TNEMEC

PRODUCT DATA SHEET

CHEMBLOC® SERIES 252SC

PRODUCT PROFILE

GENERIC DESCRIPTION Novolac Vinyl Ester

COMMON USAGE A highly chemical resistant, multi-purpose resin for fiberglass reinforced mat (65 mils) or mortar/fiberglass reinforced mat (125 mils) secondary containment systems. Protects against harsh chemicals, thermal cycling, impact and abrasion.

COLORS 00GR Gray.

COATING SYSTEM

PRIMERS Series 208, 241, 251SC

FLEXIBLE BASECOAT 206SC (optional replacement for Series 252SC mortar/slurry basecoat). Reference the appropriate product data sheet for additional information.

TOPCOATS Series 120-5001 or 252SC **Note:** A saturant coat of 252SC liquids is required over fiberglass mat prior to application of topcoat. However, when Series 206SC flexible basecoat is used, then a 237SC or 239SC saturant coat is required.

SURFACE PREPARATION

Prepare surfaces by method suitable for exposure and service. Refer to the appropriate primer data sheet for specific recommendations.

CONCRETE Allow new poured-in-place concrete to cure a minimum of 28 days at 75°F (24°C). Verify concrete dryness in accordance with ASTM F 1869 "Standard Test Method for Measuring Moisture Vapor Emission Rate of Concrete Subfloor Using Anhydrous Calcium Chloride" (moisture vapor transmission should not exceed three pounds per 1,000 square feet in a 24 hour period), F 2170 "Standard Test Method for Determining Relative Humidity in Concrete using in situ Probes" (relative humidity should not exceed 80%), or D 4263 "Standard Test Method for Indicating Moisture in Concrete by the Plastic Sheet Method" (no moisture present). **Note:** The testing listed above cannot guarantee avoidance of future moisture related problems particularly with existing concrete slabs. This is especially true if the use of an under slab moisture vapor barrier cannot be confirmed or concrete contamination from oils, chemical spills, unreacted silicates, chlorides or Alkali Silica Reaction (ASR) is suspected.

Prepare concrete surfaces in accordance with NACE No. 6/SSPC-SP13 Joint Surface Preparation Standards and ICRI Technical Guidelines. Abrasive blast, shot-blast, water jet or mechanically abrade concrete surfaces to remove laitance, curing compounds, hardeners, sealers and other contaminants and to provide a minimum ICRI-CSP 3 or greater surface profile. Large cracks, voids and other surface imperfections should be filled with a recommended filler or surfacer. **Note:** For moisture content exceeding 3 lbs per 1,000 sq ft or relative humidity in excess of 80%, Series 208 or 241 may be substituted for the primer. Refer to the Series 208 or 241 product data sheet for more information.

ALL SURFACES Must be clean, dry and free of oil, grease and other contaminants.

TECHNICAL DATA

VOLUME SOLIDS Theoretical 89% (mixed). Series 252SC system contains a reactive monomer and some loss will occur during application and cure. Actual solids by volume will vary depending upon temperature and air movement. See Coverage Rates.

RECOMMENDED DFT
Resinous Basecoat: 6.0 to 12.0 mils (150-305 microns).
Mortar/Slurry Basecoat: 60 to 80 mils.
Saturant: 8.0 to 12.0 mils (200-305 microns).
Topcoat: 4.0 to 12.0 mils (100-305 microns).

CURING TIME

Temperature	To Topcoat	Place in Service	Full Cure
75°F (24°C)	6 to 24 hours	24 hours	72 hours

If more than 24 hours have elapsed between coats, the ChemBloc coated surface must be mechanically abraded before topcoating. **Note:** A 24 hour cure provides for traffic, secondary containment and certain mild chemical exposures. Contact your Tnemec representative or Tnemec Technical Services.

VOLATILE ORGANIC COMPOUNDS **Unthinned:** 0.2 lbs/gallon (23 grams/litre)

NUMBER OF COMPONENTS
Resin Containment Kit (RCK)–Two: Part A (base) and Part B (catalyst)
Mortar Containment Kit (MCK)–Three: Parts A (base), B (catalyst) and C (aggregate)

PACKAGING

	PART A	PART B	PART C	Yield (mixed)
RCK	1-3 gallon pail	1-4 oz. bottle	N/A	1.5 gallons
MCK	1-3 gallon pail	1-4 oz. bottle	1-30 lb bag	3 gallons

Note: The fiberglass reinforcing mat (S211-0215) is calculated per sq ft based on a 38 in x 500 ft (1,500 sq ft) roll and is available in full rolls only. (Sold separately for both kit sizes.)

NET WEIGHT PER GALLON 9.07 ± 0.25 lbs (4.12 ± .11 kg) (Parts A & B mixed)

STORAGE TEMPERATURE Minimum 35°F (2°C) Maximum 90°F (32°C)
Note: Material should be stored at temperatures between 70°F and 80°F (21°C and 27°C) for at least 48 hours prior to use.

TEMPERATURE RESISTANCE (Dry) Continuous 300°F (149°C) Intermittent 325°F (163°C)

SHELF LIFE Part A: 3 months at 35°F to 49°F (2°C to 9°C), 2 months at 50°F to 79°F (10°C to 26°C), 1 month at 80°F to 90°F (27°C to 32°C). Do not store at temperature below 35°F (2°C) or above 90°F (32°C).
DUE TO THE REACTIVE NATURE OF THE VINYL ESTER RESINS AND THE CORRESPONDING LIMITED SHELF LIFE, EXPEDITIOUS USE OF THIS PRODUCT IS SUGGESTED, SINCE JOBSITE STORAGE CONDITIONS ARE BEYOND TNEMEC'S CONTROL, THIS PRODUCT IS NON-RETURNABLE.
Part B: 12 months at recommended storage temperature.

