IGP POWDER COATINGS

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Technical data sheet

IGP-DURA®*mix* 3907A-C1

Silk gloss, highly abrasion-resistant powder coating with a smooth finish, ideal for interior applications with challenging design requirements.

Characteristics

- Silk gloss
- Smooth flow
- Uni colours
- Indoor quality
- Electric. discharging

Powder properties

Particle size:	< 100 µm
Solids:	> 99 %
Density:	1.3 kg/l-1.6 kg/l
Suitability for storage:	min. 18 months at ≤ 25 °C in an unopened original container
Color tones:	On request

Processing

Pre-treatment

The substrate must be free from oil, grease and oxidation products. The pretreatment depends on the type of substrate and the corrosion protection to be achieved. We recommend the following pretreatments:

Aluminium

- Chromating according to DIN EN 12487
- Pre-anodization
- Chrome-free pretreatment according to GSB International and QUALICOAT specifications

Steel

- Zinc phosphating
- Iron phospating

Galvanised steel
- Zinc phosphating
- Chrome (III) passivation
- Chromating according to DIN EN 12487

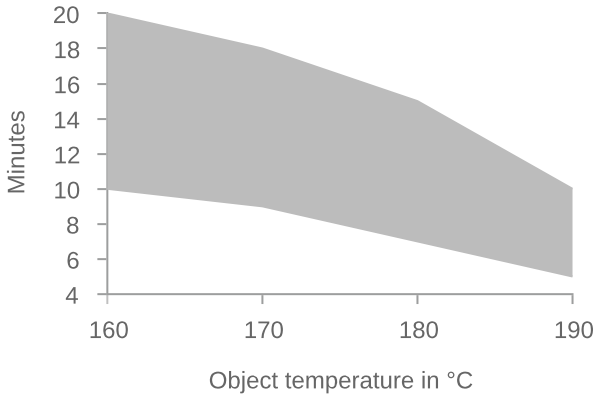
The suitability of the pretreatment method used is generally to be tested by the coater in advance with appropriate test methods. The minimum requirement for aluminium substrates / galvanised steel components is to carry out a boiling water test with a subsequent cross-cut adhesion and tape test. We refer to the guidelines of the GSB International, Qualicoat and Qualisteelcoat certifications. For further information: see also our special leaflet on pre-treatment (IGP-TI 100).

Coating devices
All conventional electrostatic systems with corona charging.
For the construction and operation of powder coating plants, the following regulations must be complied with: ATEX RL 2014/34/EU, EN 50177, DIN EN 16985.

Recommended film thickness
60 µm - 80 µm

With higher layers, the powder coating becomes insulating.

Curing conditions



T_{Object}	t_{min}	t_{max}
160 °C	**10 minutes**	**20 minutes**
170 °C	9 minutes	18 minutes
180 °C	7 minutes	15 minutes
190 °C	5 minutes	10 minutes

In order to determine ideal curing conditions, we recommend practical trials with the respective object and curing oven.

Reclaimability
Small portions of recycled powder can be added, automatically if possible, to the fresh powder. Important: Keep overspray to an absolute minimum.

Film properties

Tested on

Substrate:	Steel, 0.5mm
Film thickness:	60 µm - 80 µm
Object temperature:	160 °C, 10 min.

Appearance

Gloss level	65-85 R'/60°	DIN EN ISO 2813 2015-02

Mechanical tests

Cross-cut adhesion test	Gt 0	DIN EN ISO 2409 2020-12
Mandrel bending test	≤ 5 mm	DIN EN ISO 1519 2011
Impact test	≥ 10 inchp.	ASTM D 2794 1993
Erichsen cupping	≥ 5 mm	DIN EN ISO 1520 2007-11
Buchholz hardness	≥ 80	DIN EN ISO 2815 2003-10

Corrosion tests

Condensation water test, 500-1000h*	No infiltration, no blisters. *depending on pretreatment	DIN EN ISO 6270-2 2018-04
Natural salt spray test, 500-1000h*	No infiltration, no blisters. *depending on pretreatment.	DIN EN ISO 9227 2017-07

Chemical tests

Säuren und Laugen	Good resistance to many dilute acids and alkalis.
Organische Lösemittel	Limited resistance to organic solvents.

Additional properties

Dauerwärmebeständigkeit	> 120°C allmähliche Vergilbung	
Oberflächenwiderstand	TI 101	DIN EN 61340-2-3 2017-05

Further information

Packaging
20 kg cardboard box with inserted antistatic PE liner
400 kg cardboard container with 20 antistatic PE-liners each 20kg
500 kg cardboard container with 25 antistatic PE-liners each 20kg

Protection of coated parts
Coated parts should be packed after cooling with suitable materials without plasticizers. They should be stored protected from the weather to avoid the formation of condensation and thus water spots on the coating.

Cleaning
The coated parts must be cleaned according to the directives RAL-GZ 632 or SZFF 61.01.

Paint removal and disposal
After use, coated goods should be supplied to the normal recycling process. The disposal methods for sludges or residual powders must be observed in accordance with the local official provisions whilst taking Waste Code “080201 Coating Powder Wastes” in accordance with the European Waste Catalogue into consideration.

This application-related advice is given to the best of our knowledge. However, this information is non-obligatory and does not exempt you from carrying out your own tests. Application, use and processing of these products are beyond our control and are therefore on your responsibility.

Consult the Safety Data Sheet prior to use. Article-specific safety data sheet and comprehensive risk management measures available at: **igp-powder.com**