

## **CORCHEM<sup>®</sup> 229 UNDER WATER REPAIR COMPOUND**

<b>GENERIC</b>	Bisphenol-F difunctional novolac resins reacted with a unique modified amine adduct activator. The polymer structure is extremely tough with excellent adhesive properties and is reinforced with a combination of select pigments.
<b>DESCRIPTION</b>	High-build moisture tolerant epoxy novolac coating designed to cure under both fresh and salt water at ambient temperatures. May be applied under water by divers. Thick film heavy-duty lining provides exceptional sealing and corrosion protection to substrates and surfaces that will be exposed to severe water and physical environments. It is formulated to be extremely hard, impact and abrasion resistant. Conforms to Title 21 CFR 175.300 United States Food & Drug Administration and United States Department of Agriculture requirements for coatings in contact with food and drinking water.
<b>USE</b>	Protective barrier lining for concrete and steel that cannot be taken out of service long enough to coat in a dry environment. Suggested for splash zone areas, bridge abutments, pilings, piers, docks, well jackets, offshore drilling platforms, bulkheads, manholes, and other surfaces not possible to dry. Heavy-duty protective filler for voids and pits. Caulking and patching compound for waterproofing seams. The principal use is for problem areas that are wet or under water at time of application. Self-priming to steel, concrete, and most substrates and poorly prepared surfaces.
<b>SERVICE LIMITATIONS</b>	Temperature resistance up to 250°F depending upon the individual exposure. CONTACT CORCHEM <sup>®</sup> FOR SPECIFIC RECOMMENDATIONS BEFORE PROCEEDING for immersion service and exposure to corrosive chemicals.
<b>COLORS</b>	Gray (when mixed).
<b>FINISH</b>	Medium Gloss. Finish may vary due to texture and porosity of substrate.
<b>CAUTION!</b>	Chalking will occur with extended exposure to sunlight.
<b>VOLUME SOLIDS</b>	100%
<b>DRY COVERAGE</b>	Theoretical (no loss): 1600 sq. ft. per gallon for one mil (.001) or 231 cu. in. per gallon. When computing coverage allow for application loss and surface irregularities.
<b>DRY FILM THICKNESS</b>	As required. Multiple applications may be necessary to achieve the desired film thickness due to variations in design configurations, application equipment, temperature and other factors.
<b>COMPONENTS</b>	Two. By volume 1 to 1 [Base – White : Activator - Black].

<b>POT LIFE</b>	1/2 hour @ 70°F (one gallon mixed quantity). Pot life is <u>significantly shorter for higher temperatures or larger quantities</u> and longer for lower temperatures or smaller quantities.
<b>VOC CONTENT</b>	0 gms/l or 0.0 lbs/gal. Conforms to United States National Volatile Organic Emission Standards.
<b>THINNER</b>	None
<b>APPLICATION METHODS</b>	Putty Knife, Trowel, Squeegee, Glove, Mitt, and Brush.
<b>TEMPERATURES</b>	Apply at 35°F to 125°F (Air and Surfaces).
<b>CURING TIME</b>	Topcoat 2-24 Hours @ 70°F ( <u>refer to RECOAT AND REPAIR Section if coating reaches complete cure and hardness or if subjected to extended exposure to sunlight</u> ). Final cure is 24 hours @ 70°F. Curing times are <u>significantly shorter for higher temperatures or lower thickness and longer for lower temperatures or higher thickness</u> .
<b>PACKAGING</b>	2-gallon premeasured package kits.
<b>SHELF LIFE</b>	One year from shipment date protected between 40°F and 100°F.
<b>DOT/FLASH POINT</b>	Non-Flammable Liquid Classification.
<b>PERFORMANCE DATA</b>	Contact CORCHEM® for desired information.
<b>SURFACE PREPARATION</b>	Round off sharp edges and rough welds. Burrs and weld spatter should be completely removed. Surfaces should be abrasive blast cleaned both above and below water line. Surfaces should be clean, and free of any marine and algae growth, dirt, chalk, grease, oils, salts, and deleterious materials before application is performed.
<b>CARBON STEEL</b>	Immersion or Severe Exposures: SSPC-SP-10 (Near-White Blast Cleaning). Mild Exposures: SSPC-SP-6 (Commercial Blast Cleaning). Metal surfaces should have an anchor profile of two mils (.002) or more.
<b>NON-FERROUS METALS</b>	SSPC-SP-7 (Brush-Off Blast Cleaning). Coatings applied to these surfaces may not achieve the same degree of adhesion and toughness.
<b>WELDING</b>	Welding should precede coating. If already coated, follow instructions in U.S.A. Standard Z49.1 Safety in Welding and Cutting.
<b>CONCRETE AND MASONRY</b>	Concrete and masonry to cure at least 28 days. Clean and open surfaces by abrasive blast. All concrete laitance should be removed. "Blow" holes and cavities should be opened in order to properly fill and seal. Level protrusions and repair cavities, voids, and cracks. Apply CORCHEM® 229 UNDER WATER REPAIR COMPOUND and trowel smooth to ensure that all irregularities are filled and sealed. Clean silica sand may be added to fill large cavities and voids
<b>APPLICATION MIXING</b>	All equipment should be cleaned and flushed with CORCHEM® 4 Epoxy / Phenolic Thinner. Add Component A into Component B. Do not vary proportions. Power stir, until completely mixed and continue agitation during application. <u>Do not allow catalyzed material to stand in equipment after use!</u> Clean immediately with CORCHEM® 4 Epoxy / Phenolic Thinner or Methyl Ethyl Ketone (MEK).

