IGP POWDER COATINGS

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Technical data sheet

IGP-*KORROPRIMER* 1001A-V0

Epoxy resin primer for the best possible corrosion protection on aluminum, steel and – in V version – also on die-casting, galvanized steel and other outgassing substrates.

Characteristics

- Deep matte
- Smooth finish
- Uni, without effect
- Indoor quality
- Degassing optimized

Material approvals

- GSB 905 b - HDG steel >3mm
- QSC ST2 PE-0015/IGP-KORROPRIMER 1001
- QSC HD2 PE-0017/IGP-KORROPRIMER 1001
- QSC MS2 PE-0074/IGP-KORROPRIMER 1001
- QSC ST2 PE-0200/IGP-KORROPRIMER 1001

GSB INTERNATIONAL

Quali Steel Coat

Powder properties

Particle size:	< 100 µm
Solids:	> 99 %
Density:	1.6 kg/l-1.8 kg/l
Suitability for storage:	min. 12 months at ≤ 25 °C in an unopened original container
Color tones:	ca. RAL 9010 ca. RAL 7011 ca. RAL 7047

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

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

Steel

- Blasting: Electro corundum or conditioned cut wire shot should be used. After blasting, the norm purity degree must be at least SA 2 ½ (white metallic polish) in accordance with DIN EN ISO 12944-4. Further details can be found in this norm. Sharp edges, overlaps, etc., should be avoided (see DIN EN ISO 12944-3).

Galvanised 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 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

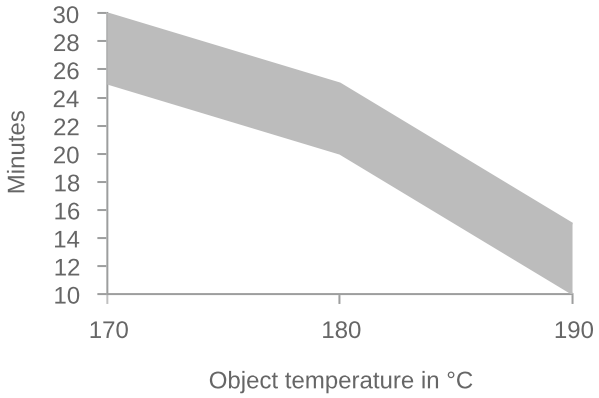
All commercially available electrostatic systems, both corona and tribo charge systems.
For the construction and operation of powder coating plants, the following regulations must be complied with: ATEX RL 2014/34/EU, EN 50177, DIN EN 16985.

Recommended film thickness

60 µm - 100 µm

To achieve a uniform finish with textured coatings, or where there are colour- or product-specific differences in hiding power, higher film thicknesses may be required. The relevant processing guidelines must be followed. To estimate the quantity of powder coating required in advance, the necessary Film thickness must be determined on a product-by-product basis.

Curing conditions



T_{Object}	t_{min}	t_{max}
170 °C	25 minutes	30 minutes
180 °C	**20 minutes**	**25 minutes**
190 °C	10 minutes	15 minutes

When curing thick steel components we recommend to gel the primer and fully cure the part with the top coat.
To avoid intercoat adhesion problems the maximum air temperature should be limited to 210°C.
When curing in directly heated gas ovens, a sample should be done in advance to ensure the intercoat adhesion with the following top coat.
Please contact our technical customer support.
In order to determine ideal curing conditions, we recommend practical trials with the respective object and curing oven.

Application

For an optimal coating and to ensure that the surface can be overcoated later, please follow the recommendations in the VR211 processing guidelines.

Reclaimability
Small portions of recycled powder can be added, automatically if possible, to the fresh powder. Important: Keep overspray to an absolute minimum.

Film properties

Tested on

Substrate:	Steel, 0.5mm
Film thickness:	60 µm - 80 µm
Object temperature:	180 °C, 20 min.

Mechanical tests

Cross-cut adhesion test	Gt 0	DIN EN ISO 2409 2020-12
Impact test	≥ 10 inchp.	ASTM D 2794 1993
Erichsen cupping	≥ 3 mm	DIN EN ISO 1520 2007-11

Further information

Packaging
20 kg cardboard box with inserted antistatic PE liner

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**