IGP POWDER COATINGS

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Technical data sheet

IGP-DURA®*than* 8109D-H3

High gloss polyurethane powder coating with an especially elegant, smooth finish for interior and exterior applications.

Characteristics

- Gloss
- Smooth flow
- Metallic
- Premium-Bond
- Industrial outdoor quality
- Cover with transparent

Powder properties

Particle size:	< 100 µm
Solids:	> 99 %
Density:	1.3 kg/l-1.6 kg/l
Suitability for storage:	min. 24 months at ≤ 25 °C in an unopened original container
Color tones:	Metallic colors 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

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

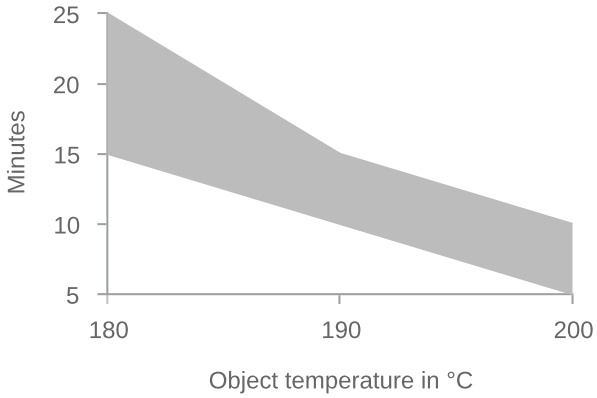
For improved corrosion protection for applications on steel / galvanised steel, the use of corrosion protection primer IGP-KORROPRIMER 10 or IGP-KORROPRIMER 60 is recommended.

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

Curing conditions



T_{Object}	t_{min}	t_{max}
180 °C	15 minutes	25 minutes
190 °C	**10 minutes**	**15 minutes**
200 °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 recovered powder can be added, automatically if possible, to the fresh powder. Important: Keep overspray to an absolute minimum. Processing instruction VR201.1 must be observed.

Film properties

Tested on

Substrate:	Aluminum (AlMg1), 0.8mm, chromated
Film thickness:	60 µm - 80 µm
Object temperature:	190 °C, 10 min.

Appearance

Gloss level	80-95 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	≥ 20 inchp.	ASTM D 2794 1993
Erichsen cupping	≥ 5 mm	DIN EN ISO 1520 2007-11
Buchholz hardness	≥ 80	DIN EN ISO 2815 2003-10

Further information

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

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.