



HP | HIGH PERFORMANCE

CHP4000

Polyamide Epoxy

General Description

CHP4000 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 color of the mixed kit, while the catalyst determines the gloss and film build level.

Table with 2 columns: Property (Colors, Bases, Colorant System, Catalyst) and Value (Clear (00), Safety Yellow (10), Silver Gray (70), Battleship Gray (75), Black (80), 7B, 8B, 9B, Industrial, 90 (Gloss), 91 (Semi-Gloss), 92 (High-Build))

Technical Data (Gloss)

Table with 2 columns: Property (Resin, Volume Solids, Spread Rate, Per Gallon, Recommended Film Thickness) and Value (Polyamide epoxy, 62 ± 2% (Gloss, Semi-Gloss), 66 ± 2% (High-Build), 400 - 500 Sq. Ft. (Gloss, Semi-Gloss), 200 - 250 Sq. Ft. (High-Build), Wet: Gloss/Semi-Gloss 3.2 - 4.0 mils, High Build 6.4 - 8.0 mils, Dry: Gloss/Semi-Gloss 2.0 - 2.5 mils, High Build 4.2 - 5.3 mils)

Depending on surface texture and porosity.

Table with 2 columns: Property (Dry Time @ 77 °F, To Recoat, Foot Traffic) and Value (To Touch: 6 hours, 10 - 12 hours, 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.

Table with 2 columns: Property (Surface Temperature, Viscosity, Flash Point) and Value (Min: 45 °F, Max: 100 °F, 80 ± 8 KU, 80 °F (TT-P-141, Method 4293))

Table with 2 columns: Property (Sheen / Gloss) and Value (Semi-Gloss: 40 - 50 @ 60°, High-Build: 65 - 75 @ 60°)

Table with 2 columns: Property (Clean Up, Thinner, Mixed Ratio, Induction time, Pot Life, Weight Per Gallon, Storage Temperature, VOC) and Value (HP7040, Do Not Thin, 1 : 1, 30 minutes, 7 hours, 9.9 - 12.6 lbs., Min: 45 °F, Max: 95 °F, 244 g/L, 2.0 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 CHP4000 can also be used.

Previously Painted Surfaces: CHP4000 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

Table with 2 columns: Certification (FEDERAL, OTC, OTC II, CARB02, CARB07, CARB19, UTAH, AZMC, SCAQMD, MPI) and Status (checkmarks, X, 82 (when used with anti-slip), 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 pre-proportioned for error free mixing. Mix "A" & "B" separately.

1.) Carefully empty the entire contents of CHP4000 Part B and the contents of CHP4000 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 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. 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 CHP4000.00 Clear, this item should only be catalyzed with CHP4000.90 Gloss Catalyst. The use of the Semi-Gloss Catalyst (CHP4000.91) 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. CHP4000 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 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	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%

## 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 CO<sub>2</sub>, 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](http://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.**