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IGP Powder Coatings

TDS IGP-DURA®guard 3207A-A0|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-DURA®guard 3207A-A0

Silk gloss, chemically highly resistant anti-graffiti powder coating with a smooth finish for interior applications.

Characteristics

- Silk gloss
- Smooth finish
- Uni colours
- Indoor quality
- Antigraffiti

Powder properties

Particle size:
Solids:
Density:

Suitability for storage: $< 100 \ \mu m$ > 99 %1.3 kg/l-1.6 kg/l min. 18 months at $\le 25 \ ^{\circ}C$ in an unopened original container Color tones: RAL and NCS-S shades, individual colors on request



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

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

Steel

- 🗌 Zinc phosphating
- Iron phospating

Galvanised steel

- 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

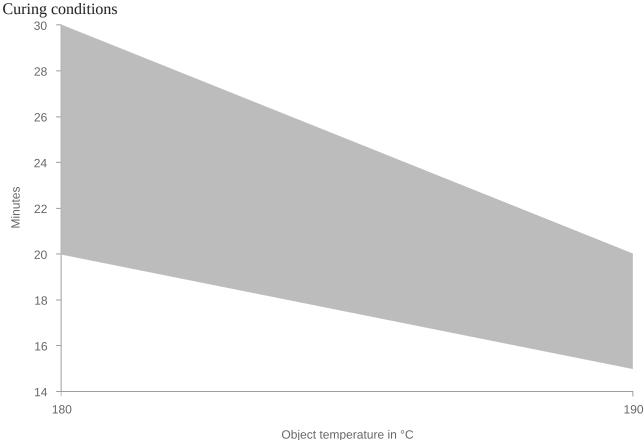
All commercially available electrostatic systems, both corona and tribo charge systems. For the construction and operation of powder coating plants, the following regulations must be complied with: ATEX RL 2014/34/EU, EN 50177, DIN EN 16985.

Recommended film thickness

60 µm - 80 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.



T_{Object} t_{min} t_{max}

180 °C 20 minutes 30 minutes

190 °C 15 minutes 20 minutes

In order to determine ideal curing conditions, we recommend practical trials with the respective object and curing oven.

Due to e-caprolactam emissions during the curing process it is necessary to take care for a good ventilation to comply with the permitted occupational exposure limits concentrations. 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: Aluminum, 0.8mm, AQT 36 Film thickness: 60 µm - 80 µm Object temperature: 190 °C, 15 min. Appearance Gloss level 65-85 R'/60° DIN EN ISO 2813 2015-02 Mechanical tests Cross-cut adhesion test Gt 0 DIN EN ISO 2409 2020-12 Mandrel bending test / Tapetest $\leq 8 \text{ mm}$ DIN EN ISO 1519 2011 Impact test / Tape test \geq 10 inchp. ASTM D 2794 1993 Erichsen cupping / Tape Test $\geq 3 \text{ mm}$ DIN EN ISO 1520 2007-11 Buchholz hardness ≥ 80 DIN EN ISO 2815 2003-10 Corrosion tests Condensation water test, 500-1000h* No infiltration, no blisters. *depending on pretreatment DIN EN ISO 6270-2 2018-04 Natural salt spray test, 500-1000h* No infiltration, no blisters. *depending on pretreatment. DIN EN ISO 9227 2017-07 Chemical tests Acids and alkalis Very good resistance to many dilute acids and alkalis. Organic solvents Outstanding resistance to organic solvents Cleaning Easy2clean properties allow efficient removal of contamination by commercially available cleaning agents and/or disinfectants



Further information

Packaging

20 kg cardboard box with inserted antistatic PE liner 400 kg cardboard container with 20 antistatic PE-liners each 20kg 500 kg cardboard container with 25 antistatic PE-liners each 20kg Overcoating For overcoating anti-graffiti powder coatings, sanding and preliminary tests are mandatory.

Printing and glueing

Preliminary tests are mandatory.

Protection of coated parts

Coated parts should be packed after cooling with suitable materials without plasticizers. They should be stored protected from the weather to avoid the formation of condensation and thus water spots on the coating.

Graffiti removal

The following procedure should be observed when removing grafitti:

- The contact time of the gaffiti with the surface must be kept as brief as possible

- Preliminary tests to select a suitable graffiti remover

- Thorough rinsing of the cleaned areas with water

- The contact time of the graffiti remover with the surface must be kept as brief as possible

IGP recommendation:

- Elite 007 grafitti remover from Crous Chemicals GmbH

- Socostrip T4210P from Socomore

- Bonderite S-ST 1302 and Bonderite C-MC 400 from Henkel AG

- or a different non-abrasive cleaner

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.