Liquid Thermoplastic Traffic Marking Paint

SMT - 300
(Meets TT-P-1952E Type III)

Revised: 2/14

1. PRODUCT NAME
   Liquid Thermoplastic Traffic Marking Paint

2. MANUFACTURER
   ThorWorks Industries, Inc.
   2520 S. Campbell St.
   Sandusky, OH 44870
   Phone: 800-326-1994
   Fax: 419-626-5477
   www.thorworks.com

Additional Plant Locations:
SealMaster has a nationwide network of manufacturing and distribution facilities.

Phone 1-800-395-7325 or visit website at www.sealmaster.net to find the location near you.

3. PRODUCT DESCRIPTION & BENEFITS

SealMaster Liquid Thermoplastic Traffic Marking Paint is a high-performance, highly durable Waterborne traffic marking material. Unique patented cross linking technology provides durability normally associated with Hot-melt Thermoplastics and epoxies. SealMaster Liquid Thermoplastic meets and exceeds the performance requirements of Federal Specification TT-P-1952E, Type III. SealMaster Liquid Thermoplastic can be applied with conventional spray equipment (with stainless steel components) to asphalt, concrete, or existing road markings that are adhering well to the pavement surface. Features include:

- Unique crosslinking chemistry
- Can use existing spray equipment (with stainless steel components)
- Safety, no heating required as with hot melt thermoplastics.
- Single component system, no need to blend as with epoxy systems.
- Can be used over cement or asphalt surfaces.
- Meets and exceeds TT-P-1952 E Type III

Basic Uses: Highways, roads, streets, intersections, legends and cross walks. Also ideal for highly durable parking lot markings.

Composition: 100% acrylic emulsion cross-linking resins, specialty pigments, surfactants, and fillers.

Sizes: 55-gallon drums, and 5-gallon pails.

Color: White, Yellow.

Limitations: Apply to clean dry surface when surface and air temperature is not expected to drop below 50°F or exceed 120°F in a 24 hour period.

Chemical & Physical Analysis

<table>
<thead>
<tr>
<th>ASTM</th>
<th>Description</th>
<th>White</th>
<th>Yellow</th>
</tr>
</thead>
<tbody>
<tr>
<td>D2369</td>
<td>Volatile Organic Content (VOC), ...................</td>
<td>15.1 lbs/gal.</td>
<td>13.5 lbs/gal.</td>
</tr>
<tr>
<td>D562</td>
<td>Density (KU) .........................................</td>
<td>70 - 115</td>
<td>70 - 110</td>
</tr>
<tr>
<td>D2697</td>
<td>Solids by Volume % ...................................</td>
<td>61</td>
<td>61</td>
</tr>
<tr>
<td>D3723</td>
<td>Solids by Weight % ...................................</td>
<td>77.5</td>
<td>76.5</td>
</tr>
<tr>
<td>D3723</td>
<td>Pigment Volume Content % ............................</td>
<td>60.00</td>
<td>60.00</td>
</tr>
<tr>
<td>D2805</td>
<td>Dry Opaque ...........................................</td>
<td>.965</td>
<td>.965</td>
</tr>
<tr>
<td>E97</td>
<td>Directional Reflectance ................................</td>
<td>86%</td>
<td>50%</td>
</tr>
<tr>
<td>D711</td>
<td>Drying Time For No Pickup, min. ...........................</td>
<td>&lt;6 min</td>
<td>&lt;6 min</td>
</tr>
<tr>
<td>D1210</td>
<td>Fineness of Dispersion, Heaman ..........................</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>D969</td>
<td>Bleeding Ratio .......................................</td>
<td>.95</td>
<td>-</td>
</tr>
<tr>
<td>D522</td>
<td>Flexibility: The paint film shall not crack, chip</td>
<td>PASSESS</td>
<td>PASSESS</td>
</tr>
<tr>
<td></td>
<td>or flake when test panel is bent 180 degrees over</td>
<td></td>
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<tr>
<td></td>
<td>a 13 mm (1/2 in) mandrel ...........................</td>
<td>PASSESS</td>
<td>PASSESS</td>
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<tr>
<td></td>
<td>Water Resistance: The paint film shall not blister,</td>
<td>PASSESS</td>
<td>PASSESS</td>
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<tr>
<td></td>
<td>wrinkle, lose adhesion, change color, or show other</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>evidence of deterioration ...........................</td>
<td>PASSESS</td>
<td>PASSESS</td>
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<tr>
<td>D2243</td>
<td>Freeze-Thaw Stability: .............................</td>
<td>PASSESS</td>
<td>PASSESS</td>
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<tr>
<td></td>
<td>- Paint shall show no coagulation or flocculation,</td>
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<td></td>
<td>change in consistency greater than 10 KU or decrease</td>
<td></td>
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<tr>
<td></td>
<td>in scratch resistance by more than 10 percent ....</td>
<td>PASSESS</td>
<td>PASSESS</td>
</tr>
<tr>
<td>D1729</td>
<td>Yellow Color Match to Federal Standard 595 ..........</td>
<td></td>
<td>PASSESS</td>
</tr>
<tr>
<td>D968</td>
<td>Abrasion Resistance - not less than 150 liters of</td>
<td>PASSESS</td>
<td>PASSESS</td>
</tr>
<tr>
<td></td>
<td>sand to abrade the paint film through to substrate</td>
<td></td>
<td></td>
</tr>
<tr>
<td>D2486</td>
<td>Scratch Resistance ...................................</td>
<td>1500 cycles</td>
<td>1500 cycles</td>
</tr>
<tr>
<td>DT392</td>
<td>Titanium dioxide content - the white paint shall contain a</td>
<td></td>
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<tr>
<td></td>
<td>minimum of 120 g/l (1 lb/gal) rutile titanium dioxide</td>
<td>PASSESS</td>
<td>PASSESS</td>
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</table>

