**General Description**

Corotech® V440 Waterborne Amine Epoxy is formulated to provide superior chemical, abrasion and impact resistance when compared to most conventional waterborne epoxies. The highly cross-linked film provides years of service in industrial and commercial applications and is particularly suited for use on concrete floors subjected to severe service conditions. The waterborne formulation produces lower odor than solvent based epoxies, so this product may be applied in occupied areas, and is more user friendly than solvent based polyamide epoxies. Additionally, this product may be applied to most generic coating types without the fear of lifting or wrinkling. This is a two component product that requires 3 parts of the proper “A” or Base Component (underfilled gallon) mixed with 1 part of the proper “B” or Converter Component (quart). Do Not Mix Partial Kits.

**Limitations**

- 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.

**Technical Data**

<table>
<thead>
<tr>
<th>White</th>
<th>White</th>
</tr>
</thead>
<tbody>
<tr>
<td>Generic Type</td>
<td>Amine Adduct Epoxy</td>
</tr>
<tr>
<td>Pigment Type</td>
<td>Titanium Dioxide</td>
</tr>
<tr>
<td>Volume Solids (mixed as recommended)</td>
<td>42 ± 2.0%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Coverage per Gallon at Recommended Film Thickness</th>
<th>350 - 450 Sq. Ft.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recommended Film Thickness</td>
<td>3.5 - 4.5 mils</td>
</tr>
<tr>
<td>Dry Time @ 77°F</td>
<td>2 Hours</td>
</tr>
<tr>
<td>Wet</td>
<td>Touch</td>
</tr>
<tr>
<td>Dry</td>
<td>Recoat</td>
</tr>
<tr>
<td>Full Cure</td>
<td>3 - 5 Days</td>
</tr>
</tbody>
</table>

*If top coat is not applied within 72 hours abrade the surface to ensure proper inter-coat adhesion. Maximum abrasion and chemical resistance are achieved at full cure; care should be taken to prevent damage to the coating during the curing process. High humidity and cool temperatures will result in longer dry, recoat and cure times.

**Certification:**

The products supported by this data sheet contain a maximum of 250 grams per liter VOC / VOS (2.09 lbs/gal.) excluding water & exempt solvents.

This product is compliant under the Ozone Transport Commission regulations as an Industrial Maintenance coating.

This product qualifies for LEED (Leadership in Energy and Environmental Design) projects when used over metal substrates.

Suitable for use in USDA Inspected Facilities.

**Recommended For**

Properly Prepared and/or Primed Steel, Iron, Concrete, Non-Ferrous Metals, Wood & Drywall. Corotech® V440 Waterborne Amine Epoxy is designed for use in food and beverage processing, chemical processing, transportation, warehouses, industrial refurbishment, healthcare, schools, large commercial applications and is particularly suited for use on concrete floors subjected to severe service conditions. The waterborne formulation produces lower odor than solvent based epoxies, so this product may be applied in occupied areas, and is more user friendly than solvent based polyamide epoxies. Additionally, this product may be applied to most generic coating types without the fear of lifting or wrinkling.

**Features**

- Waterborne Amine Epoxy
- Soap & Water Clean-Up
- Scrub Resistance
- Excellent Abrasion Scratch, and Impact Resistance
- Suitable For Use In USDA Inspected Facilities
- Resistant to Most Mild Chemicals

**Recommended For**

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**Technical Assistance:**

Available through your local authorized independent dealer. For the location of the dealer nearest you, call 1-800-225-5554, or visit www.corotechcoatings.com

**Product Information**

**Colors — Standard:**

Clear, White, Terra Cotta, Sandstone, Silver Gray, Battleship Gray

Do not tint Clear V440.00.

**— Tint Bases:**

V440.85 Pastel Base
V440.86 Tint Base
V440.87 Deep Base
V440.88 Clear Base

**TINT ONLY THE "A" COMPONENT**

Use 888 Universal Colorants Only

NOTE: Do Not Tint with 896 Series Industrial Waterborne colorants.

**— Special Colors:**

Contact your dealer.

**Limitations**

- 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.

**Dries By**

Chemical Cure

**Dry Heat Resistance**

250°F

**Viscosity @ 77°F (mixed as recommended)**

80 - 85 KU

**Flash Point**

200°F. (TT-P-141, Method 2429)

**Gloss**

85+ Units @ 60°

**Surface Temperature**

Min. @ application

Max. @ Full Cure

45°F

90°F

**Surface must be dry and at least 5° above the dew point**

**Thin With**

Do Not Thin

Clean Up Thinner

Warm Water

**Mixed Ratio (by volume)**

3 : 1

**Induction time @ 77°F (25° C)**

30 Minutes

**Pot Life @ 77°F (25° C)**

3 Hours

**Weight Per Gallon (mixed as recommended)**

11.1 lbs

**Storage**

Min. @ 45°F

Max. @ 95°F

**Volatile Organic Compounds (VOC)**

206 Grams / Liter* 1.72 LBS / Gallon*

* Catalyzed

◊ Reported values are for White. Contact dealer for values of other bases or colors.
Waterborne Amine Epoxy V440

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 latex. 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% Solid Epoxy Pre-Primer or V156 Moisture Tolerant Fast Set Epoxy Sealer. Bare concrete may require two coats of V440 to obtain desired finish.

STEEL AND FERROUS METALS: The use of Corotech® V110 Acrylic Metal Primer or V175 Waterborne Bonding Primer is recommended. All primers provide maximum performance over near white metal blasted surfaces (SSPCSP 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% Solid 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 prior to applying epoxy coatings.

