



POLYAMIDE EPOXY COATING GLOSS/SEMI-GLOSS V400

Features

- Highly cross-linked film for toughness and durability
- Resists many chemicals and solvents
- Suitable For Use In USDA Inspected Facilities
- Suitable for immersion
- Medium build epoxy

Recommended For

Corotech® V400 Polyamide Epoxy is a multi-use epoxy 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 converter determines the gloss and film build level.

General Description

Polyamide Epoxy Coating is a multi-use epoxy designed for tanks, machinery, floors, structural members, walls, boats, and other industrial and commercial substrates requiring a durable coating in severe environments. Floors: moderate- to heavy-duty performance in commercial/industrial environments exposed to heavy foot traffic and occasional traffic of lightweight rubber-tired vehicles, intermittent spillage of mild to heavier chemicals, occasional steam and chemical cleaning. Metal: excellent for use on ferrous metals, non-ferrous metals and galvanized metal. **This is a two component product that requires 1 part of the proper "A" component mixed with 1 part of "B" catalyst. The components are already premeasured to the proper mix ratio. No measuring required. Do not mix partial kits.**

Limitations

- This product will not cure at surface temperatures below 45 °F (7.2 °C).
- Do not paint if surface temperature is within 5 degrees of the dew point or if rain is expected within 12 hours.
- This product will amber and chalk if exposed to sunlight.

Product Information

Colors — Standard:

Clear (00), Safety Yellow (10), Safety Red (20), Silver Gray (70), Battleship Gray (75), Black (80), Tintable White (86)

— Tint Bases:

Tintable White (86), Deep Base (87), Clear Base (88)

Tint With Industrial Colorants Only

Tint Part "A" only. Check color accuracy by mixing equal portions of the "A" & "B" components and allow to dry.

Gloss (90), Semi-Gloss (91), High Build (92)

— Special Colors:

Contact your retailer.

Certification & Qualifications:

The products supported by this data sheet contain a maximum of 340 grams per liter VOC / VOS (2.83 lbs/gal.) excluding water & exempt solvents.

Suitable for Use in USDA Inspected Facilities

Any "A" with -90 meets performance specs of MIL-C-22750 & MIL-P-24441

Any "A" with -91 meets performance specs of MIL-C-4556 & MIL-C-22750 (Semi-Gloss)

Master Painters Institute MPI # 177 (Semi-Gloss Catalyst)

Master Painters Institute MPI # 82 when used with an anti-slip additive

Master Painters Institute MPI # 98 (High Build Catalyst)

Master Painters Institute MPI # 108 (Semi-Gloss Catalyst)

VOC REGION	COMPLIANT
FEDERAL	YES
OTC	YES
OTCII	NO
CARB	NO
CARB07	NO
UTAH	NO
AZMC	YES
SCAQMD	NO

Technical Assistance:

Available through your local authorized independent Benjamin Moore retailer. For the location of the retailer nearest you, call 1-866-708-9180 or visit www.benjaminmoore.com

Technical Data

Generic Type		Polyamide Epoxy
Pigment Type		Titanium Dioxide
Volume Solids (mixed as recommended)		62 ± 1% (Gloss/Semi-Gloss) 66 ± 1% (High Build)
Coverage per Gallon at Recommended Film Thickness		Gloss/Semi-Gloss 400 – 500 Sq. Ft. High Build 200 – 250 Sq. Ft.
Recommended Film Thickness	– 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.		
Dry Time @ 77 °F (25 °C) @ 50% RH	– To Touch	6 Hours
	– To Recoat	10 - 12 Hours / Max: 3 Days
	– Foot Traffic	24 - 48 hours
	– Full Cure	7 Days

SERVICE TIME: Light Industrial Use: 72 Hours. **Moderate to Heavy Industrial Use:** 7 days **Full Cure:** Approximately 7 Days
*Recoat after 72 hours: Abrade the surface to ensure proper inter-coat adhesion. High humidity and cool temperatures will result in longer dry, recoat and cure times.

Dries By	Chemical Cure
Dry Heat Resistance	300 °F
Viscosity @ 77°F (mixed as recommended)	Gloss 75 – 80 KU
	Semi-Gloss 80 – 85 KU
	High Build 85 - 90 KU
Flash Point	Mixed: 80 °F (TT-P-141, Method 4293)
Gloss/Sheen	Gloss (85+ @ 60°)
	Semi-Gloss (40 - 50 @ 60°)
	High Build (65 – 75 @ 60°)
Surface Temperature at application	– Min. 45 °F
	– Max. 100 °F
Thin With	Do Not Thin
Clean Up Thinner	Corotech® V704 Epoxy Reducer
Mixed Ratio (by volume)	1 : 1
Induction time @ 77 °F	30 Minutes
Pot Life @ 77 °F	7 Hours
Weight Per Gallon (mixed as recommended)	10.7 – 11.5 lbs
Storage Temperature	– Min. 45 °F
	– Max. 95 °F

Volatile Organic Compounds (VOC)

326 Grams / Liter* 2.72 LBS / Gallon*

* Catalyzed

◊ Reported values are for Tintable White. Contact retailer for values of other bases or colors.

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Surface Preparation

All surfaces must be sound, dry, clean and free of oil, grease, dirt, mildew, mill scale, form release agents, curing compounds, loose and flaking paint and other surface contaminants.

NEW SURFACES: Concrete and Masonry: 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. Prime concrete with one coat of V155 100% Solids Epoxy Pre-Primer, V156 Moisture Tolerant Epoxy may also be used.

