



IGP-DURA[®] *pol* 682S

Low temperature - coarse structure
for industrial use, silk gloss



Weather resistant coating system on a saturated polyester resin base, declaration-free hardener plus special light, heat and chalk resistant pigments.

This high reactive polyester system allows stoving temperatures from 150°C.

Technical Data Sheet

Characteristics

- good light and weather resistance
- impact resistant surface with excellent flow
- good elasticity etc.
- No yellowing with directly heated gas ovens.

Applications

- Agricultural machines
- Garden and camping furniture
- Housings for automatic devices, switch cabinets
- Boilers
- Household appliances
- Office furniture

Product range

Surface appearances

- **682SA**, coarse structure, silk gloss
- **682SD**, coarse structure, silk gloss, metallic
- **682SE**, coarse structure, silk gloss, pearl mica

Shades

Mainly RAL and NCS shades; also special domestic shades by arrangement.

Powder specification

- Particle size: < 100µm
- Solids: > 98%
- Density acc. to shade: 1.3 – 1.6 kg/l
- Storage stability: min. 12 months
- Storage temperature: < 25° Celsius

Packing

- Carton with antistatic PE liner, capacity 20 kg.
- Carton container with 20 antistatic PE liners for 20 kg each, capacity 500 kg



IGP-DURA[®]pol 682

Processing instructions

Pre-treatment

The substrate to be coated must be free of oxidants, cinder, oil, grease, stripping agents and other residues. For exterior use, pre-treatment matching the substrate is absolutely necessary:

- Aluminium and zinc-plated steel sheeting: Chromatising DIN EN ISO 12487.
- Steel: zinc or Fe-phosphating, additionally coated with **IGP Korroprimer 10**.

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. Exceptions are pearl-mica-effects which must only be processed with Corona charge.

Relevant regulations: VDE requirements and the VDM data sheet 24371.

Application notes

The thickness of the applied coatings is crucial for creating an even texture. We recommend applying a film thickness of no less than 80 µm.

Recycling capacity

Small proportions of recycled powder should be added to the fresh powder, where possibly automatically. IGP processing instruction VR 201 must also be observed for pearl mica effects.

Compatibility

IGP-DURA[®]mix 682S contains textured-finish agents that are incompatible with all smooth-finish coating powders. Even small traces can cause flaws in the form of craters.

It is thus vital to ensure absolute cleanliness when changing powders.

Stoving conditions

Given are the temperature and time combinations which result in optimal cross-linking of the coating.

IGP-DURA[®]pol 682SA and E

Object-temperature	Retention time at object temperature	
	minimum	maximum
150°C	15 min.	25 min.
160°C	10 min.	15 min.
170°C	6 min.	10 min.

IGP-DURA[®]pol 682SD

Object-temperature	Retention time at object temperature	
	minimum	maximum
150°C	15 min.	25 min.
160°C	10 min.	15 min.
170°C	6 min.	10 min.

To obtain optimal stoving conditions you are recommended to carry out practical trials each time, adapted to the object in question and the stoving oven. Our technical service department will be glad to advise you.

Technological values

To obtain the following data IGP-DURA[®]pol 682S was applied as follows:

- Aluminium sheet (AlMg1) 0.8 mm, chromatised
- Coating thickness 80 µm
- Object temperature 10 min., 160°C

Cross-cut adhesion test, DIN EN ISO 2409 Gt 0

Mandrel bending test, DIN EN ISO 1519 < 6 mm

Impact penetr. ASTM D2794 > 20 inchp.

Erichsen cupping, DIN EN ISO 1520 > 5 mm

Buchholz hardness, DIN EN ISO 2815 > 80

Accelerated weathering-test

QUV/SE-B-313, DIN EN ISO 11507/ASTM G-53-88:

after 200h > 50% residual gloss

1000 h condensate test, DIN EN ISO 6270: no infiltration, no blisters.

1000 h salt spray test, DIN EN ISO 6270-2: no infiltration, no blisters.

Cleaning

The coated parts are to be cleaned according to the specifications RAL-GZ 632 or SZFF 6101.

For pearl-mica effects, additionally note Technical Information IGP-TI 106.

Note

Our technical advice on application, given verbally, in writing and through trials is provided to the best of our knowledge but is to be regarded solely as non-binding information and does not release you from the need to carry out your own tests and trials.

Application, use and processing of the products take place outside our ability to supervise and are therefore exclusively your own responsibility.



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