

Serie 017 Architectural Application

A POWDER COATING FOR METAL FACADES AND STEEL CONSTRUCTION
BASIS: POLYESTER

Typical application

- pre-finished architectural building components (e.g. window extrusions, sheet metal claddings, etc.)
- steel construction
- automotive accessories
- metal cladding

Product details

Standard Packaging	in 20 kg cartons, 2,5 kg minipack
Specific Gravity (ISO 8130-2)	1,2–1,7 g/cm ³ depending on pigmentation
Theoretical Coverage	at 60 µm film thickness: 9,8–13,8 m ² /kg depending on specific gravity (please see also Information sheet no. 1072 - latest edition)
Storage Stability	Use before: see printed date on product label; under dry conditions at no more than 25 °C, avoid direct and extended heat exposure

(The shelf life of custom made blanket orders or other stock agreements which by their nature are stored over longer periods is determined by the original production date.)

Features

- good weather resistance
- good mechanical properties
- good flow properties
- suited for lightly out-gassing substrates
- batch consistency of RAL colors acc. to VdL guidance no. 10

Finish

Finish	Gloss
smooth <i>glossy</i>	80 – 95*
smooth <i>semi gloss</i>	70 – 80*
also available in an outfassing forgivin formulation	

Any other color can be custom made with a minimum order of 60 kg.

*Gloss level acc. to ISO 2813/60° angle (doesn't apply to metallic effect powder coatings). The measured gloss level of effect powder coatings can diverge from the details given in this product datasheet. The creation of tolerance samples is urgently recommended)

Warranty

Please see also Exhibit Limited Warranty no. 1008 latest edition.

Pre-treatment

The following table reflects the common methods of pretreatment with regards to various substrates and applications. In selecting the proper type of pretreatment please observe the suitability of the type of powder coating for a desired application according to the typical applications on page one of this Product Data Sheet.

	Alu- minum			Galvanized Steel			Steel		
Degreasing	○			○					○
¹⁾ Chromating	○	○	○	○	○	○	○		
²⁾ Pre-Anodizing	○	○	○						
²⁾ Chrome free	○	○	○	○	○				
Iron Phosphating									○
Zinc Phosphating				○	○	○	○	○	○
Blasting								○	○
³⁾ Sweeping				○	○	○	○		
	I	E	A	I	E	A	S	I	E
							S ⁴		

Application: I = interior; E = exterior; A = architectural; S = steel

- 1) acc. to DIN 50939
- 2) acc. to GSB quality and test regulations. The suitability of this type of pretreatment needs to be established through a boiling water test and subsequent cross-hatch adhesion and adhesive tape removal test.
- 3) only for zinc coated parts > 45 µm
- 4) for a two-coat process / TIGER Shield

Processing

Corona, Tribostatic*

*Suitability of metallic effects for tribo processing must be verified prior to application. Please consult with the relevant Information Sheets, latest edition.

Material approvals for colors and metallic effects*

Quality labels for the piecework coating of building components

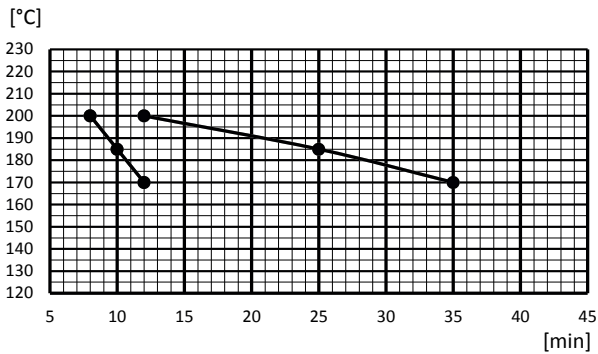
Finish	GSB Standard
smooth <i>glossy</i>	–
smooth <i>semi gloss</i>	GSB 107n

