ChemMasters

Installation Guidelines
Safe-Cure 1000 is a water based, white pigmented, wax emulsion concrete curing compound. It does not contain organic solvents and has 0 gm/L V.O.C. content.

1.0 General

1.1 Scope
This specification covers the performance characteristics and application procedures for providing a water based, white pigmented, wax emulsion concrete curing compound. It is V.O.C. compliant and has excellent moisture retention.

1.2 Material Description
The V.O.C. compliant, water based, white pigmented, wax emulsion concrete curing compound is an excellent curing compound for exterior concrete pavement, curbing, highways, bridge decks, parking lots and structures.

1.3 Typical Applications
A. Curing compound for exterior concrete pavement and curbing
B. Highways, bridge decks, parking lots and structures
C. Median barriers, curbing, walkways
D. Mass concrete, dams, mat foundations

1.4 Limitations
A. Safe-Cure 1000 is not recommended for interior use nor where appearance is important.
B. Do not apply if surface or ambient temperature is below 40° F./4° C. Product should be conditioned to 50° F./10° C. prior to application.
C. Do not use Safe-Cure 1000 as a tilt-up bond breaker.

1.5 Quality Assurance
The repair contractor shall have experience and proficiency specific to the repair type and shall be approved by the engineer and the material supplier. The material supplier shall provide job service as required to assure proper handling and installation of materials. The field representative shall instruct as needed to assure that handling, mixing, placing and finishing of materials are in accordance with specifications.

1.6 Delivery, Storage and Handling
The product shall be delivered in the original, unopened containers. It shall be labeled with the manufacturer’s name, product name and lot number. Materials

should be stored at the job site under dry conditions and at a temperature of 40°F (4°C) to 90°F (32°C).

1.7 Environmental Requirements
All materials used for the repair work shall be VOC compliant. The manufacturer shall supply the appropriate material safety data sheets upon request.

1.8 Site Conditions
Coverage is dependent upon surface texture and porosity

2.0 Materials

2.1 Approved Materials and Manufacturers

2.1.1 Product Standard
Safe-Cure 1000, as manufactured by ChemMasters, 300 Edwards Street, Madison, Ohio, 44057-3112, 1-800-486-7866, is considered to conform to the requirements of this specification and shall be the curing compound. Safe-Cure 1000 is a water based, white pigmented, wax emulsion concrete curing compound.

2.1.2 Substitutions
No submittals for substitutions will be accepted after the bid date. All submittals must be made in writing to the engineer with supporting technical data sheets and test data showing complete equivalent performance.

2.2 Packaging/Coverage/Estimating

2.2.1 Packaging
A. Safe-Cure 1000 is packaged in 5 U.S.gallon/18.9 liter pails, shipped 36 per pallet, shrink wrapped; 55 U.S.gallon/208 liter drums, shipped 4 per pallet. Center bung, agitator drums are available upon request.275 U.S.gallon/1040 liter returnable totes are available for larger projects.
B. Bulk delivery and returnable, jobsite storage tanks are available on a per project basis. Call for availability and pricing.

2.2.2 Coverage/Estimating:
A. Coverage is dependent on surface texture and porosity.
B. Curing 200 $Ft.^2$ /U.S. Gallon 5 M^2 /Liter

2.2.3 Storage:
A. Store in tightly closed containers in warm area, between 50°-100° F./10°-38°
B. Do not allow to freeze. Shelf life of properly stored material is one year from date of manufacture.

2.3 Engineering Properties
The following engineering properties shall be typical of material performance when tested under laboratory conditions at 72°F (22.2°C).

2.3.1 Plastic Properties

2.3.1.1 Solids: 23%

2.3.1.2 V.O.C. Content: 30 gm/L

2.3.1.3 Flash point: None

2.3.1.4 Weight per gallon 8.4 lbs., 1 Kg/L

2.4 Accessory Materials as manufactured by ChemMasters, 300 Edwards Street, Madison, Ohio, 44057-3112, 1-800-486-7866, is considered to conform to the requirements of this specification.

3.0 Execution

3.1 References
A. ASTM C-309, Types I or II, Class A and B, Standard Specification for Liquid Membrane-Forming Compounds for Curing Concrete
B. AASHTO M-148, Type 1 &1D,Class A & B
C. Complies with National Volatile Organic Compound Emission Standards for Architectural Coatings, Federal EPA Regulation 40 CFR Part 59
D. Army Corps of Engineers CRD-C-300 Available Upon Request
E. DOT Preapproved Material Available Upon Request for Most States
F. Refer to ChemMasters MSDS and Technical Data Sheets

3.2 Mixing:
A. Do not dilute. Stir or agitate Safe-Cure 1000 before using to disperse pigments and solids uniformly.
B. If using a pump to recirculate Safe-Cure 1000, it is recommended that an air diaphragm pump be used. If using a centrifugal pump, mix only long enough to make the Safe-Cure 1000 homogeneous.
C. Do not over mix.

3.3 Application:
A. Use a low pressure, airless sprayer equipped with a fan tip or a short napped roller to apply.
B. Hold sprayer tip 6-8"/15-20 cm from the surface of concrete.

C. Apply uniformly leaving no pinholes or gaps but avoid over applying or puddles.

3.4 Curing:
A. Apply Safe-Cure 1000 after all bleed water has dissipated and application will not mar surface.
B. DRYING TIME: Safe-Cure 1000 dries in 1-1.5 hours at 70° F./ 21° C. at 50% relative humidity. Cooler temperatures or high relative humidity may slow drying process.

3.5 Clean-up:
Clean tools and equipment used in applying Safe-Cure 1000 with warm water and detergent.