

# SERIES 16 - flat matte

## POLYESTER TGIC-FREE WEATHER RESISTANT POWDER COATING

### Typical applications

- topcoat for metallic effects
- sporting goods
- metal construction
- automotive accessories
- patio furniture
- light fixtures

### Product details

**Standard packaging** in original 44 & 55 lb (20 & 25 kg) box and 5 lb (2.5 kg) minipack

**Specific gravity (ASTM D792)** approximately 1.2 g/cm<sup>3</sup> depending on pigmentation

**Theoretical coverage** at 2.5 mils (60 µm) film thickness: **67.1 ft<sup>2</sup>/lb (13.9 m<sup>2</sup>/kg)**. Refer also to the latest edition of "Theoretic Powder Coating Coverage Chart" version 00-1001 (imperial) version 00-1000 (metric)

**Storage stability** 3 months at no more than 77 °F (25 °C) avoid direct and extended exposure to heat

### Finish

| finish                   | gloss |
|--------------------------|-------|
| smooth <i>flat matte</i> | 0-15* |

\* Gloss level according to ASTM 523 at 60° angle (doesn't apply to metallic effect powder coatings). The measured gloss level of effect powder coatings can diverge from the details given in this Product Data Sheet. The creation of tolerance samples is recommended

Available as stock-product in a selection of colors and finishes (see following table and color charts)

| product description | product ID |
|---------------------|------------|
| Clear Flat Matte    | 16/00030   |
| Olive Drab          | 16/50012   |
| Desert Tan          | 16/15013   |

### Features

- good weather resistance
- very smooth flow
- good storage stability

### Pretreatment

The following table reflects the common methods of pre-treatment with regards to various substrates and applications. In selecting the proper type of pretreatment, the suitability of the type of powder coating for a desired application according to the guidelines on this page should be observed.

|                              | Aluminum |   |   |  | Galvanized Steel |   |   |   | Steel |   |   |   |   |   |
|------------------------------|----------|---|---|--|------------------|---|---|---|-------|---|---|---|---|---|
| Degreasing                   | ○        |   |   |  | ○                |   |   |   |       |   | ○ |   |   |   |
| <sup>1</sup> ) Chromating    | ○        | ○ | ○ |  | ○                | ○ | ○ | ○ |       |   |   |   |   |   |
| <sup>2</sup> ) Pre-Anodizing | ○        | ○ | ○ |  |                  |   |   |   |       |   |   |   |   |   |
| <sup>2</sup> ) Chrome free   | ○        | ○ | ○ |  | ○                | ○ |   |   |       |   |   |   |   |   |
| Iron Phosphating             |          |   |   |  |                  |   |   |   |       |   | ○ |   |   |   |
| Zinc Phosphating             |          |   |   |  | ○                | ○ | ○ | ○ | ○     | ○ | ○ | ○ | ○ | ○ |
| Blasting                     |          |   |   |  |                  |   |   |   |       |   | ○ | ○ | ○ |   |
| <sup>3</sup> ) Sweeping      |          |   |   |  | ○                | ○ | ○ | ○ |       |   |   |   |   |   |
|                              | I        | E | A |  | I                | E | A | S | I     | E | S |   |   |   |

Application: I = interior; E = exterior; A = architectural; S = steel

- 1) according to ASTM B 449
- 2) according to GSB quality and test regulations. The suitability of this type of pretreatment needs to be established through a boiling water test and subsequent cross-hatch adhesion and adhesive tape removal test
- 3) only for zinc coated parts >1.8 mils (>45 µm)
- 4) for a two-coat process/TIGER Shield

