



IGP-DURA®*mix* 382S

Low temperature - coarse structure
for indoor use



This highly-reactive, coarse-structured, polyester and epoxy resin-based coating powder with a silk gloss enables curing temperatures starting at 140°C.

IGP-DURA®*mix* 382S is suitable for coating aluminium and steel, and, after testing, also for MDF, glass, plastics and similarly heat-sensitive substrates.

Technical Data Sheet

Characteristics

- highly creative
- good general durability
- good resistance to light (indoor use)
- hard and scratch-proof surface
- excellent abrasion resistance

Applications

- housings for automatic devices
- office furniture
- office chairs
- household appliances
- small components with complex shapes
- machine housings
- switch cabinets
- MDF wood fibre board
- heat-sensitive substrates

Product range

Surface appearance:

- **382SA**, coarse structure, silk gloss
Gloss level based on limited specimen size
- **382SA**, coarse structure, silk gloss, pearl mica
Gloss level based on limited specimen size

Shades

Principally RAL and NCS shades; special custom shades by arrangement.

Powder specifications

- Particle size: < 100 µm
- Solids: > 99%
- Density based on shade: 1.6 – 1.8 kg/l
- Storage stability: at least 3 months
- Storage temperature: < 25° C

Packaging

- Carton with antistatic PE bag liner, capacity 20 kg, net.
- Carton container with 25 antistatic PE liner bags, capacity 500 kg, net.

Ask about additional packaging materials that are thermally-resistant for transport.



IGP-DURA[®]mix 382S

Processing instructions

The substrate to be covered must be free of oxidation products, scale, oil, fat or release agent residue.

- Aluminium, either de-greasing or chromatising in accordance with DIN EN ISO 12487, depending on intended use.
- Steel or zincor sheet metal, either de-grease or iron phosphating, depending on intended use

For more in-depth information, see our special insert on pre-treatments (IGP-TI 100).

Coating equipment

Suitable for corona application. Regulations to be observed: VDE provisions and VDM information sheet 24371.

Information regarding application

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

Recyclability

Recycled powder should be added in small portions, (automatically, if possible), and mixed with fresh powder. IGP processing instruction VR201 must also be observed for pearl mica effects. The temperature should not exceed 25° C.

Compatibility

IGP-DURA[®]mix 382S contains structure agents which 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 utmost cleanliness when changing powders.

IGP-DURA[®]mix 382SA and 382SE

Object- temperature	Retention time at object temperature	
	minimum	maximum
140°C	10 Min.	20 Min.
150°C	5 Min.	10 Min.

In any event, practical experiments adapted to the particular object and curing oven are recommended in order to determine the best possible curing conditions. The curing conditions must be carefully controlled, as the resulting coating quality is dependent on the degree of curing. Inadequately cured powder varnishes are brittle and tend to form cracks. Our technical customer support is happy to advise you.

Technological values

To determine the following data, IGP-DURA[®]mix 382S was applied as follows:

- iron sheet metal 0.8 mm
- coating thickness 80 µm
- object temperature of 140°C, 10 min.

Erichsen cupping, DIN EN ISO 1520:	> 3 mm
Mandrel bend test, DIN EN ISO 1519:	≥8 mm
Impact penetration, ASTM 2794:	> 10 kg x cm
Cross-cut adhesion test, DIN EN ISO 2409:	Gt 0

Note

This application-related guidance is provided in accordance with current findings, but must be regarded as a non-binding notice and does not release you from conducting your own tests. The application, use and processing of the products occur beyond our possibilities of control and therefore lie exclusively in your sphere of responsibility.

