Test report ID 20341-2

Customer

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

Assignment

Measurlabs provided testing according to standard EN ISO 1716:2018 as requested by the customer. Testing was made for samples of product: INFRALIT PE 8350. The testing was performed by an ISO/IEC 17025 accredited external service provider.

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.

Sample(s)

Sampling was performed by the Teknos Oy at Rajamäki Plant, Perämatkuntie 12, Nurmijärvi, Finland on 26.05.2025. The powder coating sample was taken from the warehouse of ready production and painted on aluminium sheets specially made for testing.

Sample name	Performed measurements
INFRALIT PE 8350 • Tested colour: Black (RAL 9005) • Substrate: Aluminium sheet with a thickness of 1 mm and mass per area 2.7 kg/m²	EN ISO 1716:2018

Samples received 09/06/2025 (dd/mm/yyyy)

Date of tests 11/07/2025

Results The results are presented in annex 1 (No.660-2/2025) of this report, and relate to the tested sample(s) only.

On Friday, 22 August 2025, issued by

Tatu Waltari
MSc
Senior Testing Expert

+358 50 394 8129
tatu.waltari@measurlabs.com

Measurlabs (Measur Oy)

Teollisuuskatu 33
00510 Helsinki
Finland

FOREST AND WOOD PRODUCTS
RESEARCH AND DEVELOPMENT INSTITUTE

„MEŽA UN KOKSNES PRODUKTU PĒTNIECĪBAS UN ATTĪSTĪBAS INSTITŪTS" SIA
VAT No. LV 43603022749
Dobeles iela 41, Jelgava, LV-3001, Latvia
Phone +371 63010605 * E-mail meka@e-koks.lv * Web www.e-koks.lv

EN ISO/IEC 17025
T-316

Test Report
No.660-2/2025

Forest and Wood Products Research and Development Institute
Testing Laboratory

Customer: Measur Oy.

Customer's address: Teollisuuskatu 33, 00510 Helsinki, Finland.
Reg. No. 2820461-1.

Manufacturer and owner of the test report: Teknos Oy.

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

Date of the order: 09.06.2025.
Testing was done according to contract No. 99-07/25 MU.

Test samples received: 16.06.2025.

Test performed at: SIA "Meža un koksnes produktu pētniecības un attīstības institūts" (Forest and Wood Products Research and Development Institute Ltd), Dobeles iela 41, Jelgava, LV-3001, Latvia.

Description of product (According to customer's information)

- 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).

Sampling:
Sampling was done by Teknos Oy at Rajamäki Plant, Perämatkuntie 12, Nurmijärvi, Finland on 26.05.2025. The powder coating sample was taken from the warehouse of ready production and painted on aluminium sheets specially made for testing.

Application of product (according to customer's information):
The product is intended to be used as a protective coating on metallic substrates.

Specimen preparation for testing:
Specimens were prepared and delivered to the testing laboratory on 16.06.2025. by Measur Oy.

Conditioning of specimens:
Specimens were conditioned according to standard EN 13238:2010.
Conditioning method: constant mass.
Temperature: t = 23 ± 2 ºC.
Relative humidity: RH = 50 ± 5%.
Conditioning period: 15 days.

Test standard: EN ISO 1716:2018
Test date: 11.07.2025.

Test equipment: Oxygen bomb calorimeter PARR 6200. Energy equivalent (EE) used for calculations was 2386.8794 cal/°C (9986.7034 J/K) for bomb ID 2.

Test results:
Unburned residues were observed after the tests and the complete combustion of organic content was confirmed. Deviation between repeated tests was within standard EN ISO 1716:2018 limits. Test result summary shown in the Table 1.

Table 1

Product	Specimen identification No.	Total heat of combustion Q_{PCS} MJ/kg	Total heat of combustion Q_{PCS} MJ/m^2
polyester powder coating *(external component: mass/ area 0.155 kg/m^2)*	660-2-1-1	21.1627	3.2802
	660-2-1-2	21.1823	3.2833
	660-2-1-3	21.1995	3.2859
	Average	**21.2**	**3.3**
	Standard deviation	*0.0184*	*0.0029*
Substantial components (*aluminium sheet as substrate)*	-	***0.0***	-
External non-substantial component (*polyester powder coating*)	-	-	***3.3***
Product as whole	-	***1.2***	-

Deviations from standard:
No.

According to EN ISO 1716:2018 test results relate to the behaviour of test specimens of a product under the particular conditions of the test; they are not intended to be the sole criterion for assessing the potential fire hazard of the product in use.

Date of issue: 13.08.2025.

Prepared by E.Bukšāns
(signature and name)

Reviewed by K.Būmanis
(signature and name)

THIS DOCUMENT IS SIGNED BY SECURE ELECTRONIC SIGNATURE AND CONTAINS A TIME STAMP
(Signature validity can be checked: https://www.eparaksts.lv/en)