



DIAMITE EXTREME

Novolac Epoxy Coating for Severe Corrosive Chemical Resistance

1. Product Description

a. **Basic Use:** Diamite Extreme is a 95 percent solids, high performance proprietary novolac epoxy compound intended for use as a chemical-resistant and containment coating to protect concrete, brick or block walls and floors. Diamite Extreme is resistant to most acids, caustics, solvents and other harsh chemicals. Diamite Extreme is applied to walls and floors of spill, splash and chemical leakage containment areas.

b. **Features/Benefits:**

- May be heat cured at 150°F (65°C) to withstand severe chemical attack from compounds like methylene chloride.
- Contains only 5 percent solvent permitting most interior applications with virtually no risk of fire hazard or toxic odors.
- Unique novolac epoxy compound provides excellent resistance to virtually all caustics, acids, and most solvents.
- Floors may be made more durable and slip-resistant by simply adding silica quartz to freshly applied coating.
- May be used outside when top-coated with Diathane.
- Easily applied with commonly found tools and equipment.
- Produces a seamless floor and wall coating system preventing infiltration of dangerous chemicals into the environment.

c. **Typical Facilities:** Tank farms, caustic storage, chemical troughs, pharmaceutical manufacturing plants, automotive/truck plants, chemical processing plants, sewage and water treatment plants, paint or solvent storage areas, metal priming/preparation plants and food processing.

d. **Limitations:** Diamite Extreme should not be applied when ambient and substrate temperatures are below 50°F (10°C).

e. **Composition:** Diamite Extreme is a two component system consisting of 95% solids proprietary novolac epoxy system.

f. **Color/Appearance:** Diamite Extreme is available in Light Gray, Medium Gray and Tile Red.

2. Packaging

Diamite Extreme is supplied in units, each containing the proper proportions of liquid components. Standard packaging information is shown below:

<i>Unit Size</i>	<i>Binder</i>	<i>Activator</i>	<i>Shipping Wt.</i>
<i>1.25 gal. (4.75 liter)</i>	<i>1 gal. (3.8 liter)</i>	<i>.025 gal. (.95 liter)</i>	<i>12 lbs. (5.4 Kg)</i>
<i>5 gal. (18.9 liter)</i>	<i>4 gal. (15.1 liter)</i>	<i>1 gal. (3.8 liter)</i>	<i>50 lbs. (22.7 Kg)</i>

3. Estimating/Coverage

The recommended coverage rate for Diamite Extreme is 100 sq. ft./gal. (2.45 sq. m/liter). One coat applied at 100 sq. ft./gal. (2.45 sq. m/liter) will produce a 16 mil (0.41 mm) dry film thickness.

4. Technical Data

Resistance to Solvents and Chemicals	
<i>-ACIDS-</i>	<i>-SOLVENTS-</i>
<i>Acetic 5%-----L</i>	<i>Acetone (heat cure) -----L</i>
<i>Acetic Glacial-----S</i>	<i>Cellosolve -----L</i>
<i>Chromic -----L</i>	<i>Ethyl Alcohol -----L</i>
<i>Citric 10% -----L</i>	<i>Methyl Ethyl Ketone -----L</i>
<i>Hydrochloric 10% -----L</i>	<i>Methylene Chloride (heat cure) L</i>
<i>Hydrochloric Conc. -----L</i>	<i>Mineral Spirits -----L</i>
<i>Hydrochloric Vapor-----L</i>	<i>Toluene -----L</i>
<i>Fatty Acid -----L</i>	<i>Xylene -----L</i>
<i>Lactic 10% -----L</i>	<i>-PETROLEUM DERIVATIVES-</i>
<i>Muriatic -----L</i>	<i>Aircraft Hydraulic Fluid -----L</i>
<i>Nitric Below 30% -----L</i>	<i>Brake Fluid -----L</i>
<i>Nitric Above 30% -----S</i>	<i>Fuel Oil -----L</i>
<i>Oleic -----L</i>	<i>Gasoline -----L</i>
<i>Phosphoric 50% -----L</i>	<i>Transmission Fluid -----L</i>
<i>Sulphuric 10% -----L</i>	<i>-MISCELLANEOUS-</i>
<i>Sulphuric 50% -----L</i>	<i>Animal Fats -----L</i>
<i>Sulphuric Conc. -----S</i>	<i>Calcium Chloride -----L</i>
<i>-ALKALIS-</i>	<i>Detergent Solutions -----L</i>
<i>Ammonium Hydroxide 20%--L</i>	<i>Formaldehyde 37%-----L</i>
<i>Calcium Hypochlorite -----L</i>	<i>Glycerine -----L</i>
<i>Caustic Cleaners -----L</i>	<i>Salt Solutions -----L</i>
<i>Sodium Hydroxide 20% -----L</i>	<i>Urine -----L</i>
<i>Sodium Hypochlorite 5% ----L</i>	<i>Vegetable Oil -----L</i>
	<i>Water -----L</i>