Steel and Ferrous Metals: All direct to metal coatings provide maximum performance over near white metal blasted surfaces (SSPC-SP 10). There are however, situations and cost considerations that may prevent this type of surface preparation from being done. Corotech® Industrial Coatings have been designed to provide protection over less than ideal surfaces. The recommended standard is a commercial blast (SSPC-SP 6). The steel profile after the blast should be 1-2 mils and be jagged in nature. Surfaces must be free of grit dust. The coating should be applied as soon as possible after the blast in order to prevent flash rusting or surface contamination. Hand tool cleaning (SSPC-SP 2) or power tool cleaning (SSPC-SP 3) can be used if blasting is not possible. In areas where adequate surface preparation is not possible the use of V155 100% Solids Epoxy Pre-Primer is recommended. In highly corrosive areas where additional rust inhibitive qualities are required, prime with one coat of V170 Organic Zinc Rich Primer and an acrylic barrier coat prior to applying epoxy coatings.

Galvanized and Non-ferrous Metals: Solvent clean all surfaces. Apply one coat of Corotech® V110 Acrylic Metal Primer or V175 Waterborne Bonding Primer.

Weathered Galvanized: Clean Thoroughly - Apply one coat V155 100% Solid Epoxy Pre-Primer

Previously Painted Surfaces: Can be applied over most old industrial finishes in good condition. Test patches are recommended to check for wrinkling or lifting of existing coatings. V155 100% Solids Epoxy Pre-Primer may be used as a barrier coat over all existing coatings.

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.

Application

Mixing Instructions:

This is a two component kit and is pre-proportioned for error free mixing. DO NOT vary from these instructions. Mix "A" & "B" separately before combining.

- Carefully combine the entire contents of V400-90, V400-91 or V400-92 activator with the V400-Part A component; scrape the sides of the pail of Part B to make sure all liquid has been added.
- Using a jiffy 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.
- Care must be taken to assure both components are completely mixed in order to avoid partially cured spots in the coating.
- Allow to induct for 30 minutes.

It is extremely important to remember that Epoxy Coatings have a limited pot life; therefore, it is wise to make sure sufficient manpower and correct application tools are in order prior to starting the mixing sequence. Estimated pot life is: 14 Hrs. @ 50 °F (10 °C) / 7 Hrs. @ 77 °F (25 °C) / 3 Hrs. @ 100°F (38 °C) Do not thin this product – it is ready to use once both components are thoroughly mixed.

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): DeVilbiss MBC or JGA gun, with 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 recommended thinner. No reduction is necessary.

Special Note: To ensure complete clarity of the V400-00 Clear, this item should only be catalyzed with the V400-90 Gloss Converter. The use of the Semi-Gloss Converter will give the V400-00 Clear a hazy look. All painted surfaces may be slippery, especially when wet.

Where non-skid characteristics are desired, hand broadcast an appropriate anti-slip aggregate into the wet film then back-roll to encapsulate. Benjamin Moore's Corotech Anti-Slip Aggregate V630 works well for non-clear coats.

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. 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.

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
Wet Heat Resistance	150 °F
Adhesion (ASTM D3359)	Pass 5B
Humidity (ASTM D4585) (2 Coats over V150 – 1000 Hours)	Face Corrosion: None Face Blistering: None Rating: 10, Rust: 0.00%
Salt Spray (ASTM B117) (2 Coats over V150 (1000 Hours)	Face Corrosion: None Face Blistering: None Rating: 10, Rust: 0.00%

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

SYSTEMS RECOMMENDATIONS	
PRIMERS	
Ferrous Metal (Blasted)	V110 Line, V150 Line, V155-00 or V160 Line
Ferrous Metal (Marginally Prepared)	V155-00 or V160 Line
Non-Ferrous Metal	V110 Line or V175-00
Concrete	Use Direct or use V110 Line, V114-01, or V155-00, V160 Line, V163-01, or V400-00 Clear
Aged coatings	Use Direct (Check Compatibility) or use V110 Line as a barrier Coat
COMPATIBLE INTERMEDIATES	
V160 Line, V163-01	
For substrates other than listed above, or for usage in severe environmental conditions, please consult with Corotech® Technical Service.	

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Clean Up

Clean up with Corotech® V704 Epoxy Reducer.

Environmental Health & Safety Information

Danger!

Harmful if inhaled

Causes skin irritation

Causes serious eye damage

May cause an allergic skin reaction

May cause cancer

May damage fertility or the unborn child

May cause respiratory irritation

Causes damage to organs

May cause 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. Use only outdoors or in a well-ventilated area. Wash face, hands and any exposed skin thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace. Wear protective gloves/protective clothing/eye protection/face protection. Do not breathe dust /fume /mist /vapors /spray. Do not eat, drink or smoke when using this product. Keep away from heat /sparks /open flames /hot surfaces, no smoking. Keep container tightly closed. Ground /bond container and receiving equipment. Use explosion-proof electrical /ventilating /lighting /equipment. Use only non-sparking tools. Take precautionary measures against static discharge.

Response: If exposed call a POISON CENTER or physician. 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 physician. If skin irritation or rash occurs get medical attention. If on skin (or hair) take off immediately all contaminated clothing. Rinse skin with water. Wash contaminated clothing before reuse. If inhaled remove victim to fresh air and keep at rest in a position comfortable for breathing. If swallowed immediately call a POISON CENTER or 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. Keep cool.

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

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.

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



WARNING Cancer and Reproductive Harm—
www.P65warnings.ca.gov

This document represents hazards of the product referenced above. Refer to the individual Safety Data Sheet for hazards of the specific product you will be using.

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

NOT FOR RESIDENTIAL USE

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