

Series 207

POWDER COATING FOR RAILROAD CARS BASED ON EPOXY-POLYESTER CERTIFIED ACC. TO DBS 918 340 FOR DECORATIVE INTERIORS

Applications

- Railroad cars
- Decorative interior as per DBS 918 340
 - Product qualification no. 1 on aluminum
 - Product qualification no. 8 on steel
- Ceiling tiles
- Liner panels
- Seat frames

Product details

- Packaging** In original boxes of 20 kg each
- Density (ISO 8130-2)** 1.2 - 1.7 g/cm³ depending on the shade
- Theoretical coverage** with 60 µm film thickness: 9.8 - 13.8 m²/kg depending on density (see most recent edition of data sheet no. 1072)
- Shelf life** Use by: see date on Product label; dry below 25°C, do not expose to direct heat

(Please note, in case of customer-specific blanket orders or storage agreements, which by their nature are stored for an extended period of time, the shelf life date is calculated from the date of the original production.)

Surface

Surface	Gloss level
smooth <i>gloss</i>	ca. 80 – 95*
smooth <i>semi-gloss</i>	ca. 50 – 75*
smooth <i>matte</i>	20 - 35*
fine texture <i>matte</i>	–

*Gloss level acc. to ISO 2813/60° angle (not applicable to metallic effect powder coatings). The measured gloss level of effect powder coatings can diverge from the details given in this product data sheet. The production of tolerance samples is urgently recommended.

Properties

- resistance to cleaning products as per DBS 918 340
- resistance to graffiti removal products as per DBS 918 340
- very good mechanical properties
- good storage stability

Pretreatment (alternatives)

The overview matrix below shows the common methods depending on different substrates. 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 of this Product Data Sheet.

	Aluminum	Steel
Degreasing	○	○
¹⁾ Chromating	○	
²⁾ Anodization	○	
²⁾ Chrome-free	○	
Iron phosphating		○
Zinc phosphating		○
Blasting		○

1. acc. to EN 12487
2. acc. to the GSB quality and testing regulations.

Processing

Korona, modification for tribo processing* available on request

Note regarding tribo processing

* Suitability for tribo processing with fine textures, metallic powder coatings and fine texture effects must be verified on the coating system prior to actual application. In addition, please also consult our metallic effect guidelines for application in their latest version.

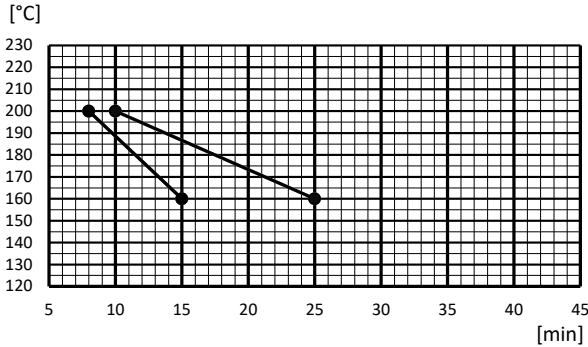
Note regarding fine textures

When using glues and screen printing, the adhesives must be tested for suitability.

Cure parameters

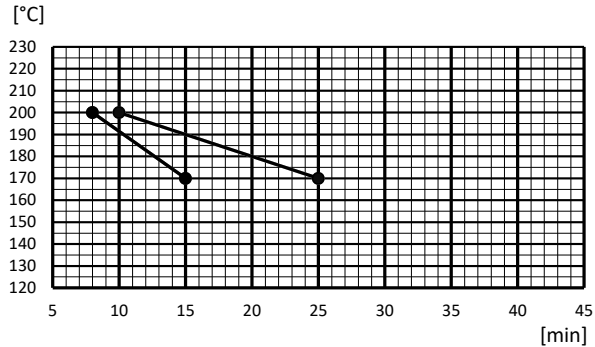
(Substrate temperature versus curing time)

smooth *gloss* | smooth*semi-gloss* | fine texture *matte*



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

smooth *matte*



Substrate temp. 170°C 200°C
min. curing time 15 minutes 8 minutes
max. curing time 25 minutes 10 minutes

Note

Effect and color differences between laboratory sampling and actual production are to be expected.

Test results

Tested on a 0.8-mm thick, chrome-free pretreated aluminum panel and Zn-phosphated steel plate based on tests performed under laboratory conditions. 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 207 smooth <i>gloss</i>	Series 207 smooth <i>semi-gloss</i>	Series 207 smooth <i>matte</i>	Series 207 fine texture <i>matte</i>
ISO 2360	Film thickness recommended	60-80 µm	60-80 µm	60-80 µm	70-90 µm
ISO 2813	Gloss level - 60°	80-95	50-75	20-35	matte look
ISO 2409	Crosscut test / adhesion 1 mm cutting distance	0			
ISO 1519	Mandrel bend test Cracking of coating	≤ 12 mm not permitted			
ISO 1520	Cupping test Cracking of coating	≥ 3 mm Permitted, but no detachment from substrate			
ASTM D 2794	Dynamic impact test Slight cracking of coating	25 cm/1 kg Permitted, but no detachment from substrate			
ISO 9227	Corrosion resistance – acetic salt spray test Aluminum AASS 500h	creep at score ≤ 1 mm			
	Corrosion resistance – neutral salt spray test Steel NSS 500h	creep at score ≤ 1 mm			
ISO 6270-2 (CH)	Determination of resistance to humidity (continuous condensation) 500 h	No blistering / formation of rust			
EN 45545-2	Fire protection in railroad cars – Requirements for fire behavior of materials and components	Hazard level: HL1 / HL2 / HL3 <u>Requirement sets for aluminum:</u> R1, R6 and R7 DB-ST-AU-17-52391-019-1.1; DB-ST-AU-17-52391-019-1.2 <u>Requirement sets for steel:</u> R1, R6, R7 and R17 DB-ST-AU-19-57482-008-2.1			

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Processing instructions

The guidelines for application (data sheet 1213) must be strictly observed. The Product Data Sheets, Technical Information Sheets and the guidelines for application each in their latest version, are 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 to the best of our knowledge in accordance with present technological standards. These are given in order to support the buyer or user. They are non-binding and do not constitute any contractual legal relationship or additional obligation from the purchase agreement. They do not release the purchaser from verifying the suitability of our products for the intended application at his own responsibility. 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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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
IATF 16949



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