

General Description

HP5700 DTM Mastix Urethane is a two component, direct-to-metal urethane designed for protecting metal surfaces. This product provides excellent gloss and colour retention as well as superior abrasion, chemical, and solvent resistance. This is a two-component product with a mix ratio of 4.2:1 (A:B) by volume. The kit components are already premeasured to the mix ratio.

No measuring required. Do not mix partial kits.

- Direct-to-metal, including tightly adhered rust
- Abrasion, chemical, and corrosion resistant
- Excellent gloss and colour retention
- Fast dry time

Usage

Interior and exterior metal surfaces on industrial equipment, machinery, fixtures, structures, tank exteriors and other areas requiring a long life, performance urethane.

| | |
|------------------------|------------|
| Colours | Black (80) |
| Bases | 7B, 8B, 9B |
| Colorant System | Industrial |

Technical Data

| | |
|--|---|
| Vehicle | Mastix Urethane |
| Pigment | Titanium Dioxide |
| Volume Solids (mixed) | 70 ± 2% |
| Spread Rate Per 3.79 L | 23.2 – 29.3 sq. m. (250 – 315 Sq. Ft.) |
| Recommended Film Thickness | Wet: 5.1 – 6.5 mils Dry: 3.5 – 4.5 mils |
| Depending on surface texture and porosity. | |
| Dry Time @ 25 °C (77 °F) @ 50% RH | To Touch: 1 – 2 hours To Recoat: 8 hours |
| High humidity and cool temperatures will result in longer dry, recoat and cure times. | |
| Recoat after 72 hours: Abrade the surface to ensure proper inter-coat adhesion. | |
| Surface Temperature | Min: 4.4 °C (40 °F) Max: 37.8 °C (100 °F) |
| During Application | Max: 37.8 °C (100 °F) |
| Viscosity | 70 ± 4 KU 36.7 °C (98 °F) |
| Flash Point | (TT-P-141, Method 4293) |
| Sheen / Gloss | 85+ @ 60° |
| Clean Up | HP7000 |
| Thinner | Refer to page 2 |
| Mixed Ratio (by volume) | 4.2 : 1 |
| Induction time @ 25 °C (77 °F) | 10 minutes |
| Pot Life @ 25 °C (77 °F) | 2 hours |
| Weight Per Gallon (mixed) | 5 kg (11 lbs.) Min: 4.4 °C (40 °F) Max: 35 °C (95 °F) |
| Storage Temperature | Min: 4.4 °C (40 °F) Max: 35 °C (95 °F) |
| VOC (Catalyzed) | < 250 g/L |

Surface Preparation

Surfaces must be clean, dry and free of all grease, dirt, dust, oil and wax. Clean all surfaces using HP6000 Oil & Grease Emulsifier. Remove all remaining loose paint, rust and mill scale via Hand Tool Cleaning (SSPC-SP 2) or Power Tool cleaning (SSPC-SP 3). Fill holes and cracks and sand smooth. Glossy surfaces must be fully deglossed. Moderate to heavily rusted areas must be thoroughly prepared and active rust should be properly removed.

All masonry surfaces must be allowed to cure a minimum of 30 days before painting. Acid etch or abrasive blast all slick, glazed concrete or concrete with laitance. For acid etching, follow all manufacturer's directions and safety instructions. Rinse thoroughly and allow to dry.

WARNING! If you scrape, sand, or remove old paint, you may release lead dust. LEAD IS TOXIC. EXPOSURE TO LEAD DUST CAN CAUSE SERIOUS ILLNESS, SUCH AS BRAIN DAMAGE, ESPECIALLY IN CHILDREN. PREGNANT WOMEN SHOULD ALSO AVOID EXPOSURE. Wear a NIOSH approved respirator to control lead exposure. Clean up carefully with a HEPA vacuum and a wet mop. Before you start, find out how to protect yourself and your family by logging onto [Health Canada @ <https://www.canada.ca/en/health-canada/services/environmental-workplace-health/environmental-contaminants/lead/lead-information-package-some-commonly-asked-questions-about-lead-human-health.html>](https://www.canada.ca/en/health-canada/services/environmental-workplace-health/environmental-contaminants/lead/lead-information-package-some-commonly-asked-questions-about-lead-human-health.html)

Primer Systems

Ferrous Metal: HP1550 Concrete and Metal Epoxy Primer is recommended in areas where adequate surface preparation is not possible. In highly corrosive areas where additional rust inhibitive qualities are required, prime with one coat of HP4600 Epoxy Mastix.

