

Series 09

A POWDER COATING FOR INTERIOR APPLICATION
BASED ON AN EPOXY-POLYESTER BLEND - STANDARD LINE OF PRODUCTS

Typical applications

- 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)	1.2-1.7 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: 12 months (from delivery); 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

- very good mechanical properties
- good flow properties
- good storage stability

Finish I Colors

- smooth flow - glossy surface, approx. 80-95*
- smooth flow - matte surface, approx. 15-30*
- rough texture - matte surface
- hammertone
- antique (for e-static application only)
- metallic - recycling consistent (for e-static application only)
- silver and gold metallic - recycling consistent (for e-static application only)

Available from stock in all RAL colors in a smooth glossy surface. Any other color can be custom made with a minimum order of 60 kg; textured and matte 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

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			Steel		galvanized Steel		
1) + 2) Chromating	○	○	○			○	○	○
2) Pre-Anodizing	○	○	○					
2) Chrome free	○	○	○			○	○	○
Iron Phosphating				○				
Zinc Phosphating				○	○	○	○	○
Blasting				○	○			
3) Sweepen						○	○	○
Degreasing	○			○		○		
	I	E	A	I	E	I	E	A

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

- 1) acc.to DIN 12487
- 2) acc. to GSB and QUALICOAT quality and test regulations.
- 3) only for zinc coated parts > 45 µm
- 4) for a two-coat process TIGER Series 270 / 271 / 272 / 273

Processing

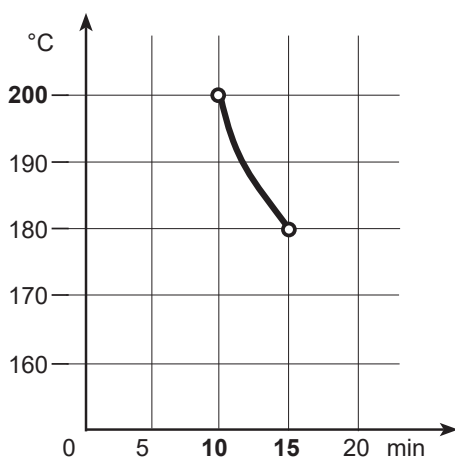
Corona, Tribostatic*

* Suitability for tribo processing must be verified prior to actual application. Please consult with the relevant application guidelines for metallic effect powder coatings, latest edition.

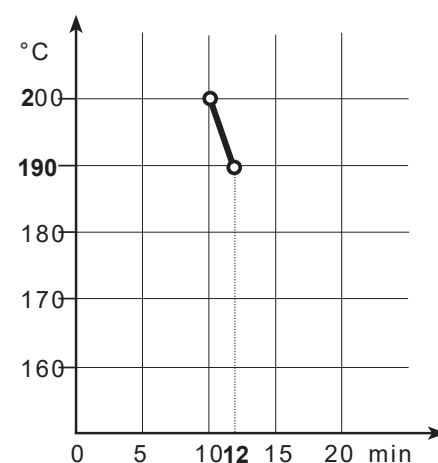
Cure parameters

(Substrate temperature versus curing time)

smooth flow - *glossy*



rough texture - *matte*
smooth flow - *matte*



Rough Texture Matte finish and Hammertones

Any deviation from and modification of the recommended application parameters (e. g. film thickness, cure conditions, different application equipment) may lead to variations in the texture. Rough Texture formulations are very sensitive to contamination at the applicator as these contaminations will always "float" to the top of the textured surface. Clean application equipment as well as a clean spraying environment is of the essence.

It is recommended to apply Hammertone effects at an increased film thickness of 100-120 µm. A variation in the cure parameters as well as heavy mass parts may result in different effects. As the effect producing agents in powder coatings float differently from those in wet paint, the effects are reproducible only to a limited extent. For an optimum coating and effect result it is recommended to consistently add virgin powder.

Please note

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

Two-coat systems: first coat: apply only half of the curing time acc. to the corresponding Product Data Sheet (provided that no other information is given therein). Second coat: requires then full cure acc. to the relevant Product Data Sheet. Please note, the exact cure conditions (curing time and cure temperature) need to be established individually based on the application and the coating line. Check continuously for intercoat-adhesion!

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 results	Series 09 glossy surface	Series 09 matte surface	Series 09 rough texture matte surface
ISO 2360	film thickness	60-80 µm	60-80 µm	90-120 µm
ISO 2813	gloss - 60°	80-95	15-30	n.a.*
ISO 2409	cross cut test 1 mm	0	0	0
ISO 1519	mandrel bending test	< 5 mm	< 10 mm	< 30 mm
ISO 1520	cupping test	> 5 mm	> 3 mm	> 2 mm
ISO 2815	impression hardness	> 90	> 90	n.a.*
ASTM D 2794	impact test 20 Inch-pound	no appearance of crack down to the substrate	minor cracks	appearance of cracks down to the substrate
ASTM D 3260	pencil hardness	H	H	n.a.*
	drill mill test	ok	ok	ok
ISO 6270-1	determination of resistance to humidity 500 h	max. blistering 1 mm	max. blistering 1 mm	max. blistering 1 mm
ISO 9227	salt spray test 500 h	max. undercutting 1 mm	max. undercutting 1 mm	max. undercutting 1 mm

*not available

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.

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.

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.

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certified according to
EN ISO 9001 / 14001
IATF 16949



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