

HP HIGH PERFORMANCE

HP4000

Polyamide Epoxy

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

Clean Up

VOC (Catalyzed)

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 color of the mixed kit, while the catalyst determines the gloss and film build level.

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

Technical Data (Gloss)

Resin		Polyamide epoxy		
Pigment		Titanium Dioxide		
Volume Solids	62 ± 2% (Gloss, Semi-Gloss)		
(mixed)	66	± 2% (High-Build)		
Spread Rate	400 - 500 Sq. Ft. (Gloss, Semi-Gloss)		
Per Gallon	200 – 250 5	Sq. Ft. (High-Build)		
Recommended	Wet:	3.6 - 4.6 mils		
Film Thickness	Dry:	1.9 – 2.4 mils		
Depending on surface texture and porosity.				

To Touch: 6 hours Dry Time @ 77 °F 10 - 12 hours To Recoat: (25 °C) @ 50% RH 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: 45 °F **During Application** Max: 100 °F 80 ± 8 KU Viscosity 80 °F (TT-P-141, Method 4293) Flash Point Gloss: 85+@ 60° Sheen / Gloss Semi-Gloss: 40 - 50 @ 60° High-Build: 65 - 75 @ 60°

Thinner Do Not Thin Mixed Ratio (by volume) 1:1 Induction time @ 77 °F (25 °C) 30 minutes Pot Life @ 77 °F (25 °C) 7 hours Weight Per Gallon (mixed) 10.7 - 11.5 lbs. Min: 45 °F **Storage Temperature**

Max:

324 g/L

HP7040

95 °F

2.7 lbs./gal

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 contacting the National Lead Informational Hotline at 1-800-424-LEAD or log on to www.epa.gov/lead.

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

FEDERAL	✓
отс	✓
OTC II	×
CARB02	✓
CARB07	✓
CARB19	×
UTAH	×
AZMC	✓
SCAQMD	×
	82 (when used with anti-slip)
MPI	108 & 177 (Semi-Gloss Catalyst)
	98 (High-Build Catalyst)

Suitable for Use in USDA Inspected Facilities

Mixing Instructions

This is a two-component product and is preproportioned 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 mixing pail, 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 77 °F (25 °C) prior to application.

Pot Life:

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

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 color 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.com

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. $\frac{1}{4}$ " – $\frac{1}{2}$ " 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 color 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 45 °F (7.2 °C). 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 Mineral Spirits or HP7010 immediately after use.

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	300 °F (148.8 °C)			
Wet Heat Resistance	150 °F (65.5 °C)			
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%			

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.

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 IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.

Continue rinsing. Immediately call a POISON CENTER or doctor/physician. If skin irritation or rash occurs: Get medical advice/attention. IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Wash contaminated clothing before reuse. IF INHALED: Remove person to fresh air and keep comfortable for breathing. If experiencing respiratory symptoms: Call a POISON CENTER or doctor. IF

SWALLOWED: Immediately call a POISON CENTER or doctor/physician. Do NOT induce vomiting. Rinse mouth. 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.

IMPORTANT: Designed to be mixed with other components. Mixture will have hazards of all components. Before opening packages, read all warning labels. Follow all precautions.

WARNING Cancer and Reproductive Harm— www.P65Warnings.ca.gov
Refer to the product label & Safety Data Sheet for product specific information.

IN CASE OF SPILL – Absorb with inert material and dispose of as specified under "Clean Up".

FOR PROFESSIONAL USE ONLY
KEEP OUT OF REACH OF CHILDREN

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