

General Description

HP4000 Polyamide Epoxy is a multi-use coating designed for machinery, floors, structural steel, walls, and other substrates in industrial and commercial environments requiring a durable coating in severe environments. Excellent for use on concrete, masonry, ferrous metals, non-ferrous and galvanized metal. This is a two-component product that requires 1 part of the proper "A" component mixed with 1 part of part "B" catalyst. The components are already premeasured to the proper mix ratio. No measuring required. Do not mix partial kits.

- Cross-linked film for toughness and durability
- Chemical- and solvent- resistant
- Suitable for immersion

Usage

Designed for coating items including tanks, machinery, floors, structural members, walls and other industrial and commercial substrates requiring a durable and resistant finish. The base component dictates the colour of the mixed kit, while the catalyst determines the gloss and film build level.

Colours	Clear (00), Safety Yellow (10), Safety Red (20), Silver Gray (70), Battleship Gray (75), Black (80)
Bases	7B, 8B, 9B
Colorant System	Industrial
Catalyst	90 (Gloss), 91 (Semi-Gloss), 92 (High-Build)

Technical Data (Gloss)

Vehicle	Polyamide epoxy	
Volume Solids (mixed)	62 ± 2% (Gloss, Semi-Gloss)	66 ± 2% (High-Build)
	Gloss/Semi-Gloss 37.2 – 46.5 sq. m. (400 – 500 Sq. Ft.)	
Spread Rate	High Build 18.6 – 23.2 sq. m. (200 – 250 Sq. Ft.)	
Per 3.79 L	Wet: 3.2 – 4.0 mils (Gloss/Semi-Gloss) 6.4 – 8.0 mils (High Build)	
Recommended Film Thickness	Dry: 2.0 – 2.5 mils (Gloss/Semi-Gloss) 4.2 – 5.3 mils (High Build)	
Depending on surface texture and porosity.		
Dry Time @ 25 °C (77 °F) @ 50% RH	To Touch:	6 hours
	To Recoat:	10 – 12 hours
	Foot Traffic:	24 – 48 hours
SERVICE TIME: Light Industrial Use: 72 Hours.		
Moderate to Heavy Industrial Use: 7 days		
Recoat after 72 hours: Abrade the surface to ensure proper inter-coat adhesion.		
Surface Temperature	Min:	7.2 °C (45 °F)
During Application	Max:	37.8 °C (100 °F)
Viscosity	80 ± 8 KU	
Flash Point	27 °C (80 °F) or greater (TT-P-141, Method 4293) Gloss: 85+ @ 60°	
Sheen / Gloss	Semi-Gloss: 40 – 50 @ 60° High-Build: 65 – 75 @ 60°	
Clean Up	HP7010	
Thinner	Do not thin	
Mixed Ratio (by volume)	1 : 1	
Induction time @ 25 °C (77 °F)	30 minutes	
Pot Life @ 25 °C (77 °F)	7 hours	
Weight Per Gallon (mixed)	4.8 – 5.2 kg (10.7 – 11.5 lbs.)	
Storage Temperature	Min:	7.2 °C (45 °F)
	Max:	35 °C (95 °F)
VOC (Catalyzed)	324 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>

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 Mastic.

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 or HP4000 can also be used.

Previously Painted Surfaces: HP4000 can be applied over most old 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

MPI	82 (when used with anti-slip) 108 & 177 (Semi-Gloss Catalyst) 98 (High-Build Catalyst)
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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 HP4000 Part B and the contents of HP4000 Part A component resin into a separate metal pail, large enough to hold both Part A and Part B, scraping the sides of both parts to ensure all liquid has been added.
- 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 30 minutes at 25 °C (77 °F) prior to application.

Pot Life:	7 hours at 25 °C (77 °F)
	14 hours at 10 °C (50 °F)
	3 hours at 38 °C (100 °F)

Limitations

- This product will not cure at surface temperatures below 45 °F (7.2 °C).
- This product will amber and chalk if exposed to sunlight. Where colour and gloss retention is important, top-coating will be necessary.

Technical Assistance

Available through your local authorized independent Benjamin Moore retailer.

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

Application

Airless Spray (Preferred Method): Tip range between .015 and .019. Total fluid output pressure at tip should not be less than 2000 psi.

Air Spray (Pressure Pot): 704 or 765 air cap and Fluid Tip E.

Brush: Natural Bristle only

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

NOTE: Do not allow material to remain in hoses, gun or spray equipment. Thoroughly flush all equipment with HP7040. Do not thin.

Special Note: To ensure complete clarity of HP4000.00 Clear, this item should only be catalyzed with HP4000.90 Gloss Catalyst. The use of the Semi-Gloss Catalyst (HP4000.91) will give the clear a hazy look.

Where non-skid characteristics are desired, hand broadcast an appropriate anti-slip aggregate into the wet film then back-roll to encapsulate. HP6300 works well for opaque finishes although will be noticeable in clear finishes.

All epoxy coatings will chalk and fade if applied on exterior surfaces subjected to direct sunlight. All epoxies tend to yellow. Where colour and gloss retention is important, top-coating will be necessary. HP4000 will stain with prolonged exposure to some solvents and chemicals or in kennels if exposed to animal waste. This staining will not affect the durability or protective qualities of the coating. Do not apply if material, substrate or ambient temperature is below 7.2 °C (45 °F). Relative humidity should be below 90%. 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 HP7040.

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

TEST DATA	
Flexibility (ASTM D1737)	Pass 3/16” Mandrel
Sag Resistance (w/-90B)	Passes 8+ mils
Sag Resistance (w/-91B)	Passes 8+ mils
Sag Resistance (w/92B)	Passes 16+ mils
Steam Resistance	Yes
Dry Heat Resistance	148.8 °C (300 °F)
Wet Heat Resistance	65.5 °C (150 °F)
Adhesion (ASTM D3359)	Pass 5B
Humidity (ASTM D4585) (2 coats / 1000 Hours)	Face Corrosion: None Face Blistering: None Rating: 10, Rust: 0.00%
Salt Spray (ASTM B117) (2 coats / 1000 Hours)	Face Corrosion: None Face Blistering: None Rating: 10, Rust: 0.00%

Environmental Health & Safety Information

Harmful if swallowed

Harmful if inhaled

Causes skin irritation

Causes serious eye damage

May cause allergy or asthma symptoms or breathing difficulties if inhaled

May cause an allergic skin reaction

May cause genetic defects

Suspected of causing cancer

Suspected of damaging fertility or the unborn child

May cause respiratory irritation

May cause drowsiness or dizziness

Causes damage to organs through prolonged or repeated exposure

May be fatal if swallowed and enters airways

Flammable liquid and vapor

Prevention: Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use personal protective equipment as required. Wash face, hands and any exposed skin thoroughly after handling. Do not eat, drink or smoke when using this product. Use only outdoors or in a well-ventilated area. In case of inadequate ventilation wear respiratory protection. Contaminated work clothing should not be allowed out of the workplace. Wear protective gloves. Do not breathe dust/fume/gas/mist/vapors/spray. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Keep container tightly closed. Ground and bond container and receiving equipment. Use only non-sparking tools. Take action to prevent static discharges. Keep cool.

Response: IF exposed or concerned: Get medical advice/attention. If skin irritation or rash occurs: Get medical advice/attention. Wash contaminated clothing before reuse. IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. IF INHALED: Remove person to fresh air and keep comfortable for breathing. IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. Do NOT induce vomiting. In case of fire: Use CO₂, dry chemical, or foam for extinction.

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.**