



app.print.technical_data_sheet.title

IGP-DURA®guard 321MA-G0

Matte, highly chemically resistant, biocide-enriched anti-graffiti powder coating with fine structure for interior application.



app.print.technical_data_sheet.characteristics

- Matte
- Fine texture
- Uni, without effect
- Indoor quality
- Contains biocides
- Anti-Graffiti



app.print.technical_data_sheet.matte

- Protected by Sanitized®



app.print.technical_data_sheet.powder_properties.title

app.print.technical_data_sheet.powder_properties.particle_size:
app.print.technical_data_sheet.powder_properties.solid:
app.print.technical_data_sheet.powder_properties.particle_density:
app.print.technical_data_sheet.powder_properties.storage_suitability.prefix
18 months
app.print.technical_data_sheet.powder_properties.storage_suitability.at
25 °C
in an unopened original container
app.print.technical_data_sheet.powder_properties.colors: 61 shades in individual colors on request



app.print.technical_data_sheet.processing.title

app.print.technical_data_sheet.processing.substrates

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 phosphating

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).

app.print.technical_data_sheet.processing.coating_devices

All commercially available electrostatic systems, both corona and tribo charge systems.

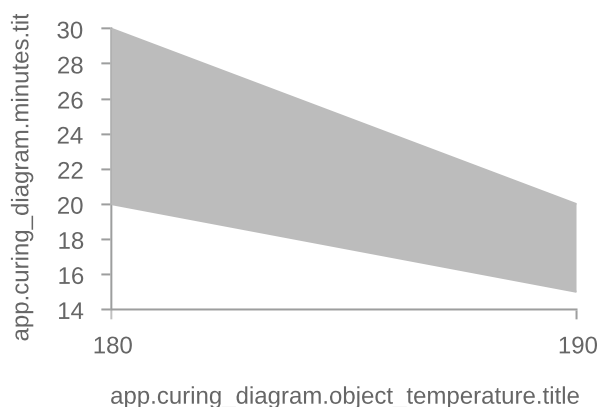
For the construction and operation of powder coating plants, the following regulations must be complied with: ATEX RL 2014/34/EU, EN 50177, DIN EN 16985.

app.print.technical_data_sheet.processing.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.

app.print.technical_data_sheet.processing.curing_condition_recommendation



app.print.technical_data_sheet.processing.curing_conditi

180 °C

190 °C

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.

app.print.technical_data_sheet.processing.reclaimability

Small portions of recycled powder can be added, automatically if possible, to the fresh powder. Important: Keep overspray to an absolute minimum. Processing instruction VR214 must be observed.



app.print.technical_data_sheet.film_properties.title

app.print.technical_data_sheet.film_properties.tested_on.title

app.print.technical_data_sheet.film_properties.tested_on.title
Apprentice, Gt 0, sub AQT 36
app.print.technical_data_sheet.film_properties.film_thickness:
100 µm
app.print.technical_data_sheet.film_properties.subject_temperature:
190 °C

app.print.technical_data_sheet.film_properties.mechanical_tests

Cross-cut adhesion test	Gt 0	DIN EN ISO 2409 2020-12
Mandrel bending test / Tape test	≤ 8 mm	DIN EN ISO 1519 2011
Impact test / Tape test	≥ 10 inchp.	ASTM D 2794 1993
Erichsen cupping / Tape test	≥ 3 mm	DIN EN ISO 1520 2007-11
Buchholz hardness	≥ 80	DIN EN ISO 2815 2003-10 (Anhang A)

app.print.technical_data_sheet.film_properties.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

app.print.technical_data_sheet.film_properties.chemical_tests

Acids and alkalis	Very good resistance to many dilute acids and alkalis.
Organic solvents	Outstanding resistance to organic solvents
Cleaning	IGP-DURAclean® properties allow efficient removal of contamination by commercially available cleaning agents and/or disinfectants



app.print.technical_data_sheet.more_information.title

app.print.technical_data_sheet.packaging.title

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

app.print.technical_data_sheet.processing.overcoating

For overcoating anti-graffiti powder coatings, sanding and preliminary tests are mandatory.

app.print.technical_data_sheet.processing.printing_and_glueing

Preliminary tests are mandatory.

app.print.technical_data_sheet.more_information.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.

app.print.technical_data_sheet.film_properties.graffiti_removal

The following procedure should be observed when removing graffiti:

- The contact time of the graffiti 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 graffiti 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

app.print.technical_data_sheet.more_information.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.

app.print.technical_data_sheet.infobox