



# IGP-DURA<sup>®</sup> *cryl* 40

## Weather Resistant Industrial Quality

UV-light and solvent-resistant coating system based on acrylic polymers containing carboxyl groups with corresponding hardeners and pigments.

# Technical Data Sheet

## Properties

- excellent resistance to light, heat and weather
- hard and scratch-resistant surface
- excellent resistance to solvents
- antigrffiti properties

## Applications

### 4009, 4007, 4003

For permanent prevention of graffiti on

- Office and school furniture
- Clothes cupboards and lockers
- Vending machines and pay machines
- Metal surfaces in the interiors of public transport.
- Facade elements, window profiles
- Noise protection walls

### 401M, 401S, 402S

For machines and equipment with special requirements regarding surface hardness, scratch, light and solvent resistance such as, for example:

- Printing machines
- Automatic lathes
- Processing centres
- Components for plant construction in the chemical industry.

Particularly suitable for coating thick-walled components

## Product range

### Surface aspects

- **4009A**, smooth flowing, gloss  
Gloss class, DIN EN ISO 2813: > 85 R'/60°
- **4007A**, smooth flowing, silk gloss
- **4007E**, smooth flowing, silk gloss with pearl-mica effect, Gloss class, DIN EN ISO 2813: 65-85 R'/60°
- 4003A, smooth flowing, matt
- 4003E, smooth flowing, matt with pearl-mica effect, Gloss class, DIN EN ISO 2813: 25-35 R/60°
- **401M**, fine structure, matt
- **401S**, fine structure, silk-gloss
- **402S**, coarse structure, silk-gloss

### Shades

Mainly RAL and NCS shades, special house shades subject to prior agreement.

## Powder specification

- Particle size: < 100 µm
- Solids: > 99%
- Density according to shade: 1.3 - 1.6 kg/l
- Storage stability: min. 12 months
- Storage temperature: < 25° C

## Packaging

- Carton lined with anti-static PE bag, capacity 20 kg.
- Cardboard container with 25 antistatic PE -liners for 20 kg, capacity 500kg.



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# IGP-DURA®cryl 40

## Processing instructions

### Pre-treatment

The substrate that is to be coated must be free of oxidation products, scale, oil, grease or mould-release residue. For the intended purposes, coordinated pre-treatment of the substrate is necessary:

- Aluminium: chromatisation DIN EN 12487, recommend the additional use of IGP-Korroprimer 30 as a primer.
- Galvanised sheet metal: also DIN EN 12487, also coated with IGP-Korroprimer 10.
- Steel: zinc or iron phosphating, also 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 corona systems. Regulations to be observed: VDE directives and VDM bulletin 24371.

### Compatibility

Faults such as loss of gloss, craters, loss of mechanical use, etc., can be the result of incompatibility with coating powders; in general the product behaves like any normal PES or PEP system.

### Recycling capacity

Recycled powder should be added in small proportions (automatically if possible) to the fresh powder and then processed.

### Stoving conditions

The temperature and time combinations resulting in optimal cross-linking of the coating are shown.

#### IGP-DURA®cryl 4009, 4007, 401M, 401S, 402M

Object temperature	Retention time at object temperature	
	minimum	maximum
180°C	15 min.	30 min.
190°C	<b>10 min.</b>	20 min.
200°C	8 min.	15 min.

#### IGP-DURA®cryl 4003

Object temperature	Retention time at object temperature	
	minimum	maximum
180°C	20 min.	40 min.
190°C	15 min.	30 min.
200°C	<b>10 min.</b>	20 min.

To obtain optimum stoving conditions, we recommend carrying 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 determine the following data, IGP-DURA®cryl 40 was applied as follows:

- Steel sheet 0.8 mm, pre-treated
- IGP-Korroprimer 10
- Coating thickness of the Primer 60-80 µm
- Object temperature 200°C, 10 min.

Cross-cut adhesion test, DIN EN ISO 2409	Gt 0
Mandrel bending test, DIN EN ISO 1519, Tapetest	> 8 mm
Reverse Impact, ASTM D2794, Tapetest	< 10 inchp.
Erichsen cupping DIN EN ISO 1520, Tapetest	≥ 2 mm
Buchholz hardness, DIN EN ISO 2815	> 100

500-1000 h\* Condensation water test, DIN EN ISO 6270-2: no infiltration, no blisters  
(\*depending on preliminary treatment)

500-1000 h\* Salt spray test, DIN EN ISO 9227: no infiltration, no blisters  
(\*depending on preliminary treatment)

### Accelerated weathering-test

1000h QUV/SE-B-313, DIN EN ISO 11507/ASTM G154-06: 100% residual gloss

### Resistance to solvents:

Resistant after exposure for 1 minute (slight surface swelling): Acetone, Ethanol, Ethyl acetate, Cyclohexanol, Methylaethylketon, Toluene.

## Removal of graffiti

Graffiti should remain on the surface for the shortest possible time. Preliminary tests to choose a suitable graffiti remover (e.g. "Bruco Z97" byTaski, from the Diversy Lever Company, „All Remove AR 9000" from PSS Interservice AG or „Graff-it-off-Kunststoffreiniger" from IPA-GRAFF-IT-OFF-SYSTEM AG).

The removal agent should remain on the surface for a very short time.

Rinse the cleaned coating thoroughly with water.

## Note

This technical advice on application is based on the latest 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 control and are therefore exclusively your own responsibility.



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