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IGP Powder Coatings

TDS IGP-KORROPRIMER 1001A-V0|240424|v1.2

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**

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Technical data sheet

IGP-KORROPRIMER 1001A-V0

Epoxy resin primer for best possible corrosion protection on steel, and in V-version also on galvanized steel.



Characteristics

- Deep matte
- Smooth finish
- Uni colours
- Indoor quality
- Degassing optimized



Material approvals

- Part of QSC-System
- QSC ST2 PE-0015/IGP-KORROPRIMER 1001
- QSC HD2 PE-0017/IGP-KORROPRIMER 1001



Powder properties

Particle size:

Solids:

Density:

Suitability for storage:

< 100 µm

> 99 %

1.6 kg/l-1.8 kg/l

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:

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.

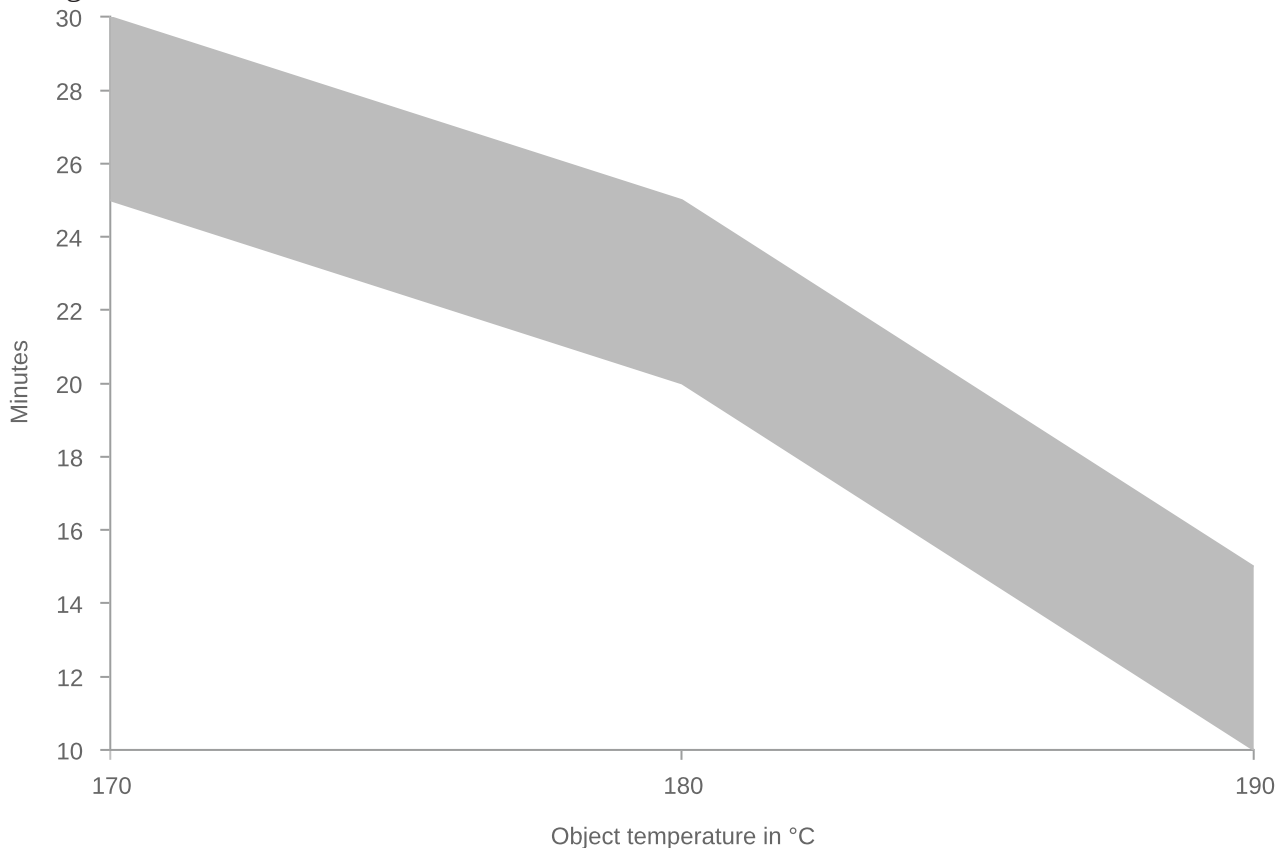
Recommended film thickness

60 µm - 100 µm

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}
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

Please follow the application guideline VR211.

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 inhp.

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.