GALVANIZED AND NON-FERROUS METALS: Solvent clean all surfaces [SSPC-SP-1]. Apply one coat of Corotech® V110 Acrylic Metal Primer or V175 Waterborne Bonding Primer.

DRYWALL: Insure drywall is dust & chalk free. Prime with an acrylic drywall primer.

PREVIOUSLY PAINTED SURFACES: Can be applied over most existing industrial finishes in good condition.

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 Information 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

1. Carefully empty the entire contents of V 440-90 activator into the can of V440-Part A component resin; scrape the sides of the can of V400-Part B material.

2. 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 mix during the mixing process.

3. Care must be taken to assure both components are completely mixed in order to avoid partially cured spots in the coating.

4. 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: 2 to 4 hours @ 77°F (25°C)

Application:

Airless Spray (Preferred Method): Tip range between .015 and .019. Total fluid output pressure at tip should not be less than 2100 psi.

Air Spray (Pressure Pot): DeVilbis MBC or JGA gun, with 704 or 765 air cap and Fluid Tip E.

Brush: Synthetic Bristle only. Roller: Industrial Cover with Phenolic core. 3/8” – 1/2” nap.

NOTE: Do not allow material to remain in hoses, gun or spray equipment. Thoroughly flush all equipment with warm water. No reduction is necessary.

Drying Time: Dries tack free in 2 hours. Can be recoated in 8 hours. This dry time is based on 70°F and 50% relative humidity. Lower temperature and/or higher humidity will result in longer dry times.

NOTE: If more than 48 hours (@77°F) elapses between coats, sand the film to provide sufficient profile.

Additional Notes: All high gloss surfaces can be slippery. Where non-skid properties are required a non-skid additive should be used. 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. Will not cure at surface temperatures below 50°F.

<table>
<thead>
<tr>
<th>TEST DATA</th>
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</thead>
<tbody>
<tr>
<td>Flexibility (ASTM D1737)</td>
</tr>
<tr>
<td>Sag Resistance</td>
</tr>
<tr>
<td>Steam Resistance</td>
</tr>
<tr>
<td>Dry Heat Resistance</td>
</tr>
<tr>
<td>Wet Heat Resistance</td>
</tr>
<tr>
<td>Adhesion (ASTM D3359)</td>
</tr>
<tr>
<td>Pencil Hardness (1 week cure)</td>
</tr>
<tr>
<td>Direct Impact / Reverse Impact</td>
</tr>
<tr>
<td>Accelerated Weathering (ASTM G53)</td>
</tr>
<tr>
<td>Abrasion Resistance (ASTM D4060) CS-10 Wheel, 1000g load</td>
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<tr>
<td>Humidity (ASTM D4555) (2 Coats over V150 – 1000 Hours)</td>
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<tr>
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<td></td>
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<tr>
<td>Salt Spray (ASTM B117) (2 Coats over V110 (1000 Hours)</td>
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</tbody>
</table>

CHEMICAL RESISTANCE GUIDE (NON-IMMERSION)

<table>
<thead>
<tr>
<th>Chemicals</th>
<th>Rating</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fresh Water</td>
<td>Excellent</td>
<td></td>
</tr>
<tr>
<td>Salt Water</td>
<td>Excellent</td>
<td></td>
</tr>
<tr>
<td>Waste Water</td>
<td>Excellent</td>
<td></td>
</tr>
<tr>
<td>Acids</td>
<td>Good-Excellent</td>
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<td>Alkalis</td>
<td>Good</td>
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<tr>
<td>Solvents</td>
<td>Excellent</td>
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<tr>
<td>Fuel</td>
<td>Good</td>
<td></td>
</tr>
<tr>
<td>Acidic Salt Solutions</td>
<td>Excellent</td>
<td></td>
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<tr>
<td>Alkaline Salt Solutions</td>
<td>Good</td>
<td></td>
</tr>
<tr>
<td>Neutral Salt Solutions</td>
<td>Excellent</td>
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</tr>
</tbody>
</table>

SYSTEMS RECOMMENDATIONS

<table>
<thead>
<tr>
<th>PRIMERS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ferrous Metal (Blasted)</td>
</tr>
<tr>
<td>Ferrous Metal (Marginally Prepared)</td>
</tr>
<tr>
<td>Non-Ferrous Metal</td>
</tr>
<tr>
<td>Concrete</td>
</tr>
<tr>
<td>Drywall</td>
</tr>
<tr>
<td>Aged coatings</td>
</tr>
</tbody>
</table>

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. |

Manufactured by Benjamin Moore & Co., 101 Paragon Drive, Montvale, NJ 07645 Tel: 800-225-5554 Fax: 888-248-2143 www.corotechcoatings.com M72 V440 EN 112014
Clean Up
Clean up with warm water.

Environmental Health & Safety Information

Danger!
Causes serious eye irritation
May cause cancer

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. Wear eye/face protection.

Response: If exposed or concerned, get medical attention. If in eyes, rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists, get medical attention.

1.43% of the mixture consists of ingredient(s) of unknown toxicity.

Storage: Store locked up.
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, a small amount of clean sand may be added. Stir often during application.

WARNING: This product contains a chemical known to the state of California to cause cancer and birth defects, or other reproductive harm.

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
KEEP FROM FREEZING
FOR PROFESSIONAL USE ONLY

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