Desert Tan Fed Std 30318 - Series 344-15050
MILITARY POWDER COATINGS

Polyurethane powder coatings for military applications with superior corrosion protection.

Typical Applications

- General military camouflage applications.

Standard Packaging

44 lb (20 kg) box.
5 lb (2.5 kg) minipack.

Specific Gravity (ASTM D792)

approximately 1.60 g/cm$^3$ depending on pigmentation.

Theoretical Coverage

at 1.5 specific gravity and 2.5 mils (60 µm) film thickness:

$51.5 \text{ ft}^2/\text{lb (11.1 m}^2/\text{kg})$.

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).

Features

- Good weather resistance.
- Good storage stability.

Finish and Color

- Smooth flat matte 0-15*.

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

It can be made to order in non-stock colors (minimum order quantity applies).
Pretreatment (alternatives)

Refer to TT-C-490 for ferrous substrates and TT-C-490/MIL-C-5541F for non-ferrous substrates.

Cure Parameters (substrate temperature)

TIGER Drylac® Series 344-15050
Cure Parameters | Smooth Flat Matte

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

Processing

Corona

Tribo*

For Tribo/Airstatic powder coatings please confirm before ordering. 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.
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 Material Safety Datasheet (MSDS) before use.

Test Results

Results are checked on iron phosphated steel test panels of 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 344-15050 Smooth Flat Matte</th>
</tr>
</thead>
<tbody>
<tr>
<td>Film thickness</td>
<td></td>
<td>2.5-3.5 mils (60-80 μm)</td>
</tr>
<tr>
<td>Cross cut tape test</td>
<td>ASTM D3359 Method B</td>
<td>5B</td>
</tr>
<tr>
<td>Mandrel bending test</td>
<td>ASTM D522</td>
<td>≤1/2 inch (≤12 mm)</td>
</tr>
<tr>
<td>Impact test</td>
<td>ASTM D2794</td>
<td>No appearance of cracks down to the substrate.</td>
</tr>
<tr>
<td>80 in/lb</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pencil hardness</td>
<td>ASTM D3363</td>
<td>2H minimum.</td>
</tr>
<tr>
<td>Humidity resistance</td>
<td>ASTM D2247</td>
<td>Maximum undercutting 1/32 inches (1 mm). No blistering.</td>
</tr>
<tr>
<td>500 hours</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Salt spray resistance</td>
<td>ASTM B117</td>
<td>Maximum undercutting 1/32 inches (1 mm). No blistering.</td>
</tr>
<tr>
<td>500 hours</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hydrocarbon resistance</td>
<td>JP8 hydrocarbon fluid</td>
<td>No change.</td>
</tr>
<tr>
<td>Accelerated weathering</td>
<td>ASTM G 154</td>
<td>Minimal change of color and gloss.</td>
</tr>
<tr>
<td>1,000 hours QUV-A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DS2P resistance</td>
<td>Spot test for 30 minutes</td>
<td>No major color and gloss change.</td>
</tr>
<tr>
<td>Acid resistance</td>
<td>1 hour resistance to 10% acetic acid</td>
<td>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.