



# ChemMasters®

**SPECIALTY CONSTRUCTION PRODUCTS**

# Silencure™

U.S. Patent 7402623  
Acrylic Curing and  
Sealing Compound With Silane  
For Freshly Placed Concrete

## P R O D U C T D A T A

### DESCRIPTION

ChemMasters' **Silencure** is a patented solvent based pure acrylic copolymer curing and sealing compound for freshly placed concrete. **Silencure** produces a non-yellowing, clear, continuous film that effectively cures fresh broom finished concrete with a tough protective acrylic surface film. **Silencure's** unique technology forms an effective curing and sealing film with a proprietary blend of silanes that penetrate fresh concrete forming a silicone matrix within the concrete preventing water and salt penetration. Unlike other silane or siloxane treatments **Silencure** can be applied to fresh concrete curing to ASTM C309 and AASHTO M 148, Type 1 & 1D (with added fugitive dye) standards and is designed to meet applicable State Department of Transportation (DOT) requirements of NCHRP 244, Series II & Series IV. There is no need to wait 28 days before applying a product for long term protection.

### USES

- Cure fresh broom finished exterior concrete to minimize crazing and shrinkage cracks, forming a film to hold moisture in fresh concrete allowing it to fully hydrate.
- Curing helps maximize the strength and durability of concrete.
- Provides long term protection to exterior broom finished concrete from damaging effects of water and salt penetration.
- **Silencure's** unique siloxane formulation provides protection from damage due to freeze thaw cycles that lasts far longer than ordinary film forming cure and seal products.

### ADVANTAGES

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

Packaging Product Number		
5 gal (18.9L)	36 per pallet	F1326.05
55 gal (208L)	4 per pallet	F1326.55

### TECHNICAL DATA

- Meets many States' DOT requirements of NCHRP 244 Series II and IV chloride protection.
- ASTM C309, Type 1 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 (V.O.C.) Emission Standards for Architectural Coatings, Federal EPA Regulation 40 CFR Part 59 <700 g/L  
\* **May be ordered with fugitive dye to meet Type 1D Requirements**

Test Data	
Drying Time @ 70 °F(21°C) with 50% Relative Humidity	Hours to dry
To Touch	1
Light Traffic	8
Heavy Traffic	12
Volatile Organic Compounds (V.O.C)	<700 g/L
% Solids	40 minimum
ASTM C156 Moisture Retention@ 72 hrs	0.30 kg/m <sup>2</sup>
Flash Point °F (°C) PMCC	108 (42)

Estimating Guide To meet applicable standards	
Fresh broom	150 ft <sup>2</sup> /gal (4 m <sup>2</sup> /L)
Formed Walls	450 ft <sup>2</sup> /gal (11 m <sup>2</sup> /L)

Drying Time @ 70°F (21°C) with 50% R.H.	
Dry Condition	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 equipment.

**Application:** Apply **Silencure** within 2 hours after final finishing the concrete and all bleed water has dissipated. Apply uniformly leaving no pinholes or gaps. Do not allow material to puddle.

For Best Results: Do not apply **Silencure** if the temperature will drop below 50°F (10°C) within 2 hours of application. Protect people, vehicles, property, plants, windows, and all non-masonry surfaces from product splash, residue, fumes, and wind drift.

Applying **Silencure** on steel trowel concrete after 2 hours may result in poor penetration and lead to blistering or peeling. Do not apply over free standing water.

**Spray Apply:** Use a low pressure, airless, sprayer equipped with a fan nozzle 0.050 to 0.095 g.p.m. or a hand pressurized sprayer with a 'Cats Eye' nozzle (minimum orifice of 0.010 to 0.012") ensure spray equipment is clean and dry before adding **Silencure**. The optimum spray pattern is an 8 to 12" fan. Hold sprayer tip 6 to 8" from the surface of concrete. In tight areas avoid overspray or splash on adjoining surfaces such as glass, metal, masonry, painted, vinyl, etc. to avoid undesirable effects. Clean surfaces with xylene before **Silencure** dries.

**Roller Apply:** Use a short nap (1/4" max) 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 ft<sup>2</sup>/gal. (11m<sup>2</sup>/L).

## CLEANUP

Clean tools and equipment with Polyseal 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

- **Silencure** is not for use on interior surfaces or on hard steel trowel finished floors. The silane in **Silencure** will not penetrate hard smooth concrete and bond properly.
- **Silencure** must be applied within 2 hours of final finishing. If it cannot be completed within 2 hours use a film forming curing compound or wet cure the concrete.
- **Silencure** is not compatible with resilient floor covering adhesives, it may prevent adhesive bonding.

- Not intended for use on surfaces to receive concrete overlays or toppings. Consult ChemMasters' Technical Service Department for compatibility with surface treatments.
- Always test for compatibility and adhesion.
- Solvent, gasoline, and hydraulic fluids must be cleaned quickly to prevent softening of the membrane.
- Do not apply **Silencure** to joints or channels scheduled to receive elastomeric caulks.
- Do not use if ambient or substrate temperature is below 50°F (10°C). Do not use if rain is expected within 24 hours of application. For best results condition material to a minimum of 70°F (21°C) prior to application.
- All label precautions and Safety Data Sheet must be fully understood before using this product.
- Avoid overspray or splash on adjoining surfaces such as glass, metal, masonry, painted, vinyl, etc. with **Silencure** to avoid undesirable effects. Clean surfaces with xylene before **Silencure** dries.
- Quality curing or sealing 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 Vapour. 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/vapours/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.**

### 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.