- APPLY** Apply by putty knife, trowel or glove as required for proper application. Application below minimum or above maximum suggested dry film thickness ranges might adversely affect performance
- RECOAT AND REPAIR** If material has reached complete cure and hardness, or if subjected to extended exposure to sunlight, uniformly abrade the surface and feather the edges. The surface must be roughened sufficiently to provide a profile adequate to ensure a mechanical bond.
- INSPECTION** Check for desired dry film thickness and for pinholes, holidays, bare areas, etc. before placing in operating service.
- CLOTHING** Wear protective garments, shoes, goggles, and filter masks. Use protective barrier creams on exposed skin areas.
- CONFINED SPACES** Wear properly fitted appropriate NIOSH/MSHA approved fresh air respirator such as MSA or equal with 1/4" I.D. or larger air supply line connected directly to proper air source during and after application unless air monitoring demonstrates vapor/mist levels are within safe limits. Use suction type exhaust fans and blowers. **CAUTION!** Air circulation and exhausting of vapors must be continued until the coatings have fully cured.

#### SAFETY INFORMATION

**THIS PRODUCT CONTAINS EPOXY-NOVOLAC RESINS AND AMINE COMPOUNDS. DO NOT USE IF YOU HAVE HAD A REACTION TO THESE MATERIALS.**

**WARNING! VAPOR HARMFUL! CAUSES SEVERE EYE AND SKIN BURNS. MAY CAUSE SKIN SENSITIZATION OR OTHER ALLERGIC RESPONSES. HARMFUL OR FATAL IF SWALLOWED!**

Use only with adequate ventilation. Prevent breathing of vapor or spray mists. Wear a properly fitted appropriate respirator during application and until all vapors and spray mists are gone. Prevent contact with eyes and skin. Do not take internally. Keep closures tight and upright to prevent leakage. Keep container closed when not in use. In case of spillage, absorb and dispose of in accordance with local applicable regulations. **FIRST AID:** In case of skin contact, wash thoroughly with soap and water; for eyes, flush immediately with plenty of water for 15 minutes and call a physician. Remove and wash contaminated clothing before reuse. (Discard contaminated shoes). If inhaled, remove to fresh air. If breathing difficulty persists or occurs later, consult a physician and have label and MSDS information available. If swallowed, **CALL A PHYSICIAN IMMEDIATELY. DO NOT INDUCE VOMITING.**

**IN CONFINED SPACES AND TANKS OBEY SPECIAL SAFETY AND EQUIPMENT INSTRUCTIONS!**

**FOR INDUSTRIAL USE BY PROFESSIONAL APPLICATORS ONLY. NOT INTENDED FOR SALE TO THE GENERAL PUBLIC. This product should not be sold or delivered to any person under 18 years of age. KEEP OUT OF THE REACH OF CHILDREN! IF, FOR ANY REASON, ADDITIONAL PRODUCT AND SAFETY INFORMATION, INSTRUCTIONS OR EXPLANATIONS ARE NEEDED, CONTACT CORCHEM IMMEDIATELY!**

#### LIMITED WARRANTY

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The buyer's sole and exclusive remedy against CORCHEM® CORPORATION shall be for replacement of the product in the event, a defective condition of the product should be found to exist. NO OTHER REMEDY (INCLUDING, BUT NOT LIMITED TO, INCIDENTAL OR CONSEQUENTIAL DAMAGES FOR LOST PROFITS, LOST SALES, INJURY TO PERSON OR PROPERTY, OR ANY OTHER INCIDENTAL OR CONSEQUENTIAL LOSS) SHALL BE AVAILABLE TO THE BUYER. The sole purpose of this exclusive remedy shall be to provide buyer with replacement of the product if any defect in materials is found to exist. This exclusive remedy shall not be deemed to have failed its essential purpose so long as CORCHEM® CORPORATION is willing and able to replace the defective materials.

Technical and application information is provided for the purpose of establishing a general profile of the coating and proper coating application procedures. Test performance results were obtained in a controlled environment and CORCHEM® CORPORATION makes no claim these tests or any other tests, accurately represent all environments. As application, environmental and design factors can vary significantly, due care should be exercised in the selection and use of the coating.

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