



## PRODUCT INFORMATION

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**CE-274**  
**10/18 Supersedes 09/13**

### **TUFCHEM™ NOVOLAC SPRAYABLE EPOXY**

#### **DESCRIPTION**

TUFCHEM Novolac Sprayable Epoxy is a three component, 100% solids premium quality novolac epoxy lining compound that is applied by peristaltic type sprayable equipment to steel, brick and concrete structures to protect them from exposure to acids, caustic and many organic solvents. It is suitable for horizontal, vertical and overhead surfaces. Lining thickness is typically 1/8".

TUFCHEM Novolac Sprayable Epoxy does not require a primer for adhesion, but the use of PENNTROWEL Epoxy Primer before spraying will reduce pinholes in the finished lining caused by concrete out-gassing. Consult Corrosion Engineering specification CES-328 for complete usage/installation details.

#### **AREAS OF USE**

TUFCHEM Novolac Sprayable Epoxy protects concrete walls, floors and overhead surfaces in the following industries - chemical, metallurgical, metal finishing, waste treatment, power generation, pulp and paper, and textile dye stuffs.

TUFCHEM Novolac Sprayable Epoxy may be used to protect concrete secondary containment areas. The 'as sprayed' finish is slip resistant.

TUFCHEM Novolac Sprayable Epoxy is particularly suited to applications where there are many changes in direction and orientation, such as areas containing many pump pads and vertical surfaces to line along with flooring areas.

#### **OUTSTANDING FEATURES**

- TUFCHEM Novolac Sprayable Epoxy has been developed to offer superior resistance to 85% sulfuric acid, 37% hydrochloric acid, 20% concentrations of nitric acid, and organic solvents including toluene, butyl acetate and trichloroethylene.
- Unique technology allows for sprayable application without the need for a primer system thus reducing downtime.
- Novolac epoxy technology allows for greater service temperature resistance than conventional sprayable epoxies.
- Sprayable application eliminates troweling, and yields faster application.

**TYPICAL PHYSICAL PROPERTIES**

PROPERTIES	TUFCHEM Novolac Sprayable Epoxy
Density	118 lb/cu ft
Tensile Strength (ASTM C 307) 7 days @ 70°F	2,600 psi (17.9 MPa)
Compressive Strength (ASTM C 579)	6,000 psi (41.4 MPa) after 12 hours @ 70°F 11,000 psi (75.9 MPa) after 24 hours @ 70°F 14,000 psi (96.5 MPa) after 28 days @ 70°F
Absorption (ASTM C 413)	0.03%
Temperature Resistance	170°F (76°C) continuous exposure 190°F (88°C) intermittent exposure
Adhesion to Concrete (ASTM C 321)	Greater than strength of concrete
Linear Shrinkage (ASTM C 531) 14 days	0.05%
Flexural Strength (ASTM C 580) 28 days	4200 psi (28.9 MPa)
Modulus of Elasticity (ASTM C 580)	1.6 x 10 <sup>6</sup> psi (1.1 x 10 <sup>4</sup> MPa)
Coefficient of Expansion (ASTM C 531)	2.7 x 10 <sup>-5</sup> in/in/°F (4.8 x 10 <sup>-5</sup> /°C)
Working Time / Setting Time @ 70°F	30-45 minutes / 2½ - 3½ hours
Color	Grey

**ESTIMATING/PACKAGING THEORETICAL QUANTITIES – NO OVERAGE ALLOWANCE**

PRODUCT	CODE	PACKAGING	COVERAGE
Penntrowel Epoxy Primer	19676	4 x 1 gal units/case	640 sf/case @ 10 mils WFT
6710 Novolac Resin Grey	19592	40 lb (4 gal) pail resin	A 313 lb unit consists of 1 x 40 lb pail resin, 1 x 21 lb can hardener, and 6 x 42 lb bags filler, and will cover 254SF per unit @ 1/8" thickness.
6711 Hardener	19595	21 lb (2.5 gal) can	
Sprayable Epoxy Filler	19706	42 lb bag filler	

**SAFETY PRECAUTIONS / DISCLAIMER**

Mixes and applications of this product present a number of hazards. Read and follow the hazard information, precautions and first aid directions on the individual product labels and material safety data sheets before using. While all statements, technical information, and recommendations contained herein are based on information our company believes to be reliable, nothing contained herein shall constitute any warranty, express or implied, with respect to the products and/or services described herein and any such warranties are expressly disclaimed. We recommend that the prospective purchaser or user independently determine the suitability of our product(s) for their intended use. No statement, information or recommendation with respect to our products, whether contained herein or otherwise communicated, shall be legally binding upon us unless expressly set forth in a written agreement between us and the purchaser/user.

