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**

IGP Powder Coatings
TDS IGP-DURA®than 8109U-A0|240424|v1.3

Technical data sheet

IGP-DURA®*than* 8109U-A0

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

Characteristics

- Gloss
- Smooth finish
- IGP-Effectives®, TPR
- Industrial outdoor quality

Powder properties

Particle size:
Solids:
Density:
Suitability for storage:

< 3.94 mil
> 99 %
10.01 lb/gal-10.85 lb/gal
min. 24 months at ≤ 77 °F
in an unopened original container
Color tones:
Based on the IGP-Effectives® colour register, which is available on request from your sales organisation.
The purchase of specific customer shades, which are refined in the IGP-Effectives® process, is possible after a feasibility check and agreement of minimum quantities.

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

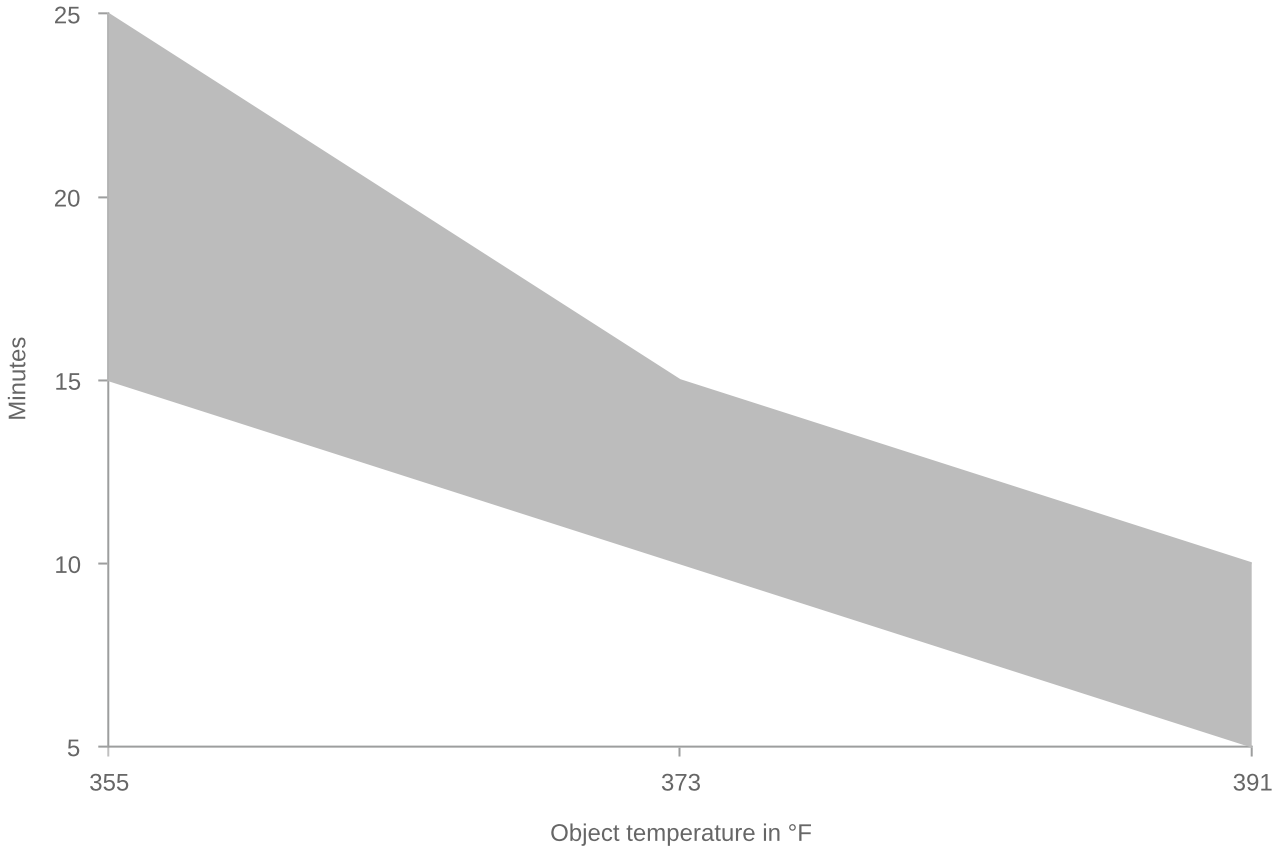
Galvanized steel

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

For improved corrosion protection for applications on steel / galvanized 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 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 commercially available electrostatic systems, both corona and tribo charge systems. 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_{Object}	t_{min}	t_{max}
356 °F	15 minutes	25 minutes
374 °F	10 minutes	15 minutes
392 °F	5 minutes	10 minutes

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

Application

Coloured transparent coating powders are mainly suitable for small parts or pipe constructions and not for large, flat surfaces. Furthermore, the visual impression is very much influenced by film thickness and homogenity: Different film thicknesses result in different colour shades! For this reason, it is not advisable to recoat coloured-transparent powder coatings for repair purposes. Devices and coating systems must be thoroughly cleaned before using the powder.

Reclaimability

Due to the high bonding rate of powder grain and effect agent, the powder can be charged much more uniformly compared to other effect finishing processes. As a result, the powder can be processed with a significantly increased recovery rate. Please also refer to the IGP processing guideline for IGP-Effectives® powder coatings: VR 201.2

Film properties

Tested on
Substrate:
Aluminum (AlMg1), 0.8 mm, chromated
Film thickness:
2.36 mil - 3.15 mil
Object temperature:
374 °F, 10 min.
Appearance
Gloss level
85-100 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
Weathering tests
QUV-SE-B-313, 200h
> 50 % residual gloss
DIN EN ISO 16474-3 2014-03

More information

Packaging
15 kg cardboard box with inserted antistatic PE liner
400 kg cardboard container with antistatic PE-liner
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.