*exemptions prevail

Cure parameters

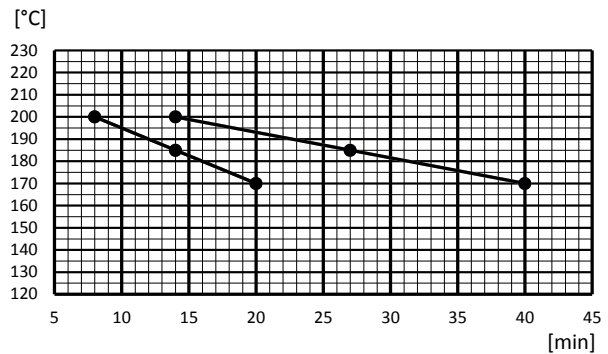
(Substrate temperature versus curing time)

smooth *glossy*



substrate temperature	minimum curing time	maximum curing time
170°C	12 minutes	35 minutes
185°C	10 minutes	25 minutes
200°C	8 minutes	12 minutes

smooth *semi gloss*



substrate temperature	minimum curing time	maximum curing time
170°C	20 minutes	40 minutes
185°C	14 minutes	27 minutes
200°C	8 minutes	14 minutes

Please observe cure parameters closely since mechanical properties will develop before full cross-linking! Metal temperatures shall not exceed 200°C. Please verify the suitability of direct gas-fired and IR oven equipment under actual production conditions for the intended application

Test results

Checked under laboratory conditions on a chromated aluminum test panel which is 0.7 mm thick. Actual product performance may vary due to product specific properties such as gloss, color, effect and finish as well as application related and environmental influences. Cure conditions according to the cure curves.

test method	test	Series 017 smooth <i>glossy</i>	Series 017 smooth <i>semi gloss</i>
ISO 2360	film thickness recommended	60-80 µm	60-80 µm
ISO 2813	gloss - 60°	80-95	70-80
ISO 2409	cross cut test / adhesion 1 mm cutting distance	0	0
ISO 1519	mandrel bending test cracking of coating	≤ 5 mm not permitted	≤ 5 mm not permitted
ISO 2815	impression hardness	≥ 87	≥ 87
ISO 1520	cupping test cracking of coating	≥ 5 mm not permitted	≥ 5 mm not permitted
ASTM D 2794	ball impact test cracking of coating	20 Inch/pound not permitted	20 Inch/pound not permitted
ISO 6270-1	determination of resistance to humidity 1000 h	delamination around scribe max. 1 mm	delamination around scribe max. 1 mm
ISO 9227	salt spray test 1000 h	delamination around scribe max. 1 mm	delamination around scribe max. 1 mm
acc. to EN ISO 16474-3	accelerated weathering UV-B (313 nm) 300 h *	residual gloss ≥ 50 %	residual gloss ≥ 50 %
EN ISO 2810	natural weathering in Florida 12 month	residual gloss ≥ 50 %	residual gloss ≥ 50 %

* acc. to GSB AL 631 (www.gsb-international.de)

Please Note

TIGER Drylac® Series 017 is suited for lightly out-gassing substrates. Introduce TIGER OGF (out-gassing forgiving) inhibitor 91/00013 according to the relevant product data sheet for heavily out-gassing work pieces

To help users exploit the benefits of the new generation of metallics to the full, we have divided our metallic effect powder coatings into the application categories A, B, C and D. For more information on this subject, please refer to the Application Guidelines for Powder Coatings with Metallic Effects, of data sheet no. 44.

Processing instructions

The guidelines for application (datasheet 1213) must be strictly observed.

The Product Data Sheets, Technical Information Sheets and the guidelines for application each in their latest version, available as a download at www.tiger-coatings.com.

Disclaimer

Our verbal and written recommendations for the use of our products are based upon experience and in accordance with present technological standards. These are given in order to support the buyer or user. They are non-committal and do not create any additional commitments to the purchase agreement. They do not release the buyer from verifying the suitability of our products for the intended application. We warrant that our products are free of flaws and defects to the extent as stipulated in our Terms of Delivery and Payment.

As a part of our product information program each of our Product Data Sheets are periodically updated, so that the latest version shall prevail. Therefore, please visit the download area of www.tiger-coatings.com to make sure you have the most current version of this Product Data Sheet. The information in our Product Data Sheets is subject to change without notification.

This Product Data Sheet substitutes any and all previous Product Data Sheets and notes for customers published on this subject matter and is only intended to give a general product overview. Please request specific information for products outside of our standard product list (latest version).

The Technical Information Sheets and the Terms of Delivery and Payment each in their latest version, available as a download at www.tiger-coatings.com, form an integral part of this Product Data Sheet.

zertifiziert nach
EN ISO 9001 / 14001



TIGER Coatings GmbH & Co. KG
Negrellistraße 36 | 4600 Wels | Austria
T +43 / (0)7242 / 400-0
F +43 / (0)7242 / 650 08
E powdercoatings@tiger-coatings.com
W www.tiger-coatings.com

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