



ChemMasters®

SPECIALTY CONSTRUCTION PRODUCTS

Silencure DOT™

White Pigmented Wax Cure with Penetrating Silane/Siloxane

P R O D U C T D A T A

DESCRIPTION

Silencure DOT is a water-based, white pigmented wax emulsion curing compound with penetrating silane/siloxane protection for concrete pavement. When applied to freshly placed concrete, **Silencure DOT** produces a continuous film, allowing it to retain water, enable its full hydration, and allowing it to achieve higher ultimate strengths while reducing surface cracks. The white pigmentation keeps the concrete surface cool, and ensures the maximum achievement of its mix design properties.

Silencure DOT is unique to any other highway pavement curing compounds because in addition to being an effective film forming curing compound, it contains penetrating silane and siloxane to provide long term protection, even after the film has dissipated.

Unlike other silane or siloxane treatments, **Silencure DOT** can be applied to fresh concrete and cures to ASTM C309 standards. Once applied, the silane/siloxane penetrates deeply into the concrete capillaries and pores where it forms a hydrophobic gel that meets most state DOT requirements for NCHRP 244 Series II and Series IV by reducing the penetration of water, salts and deicing chemicals.

USES

- Use on exterior fresh pavement to cure the concrete to ASTM C309 specifications. Curing minimizes crazing and shrinkage cracks. **Silencure DOT** maximizes the strength and durability of concrete.
- Provides long term protection to exterior concrete from the damaging effects of water and salt penetration. The silane in **Silencure DOT** reduces spalling and damage from freeze thaw cycles more effectively and for a much longer time than normal film forming cures.
- After fulfilling the curing function, the wax film quickly wears away with exposure to construction or traffic wear, eliminating residual concerns about skid resistance.

ADVANTAGES

- **Silencure DOT** performs in one step what other products require multiple steps. To duplicate the performance of **Silencure DOT**:
- **Water Curing:** Water cure for 7 days. Then return after a minimum of 28 days, power wash to clean the concrete of all dirt, grease, and debris. Once dry, apply a penetrating silane or siloxane.
- **Film forming curing compound:** Apply after all bleed water has dissipated and application will not mar

surface. After 28 days return to strip the film with chemicals and high pressure water. Wait for the surface to dry then apply a penetrating silane or siloxane.

- **Silencure DOT** provides effective film forming curing properties and efficient long-term silane protection in one simple application

Packaging Product Number

5 gal (18.9L)	36 per pallet	F1626.05
55 gal (208L)	4 per pallet	F1626.55
275 (1041L)	tote	F1626.275

TECHNICAL DATA

APPLICABLE STANDARDS:

- ASTM C309, Type 2, Class A. *Standard Specification for Liquid Membrane Forming Compounds for Curing Concrete.*
- NCHRP 244, Series II & IV.
- AASHTO M-148, Type 2, Class A.

Estimating Guide

Cure Fresh Pavement	150 ft ² /gal (4 m ² /L)
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Test Data

V.O.C. Content	< 250 g/L
Flash Point °F (°C)	>201 (>94)

DIRECTIONS:

In order to meet the specifications of NCHRP 244 for chloride protection as well as the curing specifications of ASTM C309 and AASHTO M-148, **Silencure DOT** is to be applied to fresh concrete at the rate of 150 ft²/gal (4 m²/L).

Mixing: Do not dilute. Stir or agitate **Silencure DOT** before use to disperse pigments and solids uniformly. If using a pump, use an air diaphragm pump to circulate **Silencure DOT**. Do not use a centrifugal pump. Mix only long enough to make the **Silencure DOT** homogenous. Do not over mix as this may cause foaming and may damage the curing compound.



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Application: Apply **Silencure DOT** after all bleed water has dissipated and application will not mar surface. Apply uniformly leaving no pinholes or gaps. Do not allow material to puddle.

Spray Application: Always use a dedicated sprayer for water-based curing products. Use a low pressure airless sprayer equipped with a fan nozzle of 0.030 to 0.035" at 1 gpm. The optimum spray pattern is a 8 to 12" (20 to 30 cm) fan. Hold sprayer tip 8 to 12" (20 to 30 cm) from the concrete surface.

Roller Application: Use a short napped roller (3/8" or less).

Drying Time: **Silencure DOT** dries in less than 4 hours at 70°F (21°C) at 50% relative humidity. Cooler temperatures or higher relative humidity may slow drying process.

Clean Up: Clean tools and equipment immediately after use with warm water and detergent.

Storage:

- Store tightly closed containers away from direct sunlight. Storing in direct sunlight or at high temperatures may cause the growth of bacteria, which may destroy the product. This is of particular concern when stored in 275 gallon totes. Bacteria growth in the cure will cause the product to turn from white to gray and will cause the product to have an objectionable odor. The product should not be used if this occurs.
- **Silencure DOT** is a water-based product and should not be allowed to freeze. Freezing will break down the emulsion and make the product unusable.
- Shelf life of properly stored material is one year from date of manufacture.

LIMITATIONS:

- **Silencure DOT** is not recommended for interior use or where appearance is important.
- Do not apply if surface or ambient temperature is below 40°F (4°C). Product must be conditioned to 50°F (10°C) prior to application.
- Do not allow product to freeze.
- Do not use **Silencure DOT** as a bond breaker for tilt-up construction.

Precautions:

Warning: May be harmful if swallowed. Causes mild skin irritation. Causes eye irritation. May cause an allergic skin reaction.

Precautionary Statements: Avoid breathing dust/fume/gas/mist/vapors/spray. Wash hands and skin thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace. Wear protective gloves/protective clothing/eye protection/face protection. Response: Call a POISON CENTER/doctor if swallowed and you feel unwell. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice or attention. IF ON SKIN: Wash with plenty of soap and water. If skin irritation or rash occurs: Get medical advice or attention. Take off contaminated clothing and wash it before reuse.

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

**Keep out of the 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.