



SPECIALTY CONSTRUCTION PRODUCTS

Silencure™

U.S. Patent 7402623
 Solvent-Based, Non-Yellowing,
 One Step Acrylic Cure & Protect
 with Penetrating Silane for Freshly Placed
 Broom Finished Concrete

P R O D U C T D A T A

DESCRIPTION

ChemMasters' **Silencure** is a patented solvent-based acrylic cure and protect with penetrating silane for new broom finished concrete installations. When applied to fresh concrete **Silencure** produces a non-yellowing clear continuous film that effectively cures fresh concrete and provides a tough protective acrylic film.

Silencure's unique technology forms an effective curing film with a proprietary blend of silanes that penetrate capillary pores of fresh concrete forming a silicone matrix within the concrete to protect from damage caused by freeze/thaw cycles, deicing chemicals and salt penetration.

Unlike other silane or siloxane treatments, **Silencure** is applied to fresh concrete curing to ASTM C309 and AASHTO M-148 specifications and is designed to meet applicable State Department of Transportation (DOT) Requirements of NCHRP 244, Series II & Series IV water absorption and chloride protection. There is no need to wait 28 days before applying a product for long term protection.

USES

- Cure fresh broom finished exterior concrete. Curing minimizes crazing and shrinkage cracks. **Silencure** forms a film that holds moisture in fresh concrete helping cement fully hydrate. This process helps maximize the strength and durability of concrete.
- Provides long term protection to exterior concrete from damaging effects of freeze/thaw cycles, deicing chemicals and salt penetration.
- **Silencure's** unique silane formulation lasts far longer than ordinary film forming cures.

ADVANTAGES

- **Silencure** eliminates the 28 day 3 step process to provide penetrating protection to newly placed broom finish concrete.
- A single step application of **Silencure** after final finish provides the improved protection of a penetrating sealer and reduces labor costs putting concrete into service weeks sooner.

TECHNICAL DATA

Packaging		
5 gal (18.9 liter)	36 per pallet	F1236.05
55 gal (208 liter)	4 / pallet	F1236.55

APPLICABLE STANDARDS

- Meets many States' DOT requirements of NCHRP 244 Series II and IV chloride protection
- ASTM C 309, Type I* Class A&B, Standard Specification for Liquid Membrane Forming Compounds for Curing Concrete
- AASHTO M 148, Type 1* Class A & B, Standard Specification for Liquid Membrane-Forming Compounds for Curing Concrete
- Complies with National Volatile Organic Compound Emission Standards for Architectural Coatings, Federal EPA Regulation 40 CFR Part 59 <700 g/L
 * Can be ordered with fugitive dye to meet Type ID requirements

Estimating Guide To Meet Applicable Standards Above		
Finish	ft ² /gallon	m ² /liter
Fresh Broom Concrete	150	4
Formed Walls	450	11

Physical Properties	
VOC content	< 700 g/L
% Solids	40 min.
Flash Point	1°F (-17°C)
ASTM C 156 Moisture Retention	0.30 kg/m ² per 72 Hrs

Drying Time @ 70°F (21°C) with 50% R.H.	
Dry	Hours
To Touch	1
Light Traffic	8
Heavy Traffic	12



ChemMasters®

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DIRECTIONS

Mixing: Do not dilute. **Silencure** is packaged ready to use and only requires mild agitation or stirring before applying or filling spray equipment.

Application: Apply after all bleed water has dissipated and application will not mar the surface. Apply within 2 hours of final finish. Applying **Silencure** after two hours may result in poor penetration and lead to blotchiness, blistering and peeling. Do not apply over free standing water. Apply uniformly leaving no pinholes or gaps. Do not allow the material to puddle.

For Best Results: Do not apply **Silencure** if the temperature will drop below 50°F (10°C) within two hours of application.

Spray Apply: Use a low pressure, airless, sprayer equipped with a fan nozzle 0.50 to 1.0 gallon per minute or a hand pressurized sprayer with a 'Cats Eye' nozzle (minimum orifice of 0.022 to 0.032"). The optimum spray pattern is an 8 to 12" fan. Hold sprayer tip 8 to 12" from the surface of the concrete.

