

CE-231
12/13 Supersedes 03/99

VINYL ESTER MORTAR CARBON

DESCRIPTION

Vinyl Ester Mortar Carbon is a three component vinyl ester resin based carbon-filled mortar. Supplied as a Resin, Hardener and Filler, these components are mixed to obtain a buttering consistency suitable for application onto chemical resistant masonry. Vinyl Mortar Carbon exhibits a high degree of chemical resistance, excellent bond strength, and high compressive strength. **Consult Corrosion Engineering specification [CES-358](#) for complete installation details.**

AREAS OF USE

Vinyl Ester Mortar Carbon is ideal in many applications in chemical process plants. This mortar has excellent chemical resistance to oxidizing chemicals, mineral, and organic acids, alkaline solutions, some organic solvents, as well as fluoride containing chemicals. Examples include brick linings in pickle tanks used in the production of stainless steel, where a combination of nitric and hydrofluoric acid is used.

Vinyl Ester Mortar Carbon is also suitable for brick paver floor construction where the anticipated chemical service calls for a carbon filled vinyl ester mortar.

OUTSTANDING FEATURES

- Excellent properties - including high bond strength, tensile and compressive strengths, low absorption, shrinkage.
- Easy to mix and apply.
- Resistant to strong oxidizing agents, acid bleach conditions and fluoride attack.

TYPICAL PHYSICAL PROPERTIES

| PROPERTY | Vinyl Ester Mortar Carbon |
|---|---|
| Color | Black |
| Density (ASTM C138) | 96.9 lbs / cu ft. (1551 kg/m ³) |
| Work life / Set time @ 70°F (ASTM C308) | 80-90 minutes / 3 hours |
| Compressive strength (ASTM C579) | >10,600 psi (73 MPa) |
| Tensile strength (ASTM C307) | >1,450 psi (10.0 MPa) |
| Flexural strength (ASTM C580) | >2,950 psi (20 MPa) |
| Bond strength to brick (Pull Blocks) | >1,450 psi (10.0 MPa) |
| Water absorption (ASTM C413) | 0.2% |
| Maximum service temperature | 225°F (107°C) |

ESTIMATING/PACKAGING THEORETICAL QUANTITIES – NO OVERAGE ALLOWANCE

| PRODUCT | CODE | PACKAGING | MIX RATIO* |
|-------------------------------|-------------|--------------------------|--|
| P/T Vinyl Ester L/F Resin | 22183 | 36 lb (4 gal) pail | 2.0: 1.0: 0.019 * Powder: Resin: Hardener A 109 lb unit consists of 1x 36 lb pail resin, 1x 0.7 lb bottle hardener, and 1x 72 lb bag powder |
| CHP Hardener | 19552 | 0.7 lb (0.7 pint) bottle | |
| PENNTROWEL® L/F Filler Carbon | 29446 | 2 x 36 lb (16.3 kg) bags | |

*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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