

SELECTION & SPECIFICATION DATA

Generic Type	100% Solids, high performance epoxy liner
Description	Semstone 140 CT is a 100% solids, high performance, epoxy lining system designed for concrete. It is a semi-leveling coating which may be applied as an aggregate filled and/or reinforced coating system. Semstone 140 CT is specially formulated to withstand some of industry's most aggressive chemicals.
Features	<ul style="list-style-type: none"> • Excellent resistance to chemical attack • Excellent abrasion and impact resistance • Exceptional thermal shock resistance • Superior bonding qualities • High cohesive strength • Low permeability • Low odor
Typical Uses	<ul style="list-style-type: none"> • Process Slabs • Tank Farm Floors • Chemical Loading and Unloading Areas • Spill Containment Areas
Color	U74P (Light Grey), U51P (Tile Red)
Primer	<p>Apply Semstone 110 Primer in accordance with the product data sheet. Allow the primer to cure prior to the application of Semstone 140CT.</p> <p>Note: For substrates with out-gassing concerns use Carboguard 1340. Primer should be applied while the substrate temperature is decreasing.</p>
Dry Film Thickness	30 - 150 mils (762 - 3810 microns) depending on service conditions and system design
Solids Content	By Volume 100%
Coverage Rate	<p>Semstone 140 CT will cover 1,604 sq. ft. at 1 mil DFT per gallon (39.4 sq. m/l). With aggregate included application thickness may vary from 30 to 150 mils (0.75-3.8 mm), depending on expected service conditions and system design.</p> <p>See Application Procedures for more specific coverage information. Consult Carboline's Technical Service Department for specific thickness recommendations. In addition, coverage rates will be affected by the condition of the surface being coated (degraded vs. smooth, steel vs. concrete, etc.).</p>
Theoretical Coverage Rate	<p>1604 ft²/gal at 1.0 mils (39.4 m²/l at 25 microns) 53 ft²/gal at 30.0 mils (1.3 m²/l at 750 microns) 11 ft²/gal at 150.0 mils (0.3 m²/l at 3750 microns) Allow for loss in mixing and application.</p>

SUBSTRATES & SURFACE PREPARATION

General	<p>Proper preparation is critical to ensure an adequate bond. The substrate must be dry and free of all wax, grease, oils, fats, soil, loose or foreign materials and laitance. Laitance and unbonded cement particles must be removed by mechanical methods, i.e., abrasive blasting or scarifying. Other contaminants may be removed by scrubbing with a heavy-duty industrial detergent and rinsing with clean water.</p> <p>For recommendations or additional information regarding substrate preparation, please contact Carboline's Technical Service Department.</p>
Steel	Equipment base plates, etc. to be coated along with the concrete should be abrasive blasted to a near white metal finish, SSPC-10 or NACE-2, with a minimum 3 mil (75 microns) anchor profile.
Concrete or CMU	Concrete shall be designed, placed, cured, and prepared per NACE No. 6/SSPC-SP 13, latest edition. Abrade to remove all laitance, loose concrete, etc. and to create surface profile in accordance with the appropriate ICRI CSP 4-7.
Special Instruction	Mask surfaces that are not to be coated. This material is difficult to remove once applied. Follow intercoat preparation requirements should the material need to be re-coated with itself, or be re-coating another Carboline product/system.

MIXING & THINNING

Mixing	Before mixing and applying any material, make sure environmental conditions are satisfactory for application. Warm areas or areas in direct sunlight must be shaded or arrangements made to work during evenings or at night. A hot substrate (60-100 °F (16-37 °C) or a substrate directly in the sun will shorten the material's working time and can cause other phenomenon such as pinholing and bubbling.
Pot Life	35 °F (1.7 °C) 30-40 min* *Significantly less at elevated temperatures
Material Temperature	Twenty-four hours before application, all materials (components A and B, aggregate, etc.) should be stored at 55-65°F (13-18°C) to facilitate handling.

APPLICATION CONDITIONS

Condition	Material	Surface	Ambient	Humidity
Minimum	40°F (4°C)	35°F (2°C)	35°F (2°C)	0%
Maximum	60°F (16°C)	60°F (16°C)	60°F (16°C)	80%

Apply only on clean, sound, dry and properly prepared substrates. Substrate temperature should be greater than 5 °F (3 °C) above dew point.

Application and curing times are dependent upon ambient and surface conditions. Consult Carboline's Technical Service Department if conditions are not within the recommended guidelines.

CURING SCHEDULE

Surface Temp.	Dry to Touch	Maximum Recoat	Chemical Service
35°F (2°C)	8 Hours	16 Hours	36 Hours
60°F (16°C)	2 Hours	6 Hours	18 Hours

CLEANUP & SAFETY

Cleanup	MEK, Toluene or Xylene solvents are recommended for clean up of Semstone 140 CT material spills. Use these materials only in strict accordance with manufacturer's recommended safety procedures. Dispose of waste materials in accordance with government regulations.
Safety	The selection of proper protective clothing and equipment will significantly reduce risk to injury. Body covering apparel, safety goggles and impermeable gloves are highly recommended.
Ventilation	<ul style="list-style-type: none">• The use of a NIOSH/MSHA approved respirator using a #TC- 23C-738 organic vapor or a #TC-23C-740 organic vapor acid gas cartridge is mandatory.• Use only with adequate ventilation.

PACKAGING, HANDLING & STORAGE

Shelf Life	Keep product tightly sealed in its original container until ready for use. Store at 50-85 °F (10-29 °C) out of direct sunlight. The cure mechanism of this product is not affected for a minimum of 24 months.
Storage Temperature & Humidity	Store all components between 40-110°F (4-43°C) in a dry area. Keep out of direct sunlight. Avoid excessive heat and do not freeze.
Shipping Weight (Approximate)	0.84 gallon unit weighs 9.6 lbs (4.4 kg): Part A - 0.64 gallon (resin) Part B - 0.2 gallon (hardener) 4.21 gallon unit weighs 46.4 lbs (21.1 kg) and includes: Part A - 3.2 gallon (resin) Part B - 1.0 gallon (hardener)

WARRANTY

To the best of our knowledge the technical data contained herein is true and accurate on the date of publication and is subject to change without prior notice. User must contact Carboline Company to verify correctness before specifying or ordering. No guarantee of accuracy is given or implied. We guarantee our products to conform to Carboline quality control. We assume no responsibility for coverage, performance, injuries or damages resulting from use. Carbolines sole obligation, if any, is to replace or refund the purchase price of the Carboline product(s) proven to be defective, at Carbolines option. Carboline shall not be liable for any loss or damage. NO OTHER WARRANTY OR GUARANTEE OF ANY KIND IS MADE BY CARBOLINE, EXPRESS OR IMPLIED, STATUTORY, BY OPERATION OF LAW, OR OTHERWISE, INCLUDING MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. All of the trademarks referenced above are the property of Carboline International Corporation unless otherwise indicated.