



Industrial
&
Marine
Coatings

5.21

HI-SOLIDS POLYURETHANE

PART S B65-300 GLOSS SERIES
PART S B65-350 SEMI-GLOSS SERIES
PART T B60V30 HARDENER

PRODUCT INFORMATION

Revised 8/05

PRODUCT DESCRIPTION	RECOMMENDED USES																																
<p>HI-SOLIDS POLYURETHANE is a two-component, low VOC, aliphatic, acrylic polyurethane resin coating. It is designed for high performance protection with outstanding exterior gloss and color retention.</p> <ul style="list-style-type: none"> • Good/excellent resistance to corrosion and weathering • Outstanding color and gloss retention • Chemical resistant • Part of a system tested for nuclear irradiation and decontamination, Level II • Suitable for use in USDA Inspected facilities 	<p>For use over prepared substrates in industrial environments</p> <ul style="list-style-type: none"> • Heavy duty interior and exterior structural coating • A chemical and abrasion resistant equipment and machinery finish • A gloss and color retentive heavy duty maintenance coating for use in "high visibility" areas <p>Exterior surfaces of steel tanks • Refineries • Clean rooms Chemical processing equipment • Conveyors • Handrails Exterior metal siding and trim • Rolling stock • Paper mills Marine Applications • Power plants Oil Field Machinery • Offshore structures</p> <p>Suitable for use in USDA Inspected facilities Conforms to ANWIA D102-03 CCS #5 & #6. Acceptable for use in high performance architectural applications.</p>																																
PRODUCT CHARACTERISTICS	PERFORMANCE CHARACTERISTICS																																
<p>Finish: High Gloss or Semi-Gloss</p> <p>Color: Wide range of colors possible</p> <p>Volume Solids: 65% ± 2%, mixed, may vary by color</p> <p>Weight Solids: 77% ± 2%, mixed, may vary by color</p> <p>VOC (EPA Method 24): Unreduced: <340g/L, 2.80 lb/gal Reduced 15% <370 g/L, 3.08 lb/gal mixed</p> <p>Mix Ratio: May vary by color 4:1 by volume</p> <p>Recommended Spreading Rate per coat: Wet mils: 4.5 - 6.0 Dry mils: 3.0 - 4.0</p> <p>Coverage: 260 - 347 sq ft/gal approximate</p> <p>NOTE: Brush or roll application may require multiple coats to achieve maximum film thickness and uniformity of appearance.</p> <p>Drying Schedule @ 4.6 mils wet @ 50% RH:</p> <table border="1"> <thead> <tr> <th></th> <th>@ 40°F</th> <th>@ 77°F</th> <th>@ 120°F</th> </tr> </thead> <tbody> <tr> <td>To touch:</td> <td>4 hours</td> <td>2 hours</td> <td>1 hour</td> </tr> <tr> <td>To handle:</td> <td>16 hours</td> <td>8 hours</td> <td>6 hours</td> </tr> <tr> <td>To recoat:</td> <td></td> <td></td> <td></td> </tr> <tr> <td> minimum:</td> <td>24 hours</td> <td>18 hours</td> <td>10 hours</td> </tr> <tr> <td> maximum:</td> <td>14 days</td> <td>14 days</td> <td>14 days</td> </tr> <tr> <td>To cure:</td> <td>14 days</td> <td>10 days</td> <td>7 days</td> </tr> <tr> <td>Post Cure:</td> <td>8 hours</td> <td>4 hours</td> <td>2 hours</td> </tr> </tbody> </table> <p>If maximum coat thickness is exceeded, abraze surface before re-coating. Drying time is temperature, humidity, and film thickness dependent.</p> <p>Sweat-in Time: None required</p> <p>Shelf Life: Part S: 36 months, unopened Part T: 24 months, unopened Store indoors at 40°F at 100°F</p> <p>Flash Point: 80°F, PMCC, mixed</p> <p>Reducer/Clean Up: Below 80°F: Reducer #69, RTK69 Above 80°F: Reducer #68, RTK68 or R6K32</p>		@ 40°F	@ 77°F	@ 120°F	To touch:	4 hours	2 hours	1 hour	To handle:	16 hours	8 hours	6 hours	To recoat:				minimum:	24 hours	18 hours	10 hours	maximum:	14 days	14 days	14 days	To cure:	14 days	10 days	7 days	Post Cure:	8 hours	4 hours	2 hours	<p>System Tested: (unless otherwise indicated) Substrate: Steel Surface Preparation: SSPC-SP6 1 ct. Recoatable Epoxy Primer @ 4.0 mils dft 1 ct. HI-Solids Polyurethane Gloss @ 3.0 mils dft</p> <p>Abrasion Resistance: Method: ASTM D4060, CS17 wheel, 1000 cycles, 1 kg load Result: 87.1 mg loss</p> <p>Adhesion: Method: ASTM D4541 Result: 1050 psi</p> <p>Corrosion Weathering: Primer - Zinc Clad II Plus, Intermediate - Recoatable Epoxy Primer Method: ASTM D5894, 21 cycles, 7,000 hours Result: Rating 10 per ASTM D714 for blistering Rating 9 per ASTM D610 for rusting</p> <p>Direct Impact Resistance: Method: ASTM D2794 Result: >26 in. lbs</p> <p>Dry Heat Resistance: Method: ASTM D2495 Result: 200°F</p> <p>Flexibility: Method: ASTM D522 180° bend, 1/8" mandrel Result: Passes</p> <p>Moisture Condensation Resistance: Method: ASTM D4585, 100°F, 1000 hours Result: No rusting, blistering, or delamination</p> <p>Pencil Hardness: Method: ASTM D3363 Result: F</p> <p>Salt Fog Resistance: Primer - Zinc Clad II Plus, Intermediate - Recoatable Epoxy Primer Method: ASTM B117, 9,000 hours Result: Rating 10 per ASTM D714 for blistering Rating 9 per ASTM D610 for rusting</p> <p>Thermal Shock: Method: ASTM D2246, 15 cycles Result: Excellent</p> <p>Meets the requirements of SSPC Paint No. 36, Level 3.</p>
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