Galvanized, Aluminum and Non-Ferrous Metals: Prime new or un-rusted metal with HP1100 Acrylic Metal Primer or HP1750 Waterborne Bonding Primer. **Weathered galvanized** should be primed with HP1550 Concrete and Metal Epoxy Primer.

Concrete and Masonry: Prime concrete with one coat of HP1550 Concrete and Metal Epoxy Primer, HP1560 Quick Set Epoxy Floor Sealer.

Previously Painted Surfaces: HP5700 can be applied over most industrial finishes in good condition. Test patches are recommended to check for wrinkling or lifting of existing coatings. HP1550 Concrete and Metal Epoxy Primer may be used as a barrier coat over all existing coatings.

Compliance & Certifications

This product has been approved by CFIA (Canadian Food Inspection Agency) for use in Food Processing Facilities.

Mixing Instructions

This is a two-component product and is pre-proportioned for error free mixing. Mix "A" & "B" separately.

- 1.) Carefully empty the entire contents of HP5700.90 Part B catalyst into the can of HP5700 Part A component resin. Part A container is short filled to accept entire contents of Part B catalyst.
- 2.) Using a drill mixer at low speed, blend this mixture for three to five minutes until completely blended. Keep the mixing blade turning at a slow speed to minimize whipping air into material. Scrape sides of pail during the mixing process.
- 3.) Allow to induct for 10 minutes at 25 °C (75 °F) prior to application.

Pot Life: 2 hours at 25 °C (75 °F)

| Component A | Component B | Total Yield |
|-----------------------------|---------------------------------------|-------------------------|
| HP5700 3 L (.80 gal.) | + HP5700.90 0.7 L (.20 gal.) | = 3.79 L 1 gallon |

Limitations

- Do not apply if air or surface temperatures are below 4.4 °C (40 °F) or above 37.7 °C (100 °F)
- This product is not intended for immersion service.

Technical Assistance

Available through your local authorized independent Benjamin Moore retailer.

call 1-866-708-9180
visit www.benjaminmoore.ca

Application

Airless Spray: Tip range between .013 and .017. Total fluid output pressure at tip should not be less than 3600 psi. If needed for application consistency, up to 10% of Acetone per gallon may be added according to local regulations.

Brush: Natural Bristle only

Roller: Industrial Cover with Phenolic core; 6.35 mm to 12.7 mm (¼" – ½") nap.

NOTE: Do not allow material to remain in hoses, gun or spray equipment. Thoroughly flush all equipment with HP7000.

Do not apply if material, substrate or ambient temperature is below 4.4 °C (40 °F). Relative humidity should be below 85%. Do not apply if within 5 degrees of dew point or if rain is expected within 12 hours of application.

Clean Up

Wash brushes, rollers, and other painting tools with HP7040 Epoxy Thinner immediately after use. Do not allow material to remain in hoses, gun or spray equipment. Thoroughly flush all equipment with HP7000.

| CHEMICAL RESISTANCE GUIDE (NON-IMMERSION) | |
|---|-----------|
| Fresh Water | Excellent |
| Salt Water | Excellent |
| Acids | Excellent |
| Alkalis | Excellent |
| Solvents | Excellent |
| Fuel | Excellent |
| Acidic Salt Solutions | Excellent |
| Alkaline Salt Solutions | Excellent |
| Neutral Salt Solutions | Excellent |

| TEST DATA | |
|--|--|
| Flexibility (ASTM D1737) | Pass 6.35 mm (1/4") Mandrel |
| Dry Heat Resistance | 148.8 °C (300 °F) |
| Wet Heat Resistance | 51.6 °C (125 °F) |
| Adhesion (ASTM D3359) | Pass 5B |
| Accelerated Weathering (ASTM G53) 1000 Hours 1 coat HP1550, 2 coats HP5700 | 95% Gloss Retention < 1.5 DE Colour Change (CMC) |
| Salt Spray (ASTM B117) 400 hours (1 coat HP1550, 2 coats HP5700) | Rust Breakthrough: 10 Rating Rust Area: 0.01% |
| Abrasion Resistance (ASTM D4060) Taber (CS-17 Wheel, 1000g load, 1000 cycles) | 44 mg. loss |

Environmental Health & Safety Information

Storage: Store locked up. Store in a well-ventilated place. Keep container tightly closed.

Disposal: Dispose of contents/container to an approved waste disposal plant.

CAUTION: All floor coatings may become slippery when wet. Where non-skid characteristics are desired, use an appropriate anti-slip aggregate.

**KEEP OUT OF REACH OF CHILDREN
FOR PROFESSIONAL USE ONLY**

**Refer to Safety Data Sheet for additional health
and safety information.**