Roller Apply: Use a short nap (1/4") solvent resistant roller.

Formed Concrete Walls: If walls are not to receive further treatment, apply immediately after stripping forms or following rubbing operations at 450 ft²/gal (11m²/L)

CLEANUP

Clean tools and equipment with **ChemMasters Coating Repair Solvent** or **Xylene**.

STORAGE

Store tightly closed containers away from direct sunlight and sources of heat or flame. Shelf life is 3 years from date of manufacture.

LIMITATIONS

- Not for indoor use.
- **Silencure** is not for use on interior surfaces or on hard steel trowel finished floors. Use **Silencure SRT** for these applications.
- **Silencure** has an application window that begins when all bleed water has dissipated, extending to within 2 hrs of final finishing. If it cannot be completed within that window, use a different film forming curing compound or wet cure the concrete.
- Not compatible with resilient floor covering adhesives and not intended for use on surfaces to receive concrete overlays or toppings.
- Solvent, gasoline, and hydraulic fluids must be cleaned quickly to prevent coating damage.
- Do not apply to joints or channels scheduled to receive elastomeric caulks.
- Protect adjoining glass, metal or painted surfaces that may be etched or damaged by overspray or splash. Clean with mineral spirits to remove dry material.

- Do not use if the ambient or substrate temperature is below 50°F (10°C). For best results condition material to a minimum of 70°F (21°C). Application in cooler conditions will extend cure time and may impact final appearance.
- The Safety Data Sheet and all label precautions must be fully understood before using product.
- Quality curing compounds may darken or highlight the color variations naturally present in concrete.

PRECAUTIONS: Not for indoor use.

Use outdoors only in a well ventilated area.

Danger: Flammable Liquid and Vapor. Harmful if inhaled. May cause respiratory irritation. May cause drowsiness or dizziness. May be fatal if swallowed and enters airways. Toxic to aquatic life with long lasting effects. **Precautionary Statements:** Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Keep container tightly closed. Ground and bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting equipment. Use non-sparking tools. Take action to prevent static discharges. Avoid breathing dust/fume/gas/mist/vapors/spray. Use only outdoors or in a well-ventilated area. Avoid release to the environment. Wear protective gloves/protective clothing/eye protection/face protection.

All label precautions and Safety Data Sheet must be fully understood before using this product.

**Keep out of reach of children.
For professional use only.**

This Product is Formulated and Labeled for Industrial and Commercial Use Only

FOR BEST RESULTS AND SAFEST USAGE, USER IS SPECIFICALLY DIRECTED TO CONSULT THE CURRENT PRODUCT & SAFETY DATA SHEETS AND PACKAGE LABEL FOR THIS PRODUCT. We warrant our products to meet our published specifications and to be free from defects in materials and workmanship to the acceptable quality levels defined in these specifications. If acceptable quality levels are not specified, the acceptable quality levels will be those normally supplied by us for the product. We make no guarantee of the results to be obtained from the use of our products. The determination as to the adaptability of any of our products to the specific needs of the Buyer is solely Buyer's prerogative and responsibility. We are glad to offer suggestions on the use of our products. Nevertheless, there are no warranties given except such expresses warranties offered in connection with the sale of a particular product. Our liability shall be limited to replacement of, or refund of an amount not to exceed the purchase price attributed to, the goods as to which such claim is made. Our selection of one of these alternatives shall be Buyer's exclusive remedy. IN NO CASE SHALL WE BE LIABLE FOR CONSEQUENTIAL OR SPECIAL DAMAGES, EVEN IF WE HAVE BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. THE FOREGOING WARRANTIES ARE IN LIEU OF ALL OTHER WARRANTIES, GUARANTEES, CO-CONDITIONS AND REPRESENTATIONS, EITHER EXPRESSED OR IMPLIED, WHETHER ARISING UNDER ANY STATUTE, COMMON LAW, USAGE OR TRADE, COURSE OF DEALING OR OTHERWISE, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.