "Meža un koksnes produktu pētniecības un attīstības institūts" *(Forest and Wood Products Research and Development Institute Ltd).*

Test performed at: SIA "Meža un koksnes produktu pētniecības un attīstības institūts" *(Forest and Wood Products Research and Development Institute Ltd),* "Pienavas katlu māja", Pienava, Džūkstes pagasts, Tukuma novads, LV-3147, Latvia *("Pienava heat plant", Pienava, Džūkste parish, Tukums region, LV-3147, Latvia).*

Product name: INFRALIT PE 8350.

The laboratory involved in testing is accredited by the Latvian National Accreditation Bureau (LATAK) according to the standard LVS EN ISO/IEC 17025 under the terms of Latvian legislation with reg. No. T-316.

1. Introduction

This classification report defines the reaction to fire classification assigned to INFRALIT PE 8350 in accordance with the procedures given in EN 13501-1:2018.

2. Details of classified product

2.1. General

INFRALIT PE 8350 is defined as a protective coating on metallic substrates. There is no harmonized European technical specification standard available describing this product.

2.2. Product description

- Product name: INFRALIT PE 8350.
- Manufacturer: Teknos Oy.
- Materials used for manufacturing:
  - aluminium sheet as substrate with a thickness of 1 mm and mass per area 2.7 kg/m^2;
  - polyester powder coating with a thickness of 100 – 120 microns and a density in powder form of 1430 kg/m^3.
- Tested colour: black (RAL9005).

3. Test reports and test results in support of classification

3.1. Specific conditions

Not applicable

3.2. Test reports

Name of laboratory	Name of sponsor	Test reports	Test method
SIA „ Meža un koksnes produktu pētniecības un attīstības institūts” Testing Laboratory	Measur Oy	660-1/2025	EN 13823:2020+A1:2022
SIA „ Meža un koksnes produktu pētniecības un attīstības institūts” Testing Laboratory	Measur Oy	660-2/2025	EN ISO 1716:2018

3.3. Test results

Test method	Parameter	Number of tests	Results	
			Continuous parameter mean	Compliance parameters
EN 13823:2020+A1:2022	$FIGRA_{0,2MJ}$(W/s)	3	50	(-)
	$FIGRA_{0,4MJ}$(W/s)		28	(-)
	THR_{600s}(MJ)		0.8	(-)
	LFS < edge of specimen		yes	Compliant
	SMOGRA(m^2/s^2)		Threshold not reached	(-)
	TSP_{600s}(m^2)		14.6	(-)
	Flaming droplets <10s		no	Compliant
	Flaming droplets >10s		no	Compliant
EN ISO 1716:2018	Gross heat of combustion Q_{PCS} (MJ/kg)/(MJ/m^2)	3	0.0 [a] 3.3 [b] 1.2 [c]	(-)

(-) not applicable
[a] Aluminium sheet as substrate *(substantial component),* MJ/kg;
[b] Polyester powder coating *(external non-substantial component),* MJ/m^2;
[c] Product as whole, MJ/kg.

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

INFRALIT PE 8350 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

The format of the reaction to fire classification for construction product excluding floorings and linings is:

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

Reaction to fire classification: A2-s1, d0

4.3. Field of application

4.3.1 This classification is valid for the following product end-use applications:
The product primary is intended to be used as a protective coating on metal substrates.

4.3.2. This classification is also valid for the following product parameters:

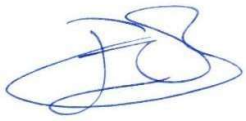
- valid only for product coating with consumption up to 155 g/m^2;
- valid only for product composition as tested;
- product performance determined on standard aluminium sheet substrate and classification valid for product application on any metal substrate of reaction to fire class A1 having a density at least 2 700 kg/m^3 and with a thickness of at least 1 mm and a melting point 500 °C and greater;
- product has no orientation limitation;
- valid for all colours. *

** According sponsor provided information that INFRALIT PE 8350 powder coating in black colour (RAL9005) contains the highest organic content from all colours, and black colour was considered the worst case colour tone in fire testing.*

5. Limitations.

5.1. No restrictions on the duration of validity of this classification report as long as the product specifications remain unchanged.
5.2. This document does not represent type approval or certification of the product.

Prepared by



E.Bukšāns

(signature and name)

Reviewed by

K.Būmanis

(signature and name)

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