NOTE: Additional ASTM Test Methods employed were D1640, D2244, D3335, D3718, E-1347, G154.

THIS PRODUCT DOES NOT CONTAIN MERCURY, LEAD, HEXAVALENT CHROMIUM, TOLUENE, CHLORINATED SOLVENTS, HYDROLYSABLE CHLORINE DERIVATIVES, ETHYLENE-BASED GYCOL OR THEIR ACETATES, OR CARCINOGENS.
4. TECHNICAL DATA
SealMaster Liquid Thermoplastic Traffic Marking Paint meets and exceeds the chemical composition and performance requirements of Federal Specification TT-P-1952E, Type III.

Environmental Considerations: SealMaster Liquid Thermoplastic Traffic Marking Paint is an environmentally friendly 100% acrylic emulsion traffic paint containing less than 100 grams per liter volatile organic content (VOC).

Physical/Chemical Properties: SealMaster Liquid Thermoplastic Traffic Marking Paint meets or exceeds TT-P-1952E Type III when tested in accordance with the following ASTM test methods: D2369, D562, D2697, D3723, D2805, D711, D1210, D969, D1849, D522, D2243, D1729, D968, D2486, D1394, D1640, D2244, D3335, D3718, E1347, G154.

5. INSTALLATION
Asphalt and concrete pavement surfaces shall be clean and free from all loose materials and dirt. New asphalt surfaces should cure sufficiently to be free of light oils on the surface (4 weeks). Allow freshly applied pavement sealer to cure for at least 24 hours prior to applying traffic paint.

Methods: Apply SealMaster Liquid Thermoplastic Traffic Marking Paint with spray equipment (with stainless steel components). Recommended spray tip size is .021” to .023”.

Mixing Procedures: Stir well before using. Use as is. Do not dilute.

Application: For maximum durability apply at a wet film thickness of 30-35 mils (155-180 ft. of 4-inch line per gallon). When applying at 30-35 wet mils, it is recommended that a larger particle size glass bead be used for optimum retroreflectance and wet night visibility. A bead drop rate of approximately 7 lbs./gal. of paint for a 4-inch line and 30-35 mil thickness is a suitable range which can be fine tuned for optimum performance.

The dry-to-no-pickup time for a 30-35 mil thickness application is typically 5 minutes or less depending on conditions. Liquid Thermoplastic can be applied with standard airless spray equipment with stainless steel components.

COVERAGE: 155-180 ft. of 4-inch line per gallon at 30-35 mils wet film thickness.

Precautions: Both surface and ambient temperature shall be a minimum of 50°F. Temperature shall not drop below 50°F within a 24 hour period following application. Keep Out Of Reach Of Children. Do not store unopened containers in freezing temperatures.

6. AVAILABILITY & COST
Availability: SealMaster Liquid Thermoplastic Traffic Marking Paint is supported by a nationwide network of SealMaster manufacturing facilities along with a national network of professional applicators.

Cost: Cost information can be obtained from a local applicator. Contact SealMaster for the representative in your area.

7. WARRANTY
SealMaster warrants that SealMaster Liquid Thermoplastic Traffic Marking Paint meets the chemical composition and performance requirements set forth in section 4. Liability to the buyer or user of this product is limited to the replacement value of the product only.

8. TECHNICAL SERVICES
Manufacturer: Complete product specifications, material safety data sheets, and technical assistance is available from SealMaster.

Professional Applicators: Your local applicator is available to provide on-site inspections and recommendations to meet your specific needs.

9. FILING SYSTEMS
- SealMaster Online Specifications at www.sealmaster.net
- Complete SealMaster Product and Equipment Catalog Available
- Sweet’s Catalog
- Sweet’s CD
- Sweet’s Online
- Sweet’s Directory

The statements made on this specification sheet are believed to be true and accurate and are intended to provide a guide for approved application practices. As workmanship, weather, construction, condition of pavement, tools utilized, and other variables affecting results are beyond our control, the manufacturer warrants only that the material conforms to product specifications and any liability to the buyer or user of this product is limited to the replacement value of the product only. The manufacturer expressly disclaims any implied warranties of merchantability or fitness for a particular purpose. Warranty is void on multi-coat applications if material made by other manufacturers is used with this product.

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Supercedes: SMT-300 (11/12), (7/13)

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SealMaster®
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