

**CE-276**  
**12/13 Supersedes 10/00**

### ***PENNCHEM<sup>®</sup> NOVOLAC BRICK MORTAR***

#### **DESCRIPTION**

PENNCHEM Novolac Brick Mortar is a three (3) component chemical resistant brick mortar based on premium quality novolac epoxy resin technology. The product exhibits excellent bond strength, high chemical resistance, and reliable curing and handling characteristics. **Consult Corrosion Engineering specification [CES-358](#) for complete installation details.**

#### **AREAS OF USE**

PENNCHEM Novolac Brick Mortar is formulated to have a buttering consistency suitable for chemical resistant masonry construction such as brick flooring, trenches, and process vessel linings.

PENNCHEM Novolac Brick Mortar is ideally suited for bonding of dense masonry units such as granite and hi alumina shapes as used for hi impact and abrasion resistant applications such as pickle tank skid plates, or in any other applications where high bond strength and the chemical resistance of novolac resin chemistry is desired.

#### **OUTSTANDING FEATURES**

- Resistant to caustic conditions (Sodium Hydroxide up to 50%), strong acid environments (98% Sulfuric, 37% Hydrochloric Acid, 20% Nitric Acid), and chlorinated solvents.
- Excellent wetting properties provides high bond strength to chemically-resistant brick and tile.
- Low shrinkage.
- Stable in storage up to one year, when stored in a cool, dry location.
- Components are pre proportioned for easy mixing.

**TYPICAL PHYSICAL PROPERTIES**

PROPERTY	PENNCHEM Novolac Mortar
Color	Grey
Density (ASTM C138)	114 lb. /ft <sup>3</sup> (1826 kg/m <sup>3</sup> )
Compressive strength (ASTM C579)	24 hours >7,200 psi (50 MPa) 4 days >9,900 psi (68 MPa) 28 days >13,500 psi (93 MPa)
Tensile strength (ASTM C307)	7 days >2,600 psi (17.9 MPa)
Flexural strength (ASTM C453)	7 days >4,300 psi (30 MPa)
Bond strength to brick (Pull blocks)	Exceeds strength of brick
Water absorption (ASTM C413)	0.06%
Coefficient of thermal expansion	2.96 x 10 <sup>-5</sup> in/in/°F
Work life/set time @ 70 °F(ASTM C308)	25-35 min. / 3-4 hours
Maximum service temperature	Immersion 200-220°F Splash & spill 230-235°F Flue gas 275-300°F (excursions to 350°F)

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

PRODUCT	CODE	PACKAGING	MIX RATIO*
6710 Resin	19591	4 x 7.8 lb (0.8 gal) cans/case	3.5: 1.0: 0.51 (Powder:Resin: Hardener)  A 157 lb unit (1.38 cu ft) consists of 1 case resin, 1 case hardener, and 2 x 55 lb bags filler.
6711 Hardener	19593	4 x 4.0 lb (0.5 gal) cans/case	
PENNTROWEL® L/F Filler	19642	55 lb (25 kg) bag	

\*NOTE: Mix ratios vary due to ambient air temperatures and the handling preferences of individual bricklayers. The above information is provided as a general guide only. For usage rates for specific masonry units, consult Corrosion Engineering estimating guide CES-145.

**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.



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