Key: L - Long Term Immersion, S - Short Term Exposure, NR-Not Recommended

5. Directions for Use

a. **Preparation:** The surface to be treated must be physically sound, thoroughly clean, free of oil, wax, curing compounds, loose paint, rust, scale, and completely dry. New concrete must be a minimum of 28 days old. Base concrete should be mechanically abraded by shotblasting or thoroughly etched with Bitesin. All acid-etched concrete surfaces must be rinsed and neutralized with potable water and allowed to completely dry.

b. **Priming:** All concrete to receive Diamite Extreme must be primed with Diamite Primer and allowed to dry.

c. **Mixing:** Thorough blending of all components is essential. Use a power drill with a Metco Jiffy mixing paddle. First, mix the binder separately; then, mix the activator separately. Next, add the mixed activator to the mixed binder and thoroughly blend for at least two minutes at revolution speeds that will not entrap air bubbles into the freshly mixed Diamite Extreme. Let stand for two minutes and blend again for two additional minutes.

d. **Application:** After the substrate has been primed, apply the mixed coating with a Diamite/Lexite Spreader Tool or by rolling with a short-nap or foam-rubber type paint roller. The rolling operation should proceed in one direction with slow, even strokes. Avoid short, quick, back-and-forth strokes such as are commonly employed in paint rolling techniques.

e. **Working Time/Pot Life:** All mixed coating should be applied within 10-20 minutes after mixing at 70°F (21°C).

f. **Cure Time:** Diamite Extreme becomes tack-free in approximately 6 hours and may be recoated at this time with Diamite Extreme if additional thickness or protection are required. The Diamite Extreme surface may be exposed to light traffic 24 hours after final application of the coating. Final cure time requires 3 to 5 days. All

cure times are based on ambient and substrate temperatures at 70°F (21°C).

i. **Heat Cure:** Diamite Extreme must be post cured at 150°F (65°C) for 12 hours with tarps or other heating methods to achieve full chemical resistance. Heat curing is only performed for attack from chemicals similar to methylene chloride and acetone. Most chemical attack applications do not require heat curing of Diamite Extreme.

i. **Clean-up:** Either DL Solvent or Waterzall Concentrate and warm water may be used for cleaning tools and equipment.

j. **Maintenance:** Diamite Extreme surfaces should be cleaned with a Waterzall Concentrate and water solution. Waterzall Concentrate may also be used at full strength to remove built-up deposits and stains. Diamite Extreme may be reapplied to itself.

6. Availability

Diamite Extreme is normally available immediately from your local distributor or it will be shipped within 5 working days upon receipt of order. Please contact your local Metalcrete representative or call Metalcrete directly for more information.

7. Warranty

Diamite Extreme is manufactured in strict accordance with the quality control standards of Metalcrete Industries. It is guaranteed to perform as indicated on this data sheet when applied by competent applicators.

8. Technical Service

Metalcrete technical service representatives are available to provide on-site assistance with a minimum three day notice.



Metalcrete Industries

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