

TECHNICAL DATA SHEET

IGP-DURA[®]face 5807U

Facade quality



IGP Pulvertechnik AG
Ringstrasse 30
9500 Wil, Switzerland
Phone +41 (0)71 929 81 11
Fax +41 (0)71 929 81 81
igp-powder.com
info@igp-powder.com

A DOLD GROUP company

IGP-DURA[®]face 5807U is a weather-resistant, silk gloss effect powder coating manufactured using the IGP-Effectives[®] process for reliable coating.

Product Description

IGP-DURA[®]face 5807U is based on saturated polyester resins, as well as the associated declaration-free hardeners, additives, pigments and extenders.

Good resistance to climate effects such as UV rays and moisture, as well as industrial emissions and other atmospheric elements. Outstanding processing stability, even with widely fluctuating or differing application parameters, such as temperature, coating thickness and voltage differences. Extremely stable effect shade, even after several recycling processes. Dirt-repellent property of the coating, which can considerably increase the maintenance and cleaning intervals for components and façades.

Application

For the coating of architectural elements and for components of industrial design which are subject to very high standards with regard to consistency of the effect pattern and shade.

Product Range

Surface aspects:

5807U Silk gloss, pearl mica effect with IGP-Effectives[®]

Shades:

Based on the IGP-Effectives[®] shade register, which is available on request from your sales organisation. The purchase of customer shades, which are refined in the IGP-Effectives process, is possible following a feasibility check and agreement of minimum quantities.

Powder Specification

Particle size	< 100 µm
Solids	approx. 99%
Density according to shade	1.3–1.6 kg/l
Suitability for storage	24 months*
Storage temperature	< 25°C

*in an unopened original container

Curing Conditions

Time and temperature combinations that result in an ideal cross-linking of the coat are displayed.

Object temperature	Retention time at object temperature	
	Minimum	Maximum
170°C	15 min.	30 min.
180°C	10 min.	20 min.
190°C	8 min.	15 min.

In order to determine ideal curing conditions, we recommend always performing practical trials that are adapted to the respective object and the stoving oven. Our Technical Customer Service Department is happy to help you.

Film Properties

To determine the following data, 5807A was applied as follows:

- Aluminium sheet (AlMg1 or «Q-Panel AA 5005-H24»), 0.8 mm, chromatised
- Coating thickness 60 µm
- Object temperature 180°C, 10 min.

Gloss level, DIN EN ISO 2813

5807U 65-85 R/60°

Mechanical tests

Cross-cut adhesion test, DIN EN ISO 2409	Gt 0
Mandrel bending test, DIN EN ISO 1519	< 5 mm
Impact penetration, ASTM D2794	> 2.5 Nm
Erichsen cupping, DIN EN ISO 1520	> 5 mm
Buchholz hardness, DIN EN ISO 2815	> 80

Weathering

Long-term exposure, 1 year Florida, 5° south, DIN EN ISO 2810	> 50% residual gloss
Accelerated weathering test, QUV/SE-B-313, 300h, DIN EN ISO 16474-3 /ASTM G-53-88:	> 50% residual gloss
Accelerated weathering test, WOM 1000h, DIN EN ISO 16474-2	> 50% residual gloss

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Chemical tests

1000h condensate water test*, DIN EN ISO 6270-2:	No infiltration, No blisters
1000h salt spray test*, DIN EN ISO 9227:	No infiltration, No blisters
Mortar resistance, ASTM D 3260:	Easily removable after 24h with no residues.

* depending on pre-treatment

Processing Information

Pre-treatment:

The substrate to be coated must be free from oxidation products as well as scale, oil or releasing agent residue.

Aluminium substrate:

Chrome-free pre-treatment:	Preferred approved systems from GSB and Qualicoat
Chromatising:	DIN EN 12487
Pre-anodisation:	Also available

Steel substrate:

Zinc or iron (Fe) phosphating
Galvanised sheet metal: Chromatising in accordance with DIN EN 12487

For improved corrosion protection for applications on steel / galvanised steel, the use of corrosion protection primer IGP-KORROPRIMER 10 is recommended. The suitability of the pre-treatment 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 intended for architectural applications is performing a boil test / pressure cooker test with a subsequent crosscut adhesion and pull-off test. We refer to the guidelines of the GSB certifications and Qualicoat. For further information: see also our special leaflet on pre-treatment (IGP-TI 100).

Coating equipment

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.

Recyclability

Due to the high bonding rate of powder granule and effect agent, the powder can be charged and deposited much more evenly compared to other effect and finishing processes. Please observe the IGP processing instruction for IGP-Effectives[®] powder coatings: VR 201.2

Cleaning

Coated parts to be cleaned in compliance with the regulations RAL-GZ 632 or SZFF 61.01. For pearl-mica effect, the Technical Information IGP-TI 106 must also be observed.

Stripping and Subsequent Use Phase

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.

Packing

- Carton with inserted antistatic PE liner, content 20 kg
- Carton container with 25 antistatic PE liners, content 500 kg

Material Approval

Qualicoat No. P-0230, class 1
GSB No.: 173k, class «standard»

Safety information:

Article-specific safety data sheet and comprehensive risk management measures available at: www.igp-powder.com

Note:

This application-related consulting is provided to the best of knowledge. However, it only represents non-binding information and does not release you from the need to perform your own tests. Application, use and processing of the products take place outside our ability to supervise and are therefore exclusively your own responsibility.