### Processing

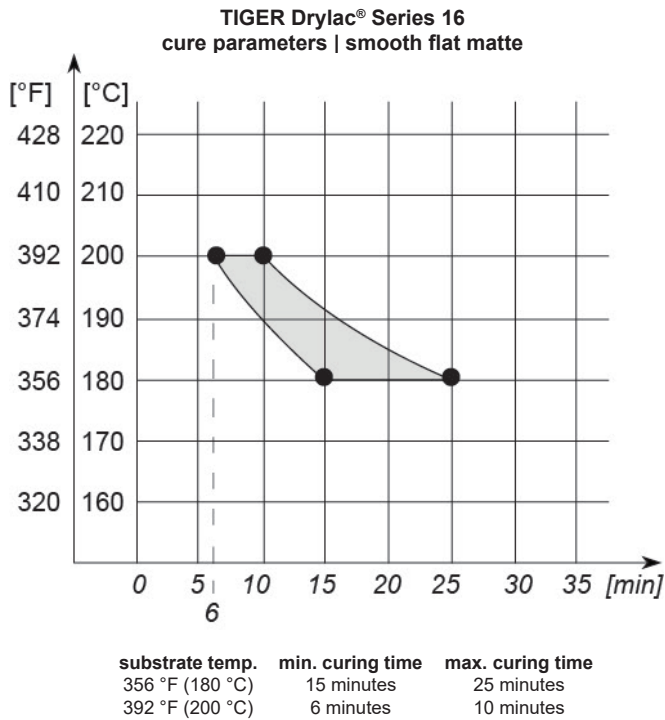
#### Corona and Tribostatic\*

\* For Tribostatic powder coatings, confirm before ordering. Suitability of metallic effects for Tribostatic processing must be verified prior to actual application. Please refer to the latest edition of the relevant application guidelines for metallic effect powder coatings

Since not all powder coatings are suitable for recycling/reclaim, please verify before ordering

## Cure parameters

(substrate temperature versus curing time)



Cure parameters must be closely observed since mechanical properties will develop before full cross-linking

## Test results

Checked under laboratory conditions on iron phosphated steel test panels Bonderite B-1000 or equivalent. Cure conditions are according to the cure curves. Actual product performance may vary due to product-specific properties such as gloss, color, effect and finish as well as application-related and environmental influences. When used as a two-coat system, the increase in film thickness will result in a decrease of mechanical properties.

| test method            | test  | Series 16<br>flat matte                                    |
|------------------------|---|--|
| ISO 2360               | <b>recommended film thickness</b>                           | 2.5-3.5 mils<br>(60-80 µm)                                 |
| ASTM D3359<br>method B | <b>cross cut tape test</b><br>1mm cutting distance          | 5B   |
| ASTM D522              | <b>mandrel bending test</b><br>cracking of coating          | ≤1/2 inch<br>(≤12.7 mm)                                    |
| ASTM D3363             | <b>pencil hardness</b>                                      | H minimum  |
| ASTM D2247             | <b>determination of resistance to humidity</b><br>500 hours | maximum<br>undercutting 1/32 inch (1 mm),<br>no blistering |
| ASTM B117              | <b>salt spray resistance</b><br>500 hours                   | maximum<br>undercutting 1/32 inch (1 mm),<br>no blistering |

**Cleaning recommendations:** refer to the latest edition of TIGER "Cleaning Recommendations" information sheet, Version 00-1005

## Please note

Top coating with a clear exterior grade powder coating over an interior grade powder coating does not result into a weather resistant coating system.

Post-bending properties of any part must be verified prior to application. Minor cracks in the coated surface may lead to corrosion.

Joint sealants and any other auxiliary products, such as glazing aids, gliding waxes, drilling and cutting lubricants, which come in contact with the coated surface, must be pH-neutral and free of substances that may damage the finish. Therefore, a suitability test at the applicator's end, prior to coating, is highly recommended.

In general, colors in the red, orange and yellow range may require an increased film thickness to achieve full hiding.

Please read and understand the Safety Data Sheet (SDS) before use.

## Chemical resistance

The required chemical resistance of a powder coating depends, among other things, on its formulation. Chemical resistance requirements must be considered according to processing conditions and final use of the finished product. This is best established during the product specification process. Agreement between all parties involved must be reached about the requirements for such chemical resistance as well as the test method, which may be performed in accordance with PCI test method #8 "Solvent Cure Test". Furthermore, the test duration and concentration of the test media need to be agreed upon.

## Disclaimer

TIGER's verbal and written recommendations for the use of its products are based upon experience and in accordance with current technological standards. These are provided in order to support the buyer or user. They are non-committal and do not create any additional commitments to the purchase agreement. They do not release the buyer from verifying the suitability of TIGER products for the intended application. TIGER warrants that its products are free of flaws and defects to the extent stipulated in the Terms of Delivery and Payment.

As part of TIGER product information program, each Product Data Sheet is updated periodically. The latest version shall prevail. It is recommended to always check for the latest editions on TIGER's website download area [www.tiger-coatings.com](http://www.tiger-coatings.com) to make sure you have the most current version of this Product Data Sheet. The information on TIGER's Product Data Sheets are subject to change without notification.

This Product Data Sheet supersedes and replaces all previous Product Data Sheet versions and notes to customers published in relation to this product and is only intended to provide a general overview on the product.

Latest versions of Technical Information Sheets and Terms of Delivery and Payment are downloadable from [www.tiger-coatings.com](http://www.tiger-coatings.com) and form an integral part of this Product Data Sheet.