Selection & Specification Data

Generic Type: Aliphatic Acrylic Polyurethane

Features:
- High gloss
- Excellent weatherability
- Exceeds SSPC Paint 36 specification for a Level 3 urethane
- Available in a variety of custom colors
- Excellent flow characteristics allow for application by brush, spray, or roller
- Superior impact and abrasion resistance
- Indefinite recoatability

Description:
A high performance, high gloss polyurethane finish with excellent color and gloss retention properties. All finishes are minimum 80 gloss with exceptional weathering performance and are available in custom colors.

Performance Driven: Carbothane 134 series products represent a globally available product line that shares the same weathering performance criteria regardless of manufacturing location. Since raw materials are not always available (or compliant) on a global basis, these products have been uniquely formulated to utilize materials that are both available regionally and regulatory-compliant for the various regions around the world. All are formulated to provide the same weathering performance. The products have been rigorously tested and field proven giving specifiers the confidence that when specifying “Carbothane 134 Series” no matter where the project is, the product used will perform as expected.

Product Series
The following products included in this series comply with the various regional or country regulatory requirements as indicated.

<table>
<thead>
<tr>
<th>Product</th>
<th>SBV</th>
<th>VOC* (g/l)</th>
<th>Primary Area of Use</th>
</tr>
</thead>
<tbody>
<tr>
<td>134 HG</td>
<td>70</td>
<td>284</td>
<td>North America</td>
</tr>
<tr>
<td>134 VOC</td>
<td>70</td>
<td>190</td>
<td>North America (CA)</td>
</tr>
<tr>
<td>134 MC</td>
<td>70</td>
<td>54</td>
<td>North America (CA-South Coast)</td>
</tr>
<tr>
<td>134 HP</td>
<td>65</td>
<td>300</td>
<td>Europe</td>
</tr>
<tr>
<td>134 GS</td>
<td>55</td>
<td>420</td>
<td>Outside North America</td>
</tr>
<tr>
<td>134 RS</td>
<td>46</td>
<td>478</td>
<td>Outside North America</td>
</tr>
</tbody>
</table>

*VOC as supplied

Dry Temp. Resistance
Continuous: 93°C (200°F)
Non-Continuous: 121°C (250°F)
Discoloration and loss of gloss is observed above 93°C (200°F).

Thickness and Coverage

Dry Film Thickness: 50 µ (2.0 mils) nominal
37-75 µ (1.5-3.0 mils) range as needed

Theoretical Coverage Rate at 1 mil (25 µ):

<table>
<thead>
<tr>
<th>Product</th>
<th>m²/liter</th>
<th>ft²/gal</th>
</tr>
</thead>
<tbody>
<tr>
<td>134 HG</td>
<td>27.54</td>
<td>1122</td>
</tr>
<tr>
<td>134 VOC</td>
<td>27.54</td>
<td>1122</td>
</tr>
<tr>
<td>134 MC</td>
<td>27.54</td>
<td>1122</td>
</tr>
<tr>
<td>134 HP</td>
<td>25.57</td>
<td>1042</td>
</tr>
<tr>
<td>134 GS</td>
<td>21.64</td>
<td>882</td>
</tr>
<tr>
<td>134 RS</td>
<td>18.11</td>
<td>738</td>
</tr>
</tbody>
</table>

Substrates & Surface Preparation

General
Surfaces must be clean and dry. Employ adequate methods to remove dirt, dust, oil and all other contaminants that could interfere with adhesion of the coating. For all surfaces prime with specific Carboline primer as recommended by your Carboline sales representative. Refer to the specific primer’s Product Data Sheet for detailed requirements of the specified primer.

Galvanized Steel
Prime with specific Carboline primer as recommended by your Carboline Sales Representative. Refer to the specific primer’s Product Data Sheet for substrate preparation requirements.

Previously Painted Surfaces
Lightly sand or abrade to roughen and degloss the surface. Existing paint must attain a minimum 3B rating in accordance with ASTM D3359 “X-Cut” adhesion test.
Application Equipment
Listed below are general equipment guidelines for the application of this product. Job site conditions may require modification to these guidelines to achieve the desired results.

