



ChemMasters

POLYSEAL

HIGH PERFORMANCE CURING AND SEALING
COMPOUND

SPECIALTY CONSTRUCTION PRODUCTS

P R O D U C T D A T A

DESCRIPTION

Polyseal is a high solids, high performance concrete curing and sealing compound. This state-of-the-art proprietary formulation completely resists discoloration from ultraviolet light exposure, creating a glossy membrane which remains clear throughout its service life.

USES

- Cure freshly poured concrete where superior curing efficiency and non yellowing performance is required
- Seal, harden and dustproof existing concrete, particularly architectural or residential concrete exposed to freeze-thaw or UV exposure
- Enhance color and provide uniform appearance of dry shake hardened floors and stamped concrete

ADVANTAGES

- Protects concrete surfaces against deicing chemicals, fertilizers, salts, grease, oil, alkalies, mild acids and detergents.
- Minimizes spalling due to freeze-thaw cycle exposure, hair line checking, premature cracking, dusting and other common defects which result from improperly cured concrete.
- Seals out most construction dirt and stains, and prevents mortar, plaster and concrete droppings from bonding to concrete surfaces
- Tint system available to pigment Polyseal in a variety of colors. Tinted Polyseal may be used to cure or seal broom or rough finished colored concrete and aids in hiding finishing imperfections or variations in color.

TECHNICAL DATA

- ASTM C-1315, Type I & II, Class A, *Standard Specification for Liquid Membrane-Forming Compounds for Curing and Sealing Concrete*
- ASTM C-309, Type I, ID & II, Class A & B, *Standard Specification for Liquid Membrane-Forming Compounds for Curing Concrete*

- AASHTO M-148, Type 1 & 1D, Class A & B
- Complies with National Volatile Organic Compound Emission Standards for Architectural Coatings, Federal EPA Regulation 40 CFR Part 59
- USDA approved, when cured, for incidental contact
- U.S. Army Corps of Engineers CRD-C-300

Solids 25% minimum

V.O.C. content 685 gm/L

Moisture retention (ASTM C-156) 0.035 gms/cm²

Flash point over 105°F (40.6°C)

Drying time@70°F (21°C) and 50% relative humidity

Dust free 45 minutes

Hard film 2 hours

Light foot traffic 8 hours

Maximum hardness 7 days

Abrasion Test (CRD-52-50) 21.77 gms wt loss

PACKAGING

Polyseal is available in 5 U.S. gallon (18.9 liter) metal pails, 4 x 1 gallon (4 x 3.7 liter) cases and 55 U.S. gallon (208 liter) drums.

Polyseal Tint is packaged in 0.5 U.S. gallon (1.9 liter) cans. One container of tint is enough to color one pail of clear Polyseal.

ESTIMATING GUIDE

Coverage is dependent upon surface texture and porosity

	Ft. ² /gal	M ² /L
Curing	300	7
Sealing/Dustproofing	350	8
Optional second coat	450	11

DIRECTIONS

MIXING: Do not dilute. Clear Polyseal is packaged ready to use.



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MIXING TINTED POLYSEAL: Pour 1 unit (1/2 gal/1.9 L) of Polyseal Tint into a 5 gallon (18.9L) pail of clear Polyseal. Mix until uniform color is achieved. When using previously tinted material, blend well prior to proceeding with application. Stir occasionally during use to insure adequate pigment dispersion.

APPLICATION: Use a short nap roller or a low pressure, solvent resistant sprayer equipped with a fan nozzle with a .030-.040 orifice tip. Hold sprayer tip 6-8 inches (15-20 cm) from the surface of the concrete. Apply uniformly leaving no pinholes or gaps. Tinted Polyseal is best applied with a short napped roller for color uniformity.

CURING: Apply Polyseal after all bleed water has dissipated and application will not mar surface. The optional second coat is applied at right angles to first coat enhancing moisture retention while providing additional protection from deicing chemicals, oils and greases.

FORMED CONCRETE WALLS: If walls are not to receive further treatment, apply immediately after stripping forms or after rubbing procedures at a rate of 450 Ft.²/gal (11 M²/L).

IN-PLACE CONCRETE: Clean thoroughly with detergent and high pressure water removing any dirt, dust, curing or sealing membranes, paints, oil, grease or other contaminants that prevent adhesion.

COLORED CONCRETE: When sealing a colored floor with tinted Polyseal, a light acid wash of the cleaned concrete may be required. Muriatic or citric acid opens the concrete pores and allows maximum penetration of the colored Polyseal. An acid wash is required on all smooth trowelled floors to be treated with tinted Polyseal, particularly if the concrete is uncolored.

MAINTENANCE: Surfaces previously sealed with Polyseal should be cleaned and resealed every 2-3 years, depending on exposure and traffic.

CLEANUP

Clean tools immediately after use with Polyseal Solvent™ or xylene.

STORAGE

Store tightly sealed containers in cool, dry area away from direct sunlight and sources of heat. Shelf life is one year from date of manufacture.

LIMITATIONS

- Polyseal is not designed as a surface coating. Polyseal should not be used on surfaces to receive concrete overlays or toppings. Consult ChemMasters for compatibility of other surface treatments. Always test for compatibility and adhesion.
- Do not use as a bond breaker for tilt wall construction or on surfaces requiring rubbing.
- Strong organic solvents, xylene, toluene, lacquer thinner, will lift Polyseal film. Gasoline, hydraulic fluids, peanut oil and cooking oils soften and lift Polyseal if spills are not removed quickly.
- Do not apply in the presence of foodstuffs. USDA approval pertains to fully cured Polyseal.
- Do not apply Polyseal to joints or channels scheduled to receive elastomeric caulks.
- Tinted Polyseal is not a permanent remedy for poorly colored or finished flooring. Polyseal is a film forming sealer which will wear over time. Colored Polyseal is not intended as a stand alone coating to color concrete. If a more wear resistant color coating is required, consult ChemMasters technical service staff.
- Tinted Polyseal is not intended for use on steel trowelled surfaces.
- Do not use if ambient or surface temperature is below 40°F (4°C). For best results, condition material to 50°F (10°C) prior to application.
- Quality curing or sealing compounds and floor treatments may darken or highlight the subtle color variations naturally present in concrete. When the difference in shading caused by absorptive deviation or finishing techniques is objectionable, consult ChemMasters technical staff prior to concrete placement for recommendations.

CAUTION

COMBUSTIBLE LIQUID: Keep away from heat or open flames. Use with adequate ventilation. May cause skin, eye and respiratory tract irritation. