

SERIES 89

LOW CURE POWDER COATING FOR INTERIOR APPLICATION BASED ON EPOXY - POLYESTER BLEND

Typical applications

- home appliances
- ceiling paneling
- cladding components
- store fixtures and shelving
- office and school furniture
- radiators
- machinery parts
- metal toys

Product details

- Standard Packaging** in 20 kg cartons, 2,5 kg minipack
- Specific Gravity (ISO 8130-2)** 1.3 -1.7 g/cm³ depending on pigmentation
- Theoretical Coverage** at 60 µm film thickness: 9.8 -13.8 m²/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 chemical resistance
- very good mechanical properties
- good storage stability

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.

Finish

Finish	Gloss
smooth <i>glossy</i>	approx. 80 – 95*
smooth <i>semi gloss</i>	approx. 55 – 65*
smooth <i>matte</i>	20 – 35*
fine texture <i>matte</i>	–
rough texture <i>glossy</i>	–

Available from stock in many RAL colors. Special sanitary colors are available. Custom colors are available upon inquiry with a minimum order of 60 kg; fine texture finishes require a 200 kg minimum order.

* 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)

Pretreatment (alternatives)

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 guidelines 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	A	E	I	A	E	S	I	A
							S ⁴		

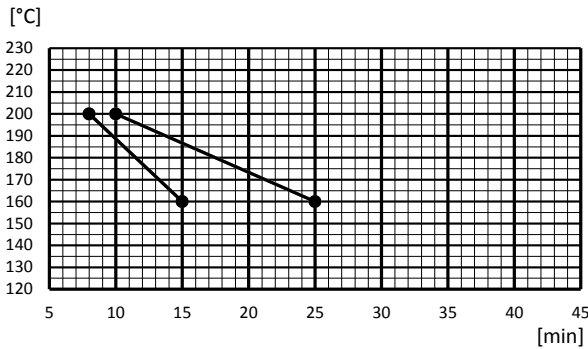
Application: I = interior; E = exterior; A = architectural; S = steel

- 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

Cure parameters

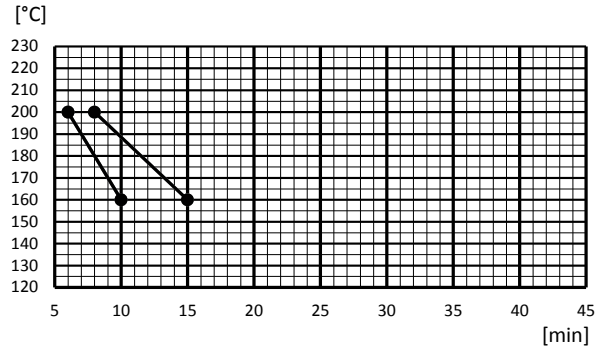
(substrate temperature versus curing time)

smooth *glossy* | smooth *semi gloss*



substrate temp.	min. curing time	max. curing time
160°C	15 minutes	25 minutes
200°C	8 minutes	10 minutes

fine texture *matte* | rough texture *glossy*



substrate temp.	min. curing time	max. curing time
160°C	10 minutes	15 minutes
200°C	6 minutes	8 minutes

Please note

Please mind the effect and color differences between a lab match versus an actual production.

Guidelines for application for rough texture glossy and fine texture finishes

Rough Texture formulations are very sensitive to contamination at these applicators as these contaminations will always “float” to the top of the textured surface. Clean applications equipment as well as a clean spraying environment is of the essence. The formulations of Fine Texture powder coatings have been modified for tribostatic spraying, however their suitability for the individual equipment has to be established by the coater. The suitability for silk screenings and the adhesives and their adhesion to the coated surface have to be verified prior to 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.

test method	test	Series 89 smooth <i>glossy</i>	Series 89 smooth <i>semi gloss</i>	Series 89 rough texture <i>glossy</i>	Series 89 fine texture <i>matte</i>
ISO 2360	film thickness recommended	60-80 µm	60-80 µm	90-120 µm	70-90 µm
ISO 2813	gloss - 60°	80-95	55-65	n.a.*	n.a.*
ISO 2409	cross cut test/adhesion 1 mm cutting distance	0	0	0	0
ISO 1519	mandrel bending test cracking of coating	< 5 mm not permitted	< 5 mm not permitted	< 10 mm not permitted	< 10 mm not permitted
ISO 2815	impression hardness	> 90	>90	n.a.*	n.a.*
ISO 1520	cupping test cracking of coating	> 5 mm not permitted	> 5 mm not permitted	> 4 mm not permitted	> 3 mm not permitted
ASTM D 2794	ball impact test cracking of coating	20 Inch/pound not permitted	20 Inch/pound not permitted	20 Inch/pound not permitted	20 inch/pound permitted
ISO 6270-1	determination of resistance to humidity 500 h	delamination around scribe max. 1 mm	delamination around scribe max. 1 mm	delamination around scribe max. 1 mm	delamination around scribe max. 1 mm
ASTM D 3363	pencil hardness	H	H	n.a.*	n.a.*
	drill mill test	ok	ok	ok	ok

* not available

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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.

certified according to
EN ISO 9001 / 14001



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