General Guidelines:
- Spray Application (General): The following spray equipment has been found suitable and is available from equipment manufacturers.
- Conventional Spray: Pressure pot equipped with dual regulators, 3/8" I.D. minimum material hose, 0.070" I.D. fluid tip and appropriate air cap.
- Airless Spray: Pump Ratio: 30:1 (min.)*, GPM Output: 3.0 (min.), Material Hose: 3/8" I.D. (min.), Tip Size: .015-.017", Output PSI: 2100-2400, Filter Size: 60 mesh. *PTFE packings are recommended and available from the pump manufacturer.
- Brush & Roller (General): Multiple coats may be required to obtain desired appearance, recommended dry film thickness and adequate hiding. Avoid excessive re-brushing or re-rolling. For best results, tie-in within 10 minutes at 24°C (75°F).
- Brush: Recommended for touch-up only. Use a medium, natural bristle brush.
- Roller: Use a short-nap mohair roller cover with solvent resistant core.

Mixing & Thinning
- Mixing: Power mix Part A separately, then combine and power mix. DO NOT MIX PARTIAL KITS.
- Thinning: See separate product data sheet for specific product for appropriate thinning recommendations to comply with regulatory requirements and specific jobsite conditions. Use of thinners other than those supplied or recommended by Carboline may adversely affect product performance and void product warranty, whether expressed or implied.
- Pot Life: See specific product data sheet. Pot life ends when coating becomes too viscous to use. MOISTURE CONTAMINATION WILL SHORTEN POT LIFE AND CAUSE GELLATION.

Cleanup & Safety
- Cleanup: Use Thinner #2 or Acetone. In case of spillage, absorb and dispose of in accordance with local applicable regulations.
- Safety: Read and follow all caution statements on this product data sheet and on the MSDS for this product. Employ normal workmanlike safety precautions.
- Ventilation: When used in enclosed areas, thorough air circulation must be used during and after application until the coating is cured. The ventilation system should be capable of preventing the solvent vapor concentration from reaching the lower explosion limit for the solvents used. User should test and monitor exposure levels to insure all personnel are below guidelines. If not sure or if not able to monitor levels, use MSHA / NIOSH approved respirator.
- Caution: This product contains flammable solvents. Keep away from sparks and open flames. All electrical equipment and installations should be made and grounded in accordance with the National Electric Code. In areas where explosion hazards exist, workmen should be required to use non-ferrous tools and wear conductive and non-sparking shoes.

Application Conditions
<table>
<thead>
<tr>
<th>Condition</th>
<th>Material</th>
<th>Surface</th>
<th>Ambient</th>
<th>Humidity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minimum</td>
<td>10°C (50°F)</td>
<td>2°C (35°F)</td>
<td>2°C (35°F)</td>
<td>10%</td>
</tr>
<tr>
<td>Maximum</td>
<td>38°C (100°F)</td>
<td>49°C (120°F)</td>
<td>35°C (95°F)</td>
<td>85%</td>
</tr>
</tbody>
</table>

Industry standards are for substrate temperatures to be at least 3°C (5°F) above the dew point. Caution: this product is moisture sensitive in the liquid stage and during initial cure. Protect from direct moisture (rain or dew) contact during initial curing period. Excessive exposure to moisture may result in a loss of gloss and/or microbubbling of the product.

Curing Schedule
See specific product data sheet for cure times. These times are based on a 2.0 mil (50 micron) dry film thickness. Higher film thickness, insufficient ventilation or cooler temperatures will require longer cure times and could result in solvent entrapment and premature failure.

*Maximum recoat times are indefinite. Surface must be clean and dry. As part of good painting practice it is recommended to test for adhesion by wiping the surface with solvent. If the film shows a slight "tack" the surface is suitable for recoating without extensive surface preparation such as abrading or de-glossing.

Handling & Storage
- Storage (General): Store indoors.
- Storage Temperature & Humidity: 4°C-43°C (40° -110°F) / 0-80% Relative Humidity