



ChemMasters

SPECIALTY CONSTRUCTION PRODUCTS

SILENCURE

ACRYLIC CURING & SEALING COMPOUND
CONTAINING SILANE

P R O D U C T D A T A

DESCRIPTION

Silencure is a solvent-based, pure acrylic copolymer curing and sealing compound for concrete. When applied to fresh concrete, Silencure produces a non yellowing, clear, continuous film, which effectively cures fresh concrete and provide a tough protective acrylic film to the surface.

Silencure is unique because in addition to being an effective film forming curing and sealing compound, it contains silane. The silane penetrates the fresh concrete and provides long term protection for the concrete after the film has dissipated.

Unlike other silane or siloxane treatments, Silencure can be applied to fresh concrete to cure to ASTM C-309 standards. Unlike other curing compounds, Silencure penetrates into the pores of the concrete and forms a hydrophobic gel that meets the chloride ion restrictions of NCHRP 244 to reduce the penetration of water, salts and deicing chemicals.

USES

- Use on exterior fresh concrete to cure the concrete. Curing minimizes crazing and shrinkage cracks. Silencure forms a film that holds moisture in the fresh concrete to help the cement to fully hydrate. This process helps to maximize the strength and durability of the concrete.
- Provide long term protection to exterior concrete from the damaging effects of water and salt penetration. The silane in Silencure reduces spalling and damage from freeze thaw cycles more effectively and for a much longer time than normal film forming cure & seal products.

ADVANTAGES

- Silencure performs in one step what requires several steps for other products. To duplicate the performance of Silencure with standard products, the following steps are required:

1. Cure the fresh concrete by water curing for 7 days or the application of a film forming curing compound.
2. If water curing, return after a minimum of 28 days to clean the concrete of any dirt, grease etc. If curing with a curing compound, strip the cure with chemicals and high pressure water
3. After the concrete thoroughly dries, apply a penetrating silane or siloxane

Silencure provides effective film forming curing / sealing properties and efficient long term silane protection in one simple application

APPLICABLE STANDARDS

- NCHRP 244, Series II & IV
- ASTM C-309, Type I, ID & II, Class A & B,
- AASHTO M-148, Type 1 & 1D, Class A & B

TECHNICAL DATA

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

Dry to Touch	1 hour
Light Traffic	8 hours
Heavy Traffic	12 hours

V.O.C. content: 680 gm/L

Flash Point: 105° F. 40°C.

ESTIMATING GUIDE

Application rate

In order to meet the specifications of NCHRP 244 for chloride protection as well as ASTM C-309 and AASHTO M-148, Silencure is to be applied to fresh concrete at the rate of 150 Ft.²/gal (4 M²/L)

PACKAGING

Silencure is packaged in 55 U.S. gallon drums and 5 gallon pails. 36 pails are shipped on a pallet.



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APPLICATION

MIXING: Do not dilute. Silencure is packaged ready to use and only requires stirring or agitation prior to use. Thoroughly mix Silencure before applying or loading into application equipment.

APPLICATION: Protect people, vehicles, property, plants, windows and all non masonry surfaces from product splash, residue, fumes and wind drift. Apply Silencure within three hours after the concrete has received final finishing and all bleed water has dissipated. Do not apply over free standing water. Apply with a short nap, solvent resistant roller or spray equipment. If spraying, use a low pressure, solvent resistant airless sprayer equipped with a fan nozzle (minimum orifice of .030-.032) or a hand pressurized sprayer with a "Cats Eye" nozzle (minimum orifice of .010-.012). Ensure that spray equipment is clean and dry before adding material. The optimum spray pattern is an 8-12 inch fan. Hold sprayer tip 6-8 inches from the surface of the concrete. Apply uniformly leaving no pinholes or gaps. Do not allow the material to puddle.

When using a hand pressurized sprayer it is important to maintain as high an air pressure as possible to aid in spraying.

CURING: When applying Silencure to fresh concrete, apply after all bleed water has dissipated and application will not mar surface.

FORMED CONCRETE WALLS: If walls are not to receive further treatment, apply immediately after stripping forms or following rubbing operations.

OLDER CONCRETE: Clean thoroughly with detergent and high pressure water, removing any dirt, dust, curing or sealing membranes, paints, oil, grease or other contaminants that may prevent adhesion and penetration of Silencure.

CLEANUP

Tools and equipment used in applying Silencure should be cleaned with Polyseal Solvent, mineral spirits or xylene before the Silencure dries.

STORAGE

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

CAUTIONS

COMBUSTIBLE LIQUID: Keep away from heat or open flame. Use with adequate ventilation. May cause skin, eye and respiratory tract irritation. Keep out of reach of children.

All label precautions and MSDS must be fully understood before using this product.

Adjoining glass, metal or painted surfaces should be protected against spray or splash with Silencure. Silencure may etch or damage these surfaces. Inadvertent splashes should be removed with mineral spirits before they dry on the surface.

LIMITATIONS

- **Do not use on interior surfaces or on hard steel trowel finished floors. The silane in Silencure will not penetrate hard, smooth concrete and, as a result, the sealer will not properly bond.**
- Do not use Silencure on areas to receive floor coverings including carpet, tiles over overlays as the silane in Silencure may prevent bonding of adhesives.
- Do not use as a bond breaker for tilt wall construction.
- Silencure treated surfaces may be stained with oils or greases that are not cleaned quickly.
- The film formed by Silencure will soften if subjected to spills of gasoline or other solvents. Solvent spills must be cleaned quickly to prevent softening of the membrane.
- Condition material to a minimum of 70°F (21°C) if material is to be applied with ambient temperatures below 50°F (10°C) in order to improve sprayability.
- Quality curing or sealing compounds may darken or highlight the subtle color variations naturally present in concrete.

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 MATERIAL SAFETY DATA SHEET 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.