FLASH POINT - SETA Part A: 74°F (23°C) Part B: 176°F (80°C)

HEALTH & SAFETY

This product contains organic peroxides and other chemical ingredients which are considered hazardous. Read container label warning and Material Safety Data Sheet for important health and safety information prior to the use of this product. **Keep out of the reach of children.**

APPLICATION

COVERAGE RATES

Before commencing, obtain and thoroughly read the Secondary Containment Installation and Application Guide.

	Dry Mils (Microns)	Wet Mils (Microns)	Sq Ft/Kit (m²/Kit)
Resinous Basecoat (RCK)	6.0-12.0 (150-305)	6.0-12.0 (150-305)	200-400 (18.6-37.1)
Mortar/Slurry Basecoat (MCK) †	60.0-80.0 (1525-2030)	60.0-80.0 (1525-2030)	60-80 (5.7-7.4)
Saturant Coat (RCK)	8.0-12.0 (205-305)	8.0-12.0 (205-305)	200-300 (18.6-27.9)
Topcoat (RCK)	4.0-12.0 (100-305)	4.0-12.0 (100-305)	200-600 (18.6-55.7)

† Coverage rates are based on the addition of the entire Part C filler. **Note:** Coverage rates will vary depending on vertical or horizontal applications. **Note:** Practical spreading rates are based on typical field applications. Actual spreading rates will vary with surface profile and surface irregularities. Application of coating below minimum or above maximum recommended dry film thicknesses may adversely affect coating performance.

MIXING

Use a variable speed drill with a box blade. Slowly mix Part A component, and while under agitation add Part B component and mix for a minimum of two minutes. Ensure that all Part B is blended with Part A by scraping the pail walls with a flexible spatula. **Note:** A large volume of material will set up quickly if not applied or reduced in volume. **Caution: Do not reseal mixed material. An explosion hazard may be created.**
Mortar/Slurry Basecoat: If a filled basecoat mortar is required, slowly add one 30 lb bag of Part C filler (S211-0214) to mixed liquids until all the Part C filler is thoroughly blended. The yield will be approximately 3 gallons. For filled basecoat slurry, the Part C filler can be reduced by approximately 6 lbs or 20%.

THINNING

Do not thin.

POT LIFE

30 to 35 minutes at 75°F (24°C).
At higher temperatures, pot life will decrease. In hot weather, material should be cooled to 65°F to 80°F (18°C to 27°C) prior to mixing and application to improve workability and avoid shortened pot life. In applications where temperatures are between 80°F-90°F (27°C-32°C) reduce the Part B catalyst by one half (4 oz.) to increase pot life.

APPLICATION

Fiberglass Mat Reinforced Application (RCK): Uniformly roller apply the mixed liquids (Parts A and B) at a rate of 6.0-12.0 mils or a rate of 200-400 sq ft/kit (18.6-37.1 m²).
Mortar/Fiberglass Mat Reinforced Application (MCK): Uniformly trowel apply the mixed Part A and Part B liquids and Part C filler (S211-0214) at a rate of approximately 60-80 mils or 60-80 sq ft/kit (5.7-7.4 m²), leaving a smooth, even finish.
Reinforcement and Saturant: While the basecoat is still wet, lay and press the fiberglass reinforcing mat (S211-0215) into the surface. Using a rib roller, backroll fiberglass to remove any air pockets. Once mat is placed, immediately saturate mat with Series 252SC saturant coat (approximately 8.0 to 12.0 mils or 200-300 sq ft/kit (18.6-27.9 m²)) until fiberglass mat is completely wet out. **Caution: When applied vertically the saturant coat should be applied at a thickness to only wet out the fiberglass mat. Any attempt to build a film on top of the mat may result in sags and runs.**

APPLICATION EQUIPMENT

Resinous Basecoat, Saturant and Topcoat: Brush, roller, squeegee. Brush small areas only. A rib roller or broad knife should be used to press and embed fiberglass reinforcing mat in both the resin and aggregate filled basecoat.
Mortar/Slurry Basecoat: Squeegee, trowel, loop roller.
Note: For detailed instructions, refer to the Secondary Containment Installation and Application Guide.

SURFACE TEMPERATURE

Minimum of 55°F (13°C), optimum 65°F to 80°F (18°C to 27°C), maximum of 90°F (32°C). The substrate temperature should be at least 5°F (3°C) above the dew point. Coating will not cure below minimum surface temperature. To avoid outgassing, concrete temperature should be stabilized or in a descending temperature mode. Material should not be applied in direct sunlight.

MATERIAL TEMPERATURE

For optimum application, handling and performance, the material temperature during application should be between 70°F and 80°F (21°C and 27°C). Temperature will affect the workability. Cool temperatures increase viscosity and decrease workability. Warm temperatures will decrease viscosity and shorten pot life. In applications where temperatures are between 80°F-90°F (27°C-32°C) reduce the Part B catalyst by one half (4 oz.) to increase pot life. THIS PRODUCT SHOULD NOT BE APPLIED BELOW 60°F (16°C) MATERIAL TEMPERATURE.

CLEANUP

Clean all equipment immediately after use with MEK.