



ChemMasters®

Chemisil™

Sodium Silicate
Hardener and Dustproof

SPECIALTY CONSTRUCTION PRODUCTS

P R O D U C T D A T A

DESCRIPTION

ChemMasters' Chemisil is a clear water based chemical floor hardener that reacts with the free lime and calcium carbonate in concrete to harden and dustproof surfaces making them easier to maintain.

USES

- Reduces dusting on interior or exterior concrete surfaces.
- May be applied to horizontal or vertical surfaces such as floor slabs, formed, and poured walls.
- Hardens soft punky surfaces caused by premature freezing of concrete surfaces.
- Halts progression of deterioration caused by carbonation.

ADVANTAGES

- Seals, hardens, and dustproofs in one step.
- 0% Volatile Organic Compound (V.O.C.) content and no odor.
- Compatible with the majority of adhesives for resilient floor coverings.
- May be used in food storage or occupied areas.
- Increases resistance to penetration of water.
- Cost effective - reduces labor cost of subsequent construction clean up.

Packaging and Part Number

1 gal/ 3.7 L	F4210.01
5 gal/18.9L	F4210.05
55 gal/208L	F4210.55

TECHNICAL DATA

Estimating Guide

Trowel Finished Concrete	200 ft ² /gal	5 m ² /L
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Test Data

Flash Point	> 212°F
V.O.C. Content	0%
Degrees Baume	11°F
Density	9 lbs/ gal (4 kg/L)
ASTM C779 Increased Abrasion Resistance vs. Control	200 to 400%

Dry Time @ 70°F (21°C) @ 50% humidity

Traffic use:	Hours
Light foot traffic	1
Heavy (wheeled) traffic	24

DIRECTIONS

Mixing: **Chemisil** is ready to use and does not require special mixing. Do not dilute.

Curing Application: No silicate treatment will cure concrete to ASTM C309 specifications. Consider use of **EZ Strip Cure^{DR}** for concrete to meet ASTM curing specifications. However, sodium silicates have been used to aid in the curing process for surfaces scheduled to receive subsequent penetrating treatments and/or specialty coatings.

No surface preparation is required when using **Chemisil** as a curing aid. Apply **Chemisil** to freshly poured concrete immediately following final finish operations when the surface has stiffened sufficiently to support applicator. Spray **Chemisil** onto surface at an even rate of 200 ft²/ gal (5 m²/L). Do not allow **Chemisil** to puddle. If puddles develop use a squeegee to redistribute **Chemisil** from low to high spots.



ChemMasters®

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Application Over Older Concrete:

Remove all dust and dirt. Sweep the area with a soft bristle broom then rinse with clean water using a pressure washer or hose with nozzle. The surface must be cleaned of all contaminants that would interfere with the penetration of **Chemisil**. If the surface is heavily soiled use a heavy duty cleaner degreaser such as ChemMasters **1207** or **Skid Daddle**, scrub with a broom then rinse with pressure washer or hose with nozzle. The surface must be cleaned of all contaminants that would interfere with the penetration of **Chemisil**. If the surface is heavily soiled use a heavy duty cleaner degreaser such as ChemMasters' **1207** or **Skid Daddle**, scrub with broom, rinse with pressure washer. Repeat as needed until surface is clean. Before applying **Chemisil** the surface must be completely dry.

Apply **Chemisil** with a short nap (1/4" max) solvent resistant roller or airless sprayer equipped with an 8 to 12" fan tip. If spraying hold spray tip 6 to 8" from the surface and apply a continuous film leaving no pinholes or gaps. Do not allow material to puddle. When using a hand pressurized sprayer it is important to maintain the maximum air pressure to ensure full even coverage.

*** Important: Scrub continuously for 30 minutes do not allow **Chemisil** to dry out. Remove excess material with dry mop. Do not track or leave patterns. Call ChemMasters' Technical Service Department for special circumstances ***

Do not over apply or allow to puddle. For optimum performance apply a light thin second coat. Area may be opened to foot traffic when dry, about 1 hour at 70°F at 50% relative humidity. Wait 24 hours before opening to wheeled or heavy traffic.

Clean Up

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

Storage

Protect from freezing. Store tightly sealed containers above 40°F (4°C). Shelf life is two years from date of manufacture.

Limitations:

- **Chemisil** stains glass and metal. If overspray occurs immediately wash surface with warm water
- Over application will cause a crystalline glaze or noticeable whitening of the surface. If this occurs flush surface with warm or hot water.
- Integrally colored concrete must be a minimum of 60 days old prior to application of **Chemisil**.

Precautions:

Warning: Causes skin irritation. Causes serious eye irritation.

Precautionary Statements: Wash hands and skin thoroughly after handling. Wear protective gloves/protective clothing/eye protection/face protection.

Response: IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. If skin irritation occurs: Get medical advice or attention. 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. Take off contaminated clothing and wash it before reuse.

Keep out of reach of children.

Proper application is the responsibility of the user. ChemMasters can only make technical recommendations and cannot provide quality control on the jobsite.

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.