

CE-231M
11/12 Supersedes 03/10

VINYL ESTER MORTAR CARBON

DESCRIPTION

Vinyl Ester Mortar Carbon is a three component high performance novolac 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 brick masonry.

Vinyl Ester 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. Applications include food processing plants where CIP chemistry requires a vinyl ester based mortar that is also black.

Vinyl Ester Mortar Carbon Grade is black and should not be used in pulp and paper applications where contact with white processed pulp cannot be tolerated. Consult Product Data Sheet (CE-250) Pennchem[®] Mortar for these applications.

OUTSTANDING FEATURES

- Excellent properties - including high bond strength, tensile and compressive strengths, low absorption, shrinkage.
- Easy to mix and apply. Good handling and workability.
- Chemical resistance in aggressive chemical service. Will resist strong oxidizing agents, acid bleach conditions and fluoride attack, and specialized acid combinations such as nitric/hydrofluoric acid.

TYPICAL PHYSICAL PROPERTIES

PROPERTY	VINYL ESTER MORTAR CARBON
Color	Black
Density (ASTM C-138)	1550 Kg/m3
Comprehensive Strength (ASTM C579)	81.2 MPa
Flexural Strength (ASTM C580)	22.7 MPa
Tensile Strength (ASTM C307)	11.0 MPa
Bond Strength to Pull Blocks (Brick)	10.9 MPa
Water Absorption	0.2%
Maximum Service Temperature	105°C continuous. May be higher in intermittent conditions depending on chemical exposure. Consult CED for specific applications.
Work Life	30-40 minutes
Set Time @ 21 °C (70°F)	3 hours, depending on catalyst addition level

ESTIMATING/PACKAGING THEORETICAL QUANTITIES – NO OVERAGE ALLOWANCE

PRODUCT	CODE	PACKAGING	COVERAGE
PT Novolac Resin Clear PT LF Filler Carbon	50125 50306	29 Kg Pail 25 Kg Bag	Mix components at a ratio of approx 2.25: 1.0: Powder: Resin. Note:* Individual bricklayer handling preferences may require slight variation in mix ratio.
CHP Hardener	50111	1 Kg Bottle	Use 16-24 gm per kg Resin or 1.5-2.25% Hardener to 1 part of Resin.

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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