

Technical data sheet

IGP-DURA[®]than 8105B-A1

Silk matt polyurethane powder coating available in transparent and varnishing versions for interior and exterior applications.



Characteristics

- Silk matte
- Smooth finish
- Transparent
- Industrial outdoor quality



Powder properties

Particle size:	< 100 µm
Solids:	> 99 %
Density:	1.2 kg/l-1.3 kg/l
Suitability for storage:	min. 24 months at ≤ 25 °C in an unopened original container
Color tones:	Transparent, individual colours 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.

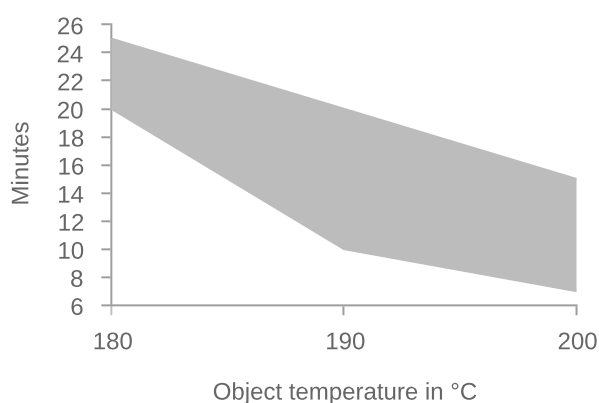
For the construction and operation of powder coating plants, the following regulations must be complied with: ATEX RL 2014/34/EU, EN 50177, DIN EN 16985.

Recommended film thickness

60 µm - 80 µm

During the coating process, care must be taken to ensure that the coating thickness is as uniform as possible on and between the individual workpieces. Even slight variations of around ± 5 µm can result in noticeably lighter or darker shades in the case of darker, glaze-like shades.

Curing conditions



T Object	t min	t max
180 °C	20 minutes	25 minutes
190 °C	10 minutes	20 minutes
200 °C	7 minutes	15 minutes

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

Application

With transparent coatings, it is naturally essential to ensure that the equipment and surroundings are kept particularly clean. With coloured transparent coating powders, particular attention must be paid to ensuring an even distribution of film thickness. Please refer to the recommendations in the VR219 processing guideline.

Reclaimability

To prevent contamination, particular care must be taken to ensure that the entire coating plant is thoroughly cleaned. As a general rule, clear powder coatings are suitable for reclaiming.



Film properties

Tested on

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

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	≥ 2.5 Nm	ASTM D 2794 1993
Erichsen cupping	≥ 5 mm	DIN EN ISO 1520 2007-11
Buchholz hardness	≥ 80	DIN EN ISO 2815 2003-10 (Anhang A)



Further information

Packaging

15 kg cardboard box with inserted antistatic PE liner
400 kg cardboard container with 20 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**](https://www.igp-powder.com)