



Technical data sheet

# IGP-DURA®mix 3907D-D2

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

### Characteristics

- Silk gloss
- Smooth finish
- Metallic
- Indoor quality
- Abrasion resistant



## Powder properties

Particle size: Solids: Density: Suitability for storage:

Color tones:

< 3.94 mil> 99 % 10.85 lb/gal-13.35 lb/gal min. 12 months at  $\leq$  77 °F in an unopened original container 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:

Aluminum

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

Steel

- Zinc phosphating
- Iron phospating

#### Galvanized 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 aluminum substrates / galvanized 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**

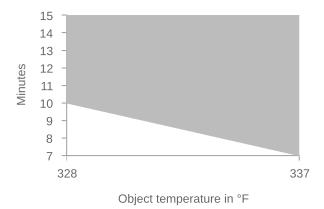
All conventional electrostatic systems with corona charging. For the construction and operation of powder coating plants, the following regulations must be complied with: ATEX RL 2014/34/EU, EN 50177, DIN EN 16985.

#### **Recommended film thickness**

2.36 mil - 3.15 mil

A homogeneous coating result with textured coatings or article- and color-specific differences in hiding power may require higher coating thicknesses. The corresponding processing guidelines must be observed. For a pre-calculation of the required powder coating quantity, the necessary coating thickness must be determined for each article.

#### **Curing conditions**



T <sub>Object</sub>	t <sub>min</sub>	t <sub>max</sub>
329 °F	10 minutes	15 minutes
338 °F	7 minutes	15 minutes

In order to determine ideal curing conditions, we recommend practical trials with the object in question 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. Processing instruction VR 201.1 must be observed.



### Film properties

#### Tested on

Substrate: Film thickness: Object temperature: Steel, 0.5 mm 2.36 mil - 3.15 mil 329 °F, 10 min.

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



# More information

#### Packaging

20 kg cardboard box with inserted antistatic PE liner 400 kg cardboard container with antistatic PE-liner 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. Technical Information IGP-TI 106 must also be observed when dealing with pearl mica effects.

#### 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 nonobligatory 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**