



Scheda tecnica

## IGP-DURA<sup>®</sup>one 5603A-A1

Matte, smooth flowing low-cure powder coating with good weather stability based on saturated polyester and declaration-free hardener.



### Proprietà

- Opaco
- Superficie liscia
- Tinte unite
- Standard facade quality,  
1 year Florida > 50% residual gloss
- Bassa temperatura



### Omologazioni

- GSB 173 d - Florida 1
- Part of QSC-System
- Qualicoat Nr. P-1983, class 1
- Qualicoat Nr. P-1955, class 1
- QSC ST2 PE-0015/IGP-KORROPRIMER 1001
- QSC ST2 PE-0016/IGP-KORROPRIMER 6007
- QSC HD2 PE-0017/IGP-KORROPRIMER 1001
- QSC HD2 PE-0018/IGP-KORROPRIMER 6007
- QSC MS2 PE-0074/IGP-KORROPRIMER 1001
- QSC HD1 PE-0160
- QSC ST2 PE-0206/IGP-KORROPRIMER 1808



### Proprietà delle polveri

|                |   |
|----------------|---|
| Granulometria: | < 100 µm  |
| Corpi solidi:  | > 99 %  |
| Densità:       | 1.3 kg/l-1.6 kg/l   |
| Stoccaggio:    | min. 24 months a ≤ 25 °C<br>in an unopened original container |
| Color tones:   | RAL and NCS-S shades, individual colors on request            |



## Applicazione

### Pretrattamento

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:

#### Alluminio

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

#### Acciaio

- Zinc phosphating

#### Acciaio zincato

- Zinc phosphating
- Chrome (III) passivation
- Chromating according to DIN EN 12487

For improved corrosion protection for applications on steel / galvanised steel, the use of corrosion protection primer IGP-KORROPRIMER 10, IGP-Korroprimer 18 or IGP-KORROPRIMER 60 is recommended.

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).

### Impianti di verniciatura

All conventional electrostatic systems with corona charging.

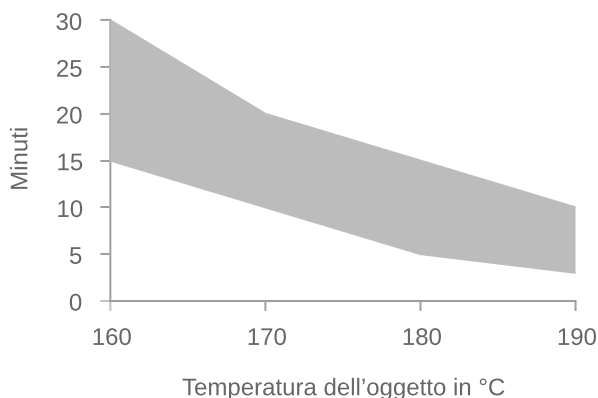
For the construction and operation of powder coating plants, the following regulations must be complied with: ATEX RL 2014/34/EU, EN 50177, DIN EN 16985.

### Spessore del film consigliato

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.

## Condizioni di cottura



| <b>T<sub>oggetto</sub></b> | <b>t<sub>min</sub></b> | <b>t<sub>max</sub></b> |
|----------------------------|------------------------|------------------------|
| 160 °C                     | 15 minutes             | 30 minutes             |
| <b>170 °C</b>              | <b>10 minutes</b>      | <b>20 minutes</b>      |
| 180 °C                     | 5 minutes              | 15 minutes             |
| 190 °C                     | 3 minutes              | 10 minutes             |

Per accertare le condizioni di cottura migliori si consiglia, in ogni caso, di effettuare prove pratiche con il rispettivo oggetto e forno di polimerizzazione.

## Recupero

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



## Caratteristiche del film

### Testato per

|                           |                                     |
|---------------------------|-------------------------------------|
| Substrati:                | Aluminum (AlMg1), 0.8 mm chrom-free |
| Tinte testate:            | RAL 9010, 5010, 3005                |
| Spessore:                 | 60 µm - 80 µm                       |
| Temperatura dell'oggetto: | 170 °C, 10 min.                     |

### Struttura superficiale

|              |              |                         |
|--------------|--------------|-------------------------|
| Brillantezza | 25-35 R'/60° | DIN EN ISO 2813 2015-02 |
|--------------|--------------|-------------------------|

### Prove meccaniche

|                         |             |                         |
|-------------------------|-------------|-------------------------|
| Cross-cut adhesion test | Gt 0        | DIN EN ISO 2409 2020-12 |
| Mandrel bending test    | ≤ 5 mm      | DIN EN ISO 1519 2011    |
| Impact test             | ≥ 20 inchp. | ASTM D 2794 1993        |
| Erichsen cupping        | ≥ 5 mm      | DIN EN ISO 1520 2007-11 |
| Buchholz hardness       | ≥ 80        | DIN EN ISO 2815 2003-10 |

### Test di resistenza agli agenti atmosferici

|                          |                             |                            |
|--------------------------|-----------------------------|----------------------------|
| Xenon-arc lamps, 1000h   | > 50 % Brillantezza residua | DIN EN ISO 16474-2 2014-03 |
| QUV/SE-B-313, 300h       | > 50 % Brillantezza residua | DIN EN ISO 16474-3 2014-03 |
| 1 year Florida, 5° south | > 50 % Brillantezza residua | DIN EN ISO 2810 2021-01    |

### Verifiche della resistenza a corrosione

|                                    |                              |                           |
|------------------------------------|------------------------------|---------------------------|
| Condensation water test, 1000h     | No infiltration, no blisters | DIN EN ISO 6270-2 2018-04 |
| Acetic acid salt spray test, 1000h | No infiltration, no blisters | DIN EN ISO 9227 2017-07   |

### Prove chimiche

|                   |  |                  |
|-------------------|--|------------------|
| Mortar resistance | Easily removable after 24h with no residues. | ASTM D 3260 2001 |
|-------------------|--|------------------|



## Altre informazioni

### **Imballaggio**

20 kg cardboard box with inserted antistatic PE liner

### **Sovraverniciabilità**

Preliminary tests are mandatory for overcoating painted surfaces.

### **Stampaggio e incollaggio**

Preliminary tests are mandatory for printing and glueing of painted surfaces.

### **Protezione delle superfici verniciate**

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.

### **Pulizia**

The coated parts must be cleaned according to the directives RAL-GZ 632 or SZFF 61.01.

### **Rimozione e smaltimento della pittura**

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.

Le presenti informazioni di natura tecnica relative all'utilizzo sono fornite sulla base delle conoscenze attuali. Tuttavia devono essere considerate come indicazioni non vincolanti che non esonerano dall'effettuazione di controlli autonomi. Utilizzo, destinazione e applicazione di prodotti hanno luogo senza possibilità di controllo da parte nostra e, pertanto, soggiacciono esclusivamente alla vostra responsabilità.

Prima dell'applicazione consultare la scheda di sicurezza. Scheda di sicurezza specifica per l'articolo e misure più approfondite sulla gestione del rischio alla pagina: [igp-powder.com](http://igp-powder.com)