SERIES 69 - INTERIOR APPLICATIONS

Epoxy based powder coating for interior applications.

Typical Applications

- Laboratory equipment.
- Machinery parts.
- Pump housing.
- Surfaces where increased chemical resistance is required.

Features

- Very good mechanical properties.
- Excellent chemical resistance.
- Good resistance to corrosion.
- Good flow properties.
- Excellent coverage.
- Good storage stability.

Finish and Color

- Smooth glossy 80-95+*.
- Smooth flat to matte <25*.
- Metallic and Special effects.
- Clear.

* Gloss level according to ASTM 523 at 60° angle.

It can be made to order in all industry colors (minimum order quantity applies).

Standard Packaging

44 & 55 lb (20 & 25 kg) boxes.
5 lb (2.5 kg) minipack.

Specific Gravity

(approximately 1.2-1.8 g/cm³ depending on pigmentation.

Theoretical Coverage

at 1.5 specific gravity and
2.5 mils (60 µm) film thickness:
51.5 ft²/lb (11.1 m²/kg).

Refer also to the latest edition of “Theoretic Powder Coating Coverage Chart”.
Version 00-1001 (imperial).
Version 00-1000 (metric).

Storage Stability

6 months at no more than
77 °F (25 °C).
Pretreatment (alternatives)

The following table reflects the common methods of pretreatment 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 page one of this Product Data Sheet should be observed.

<table>
<thead>
<tr>
<th>Pretreatment</th>
<th>Interior</th>
<th>Exterior</th>
<th>Architectural</th>
<th>Steel construction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Degreasing</td>
<td>I</td>
<td>E</td>
<td>A</td>
<td>S</td>
</tr>
<tr>
<td>1) Chromating</td>
<td>I</td>
<td>E</td>
<td>A</td>
<td>S</td>
</tr>
<tr>
<td>2) Anodizing</td>
<td>I</td>
<td>E</td>
<td>A</td>
<td>S</td>
</tr>
<tr>
<td>2) Chrome free</td>
<td>I</td>
<td>E</td>
<td>A</td>
<td>S</td>
</tr>
<tr>
<td>Iron Phosphating</td>
<td>I</td>
<td>E</td>
<td>A</td>
<td>S</td>
</tr>
<tr>
<td>Zinc Phosphating</td>
<td>I</td>
<td>E</td>
<td>A</td>
<td>S</td>
</tr>
<tr>
<td>Blast Cleaning</td>
<td>I</td>
<td>E</td>
<td>A</td>
<td>S</td>
</tr>
<tr>
<td>3) Sweeping</td>
<td>I</td>
<td>E</td>
<td>A</td>
<td>S</td>
</tr>
</tbody>
</table>

1) According to ASTM B 449.
2) According to GSB quality and test regulations.
3) Only for zinc coated parts >1.8 mils (>45 μm).
4) For a two-coat process/TIGER Shield®.

Processing

Corona

Tribo*

* For Tribo/Airstatic powder coatings please confirm before ordering. Suitability of metallic effects for Tribo processing must be verified prior to application. Please refer to the latest edition of the relevant Information Sheets.

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

Cure Parameters (substrate temperature)

To achieve a full cure and the desired mechanical properties and weatherability the time/temperature combination must fall within the cure window.
Please Note

Epoxy powder coatings have a tendency to color shift and gloss variations due to changes in curing conditions. It is recommended to closely observe the curing parameters for TIGER Drylac® Series 69.

For metallic finishes it is recommended to observe the guidelines published in the latest edition of TIGER Drylac® “Application guidelines for metallic effect powder coatings”.

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.

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 Material Safety Data Sheet (MSDS) before use.

Test Results

Results are checked on iron phosphated steel test panels Bonderite B-1000 or equivalent. Cure conditions are according to the cure curves. When used as a two-coat system, the increase in film thickness will result in a decrease of mechanical properties.

<table>
<thead>
<tr>
<th>Test results</th>
<th>Test method</th>
<th>Series 69 Glossy</th>
<th>Series 69 Flat to Matte</th>
</tr>
</thead>
<tbody>
<tr>
<td>Film thickness</td>
<td></td>
<td>2.5-3.5 mils (60-80 µm)</td>
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</tr>
<tr>
<td>Gloss - 60°</td>
<td>ASTM D523</td>
<td>80-95+</td>
<td>&lt;25</td>
</tr>
<tr>
<td>Cross cut tape test</td>
<td>ASTM D3359 Method B</td>
<td>5B</td>
<td>5B</td>
</tr>
<tr>
<td>Mandrel bending test</td>
<td>ASTM D522</td>
<td>≤1/8 inches (≤5 mm)</td>
<td>≤5/16 inches (≤10 mm)</td>
</tr>
<tr>
<td>Impact test 80 in/lb</td>
<td>ASTM D2794</td>
<td>No appearance of crack down to the substrate.</td>
<td>Minor cracks.</td>
</tr>
<tr>
<td>Pencil hardness</td>
<td>ASTM D3363</td>
<td>2H minimum.</td>
<td>2H minimum.</td>
</tr>
<tr>
<td>Humidity resistance 500 hours</td>
<td>ASTM D2247</td>
<td>Maximum undercutting 1/32 inches (1 mm). No blistering.</td>
<td>Maximum undercutting 1/32 inches (1 mm). No blistering.</td>
</tr>
<tr>
<td>Acid salt spray resistance 500 hours</td>
<td>ASTM B117</td>
<td>Maximum undercutting 1/32 inches (1 mm). No blistering.</td>
<td>Maximum undercutting 1/32 inches (1 mm). No blistering.</td>
</tr>
</tbody>
</table>

Cleaning recommendations: Refer to the latest edition of TIGER “Cleaning Recommendations” information sheet, Version 00-1005.
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.

As part of TIGER Drylac® product information program, Product Data Sheets are updated periodically. It is recommended to always check for the latest editions on TIGER’s website. 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 given 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. This Product Data Sheet supersedes all previous Product Data Sheet versions and notes published in relation to this product.