

SELECTION & SPECIFICATION DATA

Description	Semstone 140SL is a 100% solids, high performance, epoxy coating designed for concrete. Semstone 140SL is a self-leveling coating which may be applied as a neat, aggregate filled and/or reinforced coating system. Semstone 140SL is specially formulated to withstand some of industry's most aggressive chemicals.
Features	<ul style="list-style-type: none"> • Semstone 140SL is a two-component system that possesses the following characteristics: • Excellent resistance to chemical attack • Excellent abrasion and impact resistance • Exceptional thermal shock resistance • Superior bonding qualities • High cohesive strength • Low permeability • Low odor
Primer	Semstone 110 Primer <u>must</u> be used prior to the application of Semstone 140SL. Apply Semstone 110 Primer at a rate of 250-300 sq. ft. / 1.5 gal unit. Note: For substrates where out-gassing would be a concern, use Carboguard 1340. Primer should be applied while the substrate temperature is decreasing. Two coats may be required to "help" prevent out-gassing of the substrate.
Typical Uses	<ul style="list-style-type: none"> • Process Areas • Tank Farm Floors • Production Areas • Spill Containment Areas • Light Manufacturing

SUBSTRATES & SURFACE PREPARATION

General	<p>Proper preparation is critical to ensure an adequate bond. The substrate <u>must</u> be dry and free of all wax, grease, oils, fats, soil, loose or foreign materials and laitance. Laitance and unbonded cement particles <u>must</u> 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. For recommendations or additional information regarding substrate preparation, please contact Carboline's Technical Service Department.</p> <p>Coverage: Semstone 140SL will cover 1,604 sq. ft./gal. For estimating purposes, one gallon of Semstone 140SL will cover 64 sq. ft./5.96 sq. m at a thickness of 25 mils/0.63 mm. Application thickness may vary from 30-150 mils/0.75-3.8 mm, depending on expected service conditions (i.e., chemical exposure, temperature, traffic load and other mechanical abuse, immersion service vs. splash-spill, etc.). 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>
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 1 to 2 mils anchor profile.
Concrete or CMU	Concrete should be properly cured for a minimum 28 days and have the following characteristics: Substrate tensile strength of at least 300 psi. pH in the range of 7 to 11. The surface <u>must</u> show open pores throughout and have a sandpaper texture. Refer to SSPC-SP13 / NACE 6

Semstone 140 SL

PRODUCT DATA SHEET



MIXING & THINNING

Mixing | Before mixing and applying any material, make sure environmental conditions are satisfactory for application. For optimal working conditions, substrate temperature must be between 60-80°F/15-27°C. Measure the surface temperature with a surface thermometer. Cold areas must be heated until the slab temperature is above 50°F/10°C. This will allow the material to achieve a proper cure. Also, a cold substrate will make the material stiff and difficult to apply. Warm areas or areas in direct sunlight must be shaded or arrangements made to work during evenings or at night. A warm substrate (60-80°F/15-27°C) will aid in the material's workability; however, a hot substrate (80-100°F/27-37°C) or a substrate directly in the sun will shorten the material's working time and can cause other phenomenon such as pin-holing and bubbling. Substrate temperature should be greater than 5°F/3°C above dew point.
If the temperature is expected to drop below 50°F/10°C use Semstone 140CT.

Pot Life | 75°F for 45 to 60 min.*
* Significantly less at elevated temperatures

CURING SCHEDULE

Surface Temp.	Chemical Service	Dry to Touch	Firm
24°C (75°F)	36 Hours	12 Hours	24 Hours

CLEANUP & SAFETY

Cleanup | MEK, Toluene or Xylene solvents are recommended for clean up of Semstone 140SL material spills. Use these materials only in strict accordance with the 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 |

- 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 | 1 year in the original, unopened container.

Storage Temperature & Humidity | Store all components between 50-75°F/10-24°C in a dry area. Keep out of direct sunlight. Twenty-four hours before application, all materials (components A and B aggregate, etc.) should be stored at a 70-85°F/21-29°C to facilitate handling.

Storage | Avoid excessive heat and do not freeze.

Shipping Weight (Approximate) | Semstone 140SL has a 2.2:1 mix ratio by volume and is available in 1 gallon and 5 gallon units.
A 1 gallon unit consists of:
1 gallon metal can of Part A (resin) (partially filled)
1 gallon metal can of Part B (hardener) (partially filled)
A 5 gallon unit consists of:
5 gallon plastic pail of Part A (resin) (partially filled)
3 gallon metal can of Part B (hardener) (partially filled)
Weight per mixed gallon: 9.9 lbs.

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.