



DIAMITE NEC

Novolac Epoxy Coating for Highly Corrosive Chemicals

1. Product Description

a. Basic Use: Diamite NEC is a 100% solids, high performance novolac epoxy compound intended for use as a chemical-resistant and containment coating to protect concrete, brick or block walls and floors. Diamite NEC is resistant to most acids, caustics, solvents and other harsh chemicals. Diamite NEC is applied to walls and floors of spill, splash and chemical leakage containment areas.

b. Features/Benefits:

- Proprietary novolac epoxy compound provides excellent resistance to most common acids.
- May be used outside when top-coated with Diathane.
- Easily applied with commonly found tools and equipment.
- Contains no volatile solvents permitting interior application with virtually no risk of fire hazard or toxic odors.
- USDA approved as an acceptable coating in processing and storage areas for meat and poultry food products.
- Floors may be made slip-resistant by simply adding silica quartz to freshly applied coating.
- Produces a seamless floor and wall coating system preventing infiltration of dangerous chemicals into environment.

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

d. Limitations: Diamite NEC should not be exposed to heavy wear or severe abrasion. Diamite NEC should not be applied when ambient and substrate temperatures are below 50°F (10°C).

e. Composition: Diamite NEC is a two component system consisting of 100% solids novolac epoxy.

f. Color/Appearance: Diamite NEC is available in limited standard colors.

2. Packaging

Diamite NEC 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>3 gal. (11.4 liter)</i>	<i>2 gal. (7.6 liter)</i>	<i>1 gal. (3.8 liter)</i>	<i>33 lbs. (15.0 Kg)</i>
<i>15 gal. (56.8 liter)</i>	<i>10 gal. (37.9 liter)</i>	<i>5 gal. (18.9 liter)</i>	<i>155 lbs. (70.3 Kg)</i>

3. Estimating/Coverage

The recommended coverage rate for Diamite NEC 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 50% -----A</i>	<i>Acetone -----S</i>
<i>Acetic Glacial-----S</i>	<i>Cellosolve -----S</i>
<i>Chromic -----A</i>	<i>Ethyl Alcohol -----A</i>
<i>Citric 10% -----A</i>	<i>Methyl Ethyl Ketone -----S</i>
<i>Hydrochloric 10% -----A</i>	<i>Mineral Spirits -----A</i>
<i>Hydrochloric Conc. -----S</i>	<i>Toluene -----A</i>
<i>Hydrochloric Vapor-----A</i>	<i>Xylene-----A</i>
<i>Fatty Acid-----A</i>	<i>-PETROLEUM DERIVATIVES-</i>
<i>Lactic 10% -----A</i>	<i>Aircraft Hydraulic Fluid -----A</i>
<i>Muriatic-----A</i>	<i>Brake Fluid -----A</i>
<i>Nitric Below 30% -----A</i>	<i>Fuel Oil-----A</i>
<i>Nitric Above 30% -----S</i>	<i>Gasoline -----A</i>
<i>Oleic-----A</i>	<i>Transmission Fluid -----A</i>
<i>Phosphoric 50%-----A</i>	<i>-MISCELLANEOUS-</i>
<i>Sulphuric 10% -----A</i>	<i>Animal Fats -----A</i>
<i>Sulphuric 50% -----A</i>	<i>Calcium Chloride -----A</i>
<i>Sulphuric Conc. -----S</i>	<i>Detergent Solutions -----A</i>
<i>-ALKALIS-</i>	<i>Formaldehyde 37%-----S</i>
<i>Ammonium Hydroxide 20%--A</i>	<i>Glycerine -----A</i>
<i>Calcium Hypochlorite -----A</i>	<i>Salt Solutions -----A</i>
<i>Caustic Cleaners -----A</i>	<i>Urine -----A</i>
<i>Sodium Hydroxide 20% -----A</i>	<i>Vegetable Oil -----A</i>
<i>Sodium Hypochlorite 5% ----A</i>	<i>Water -----A</i>

Key: A-Unaffected, 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 NEC 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 NEC. 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 45 minutes after mixing at 70°F (21°C).

f. Cure Time: Diamite NEC becomes tack-free in approximately 6 hours and may be recoated at this time with Diamite NEC or Diathane if additional thickness or

protection are required. The Diamite NEC 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).

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

i. Maintenance: Diamite NEC 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 NEC may be reapplied to itself.

6. Availability

Diamite NEC 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 NEC 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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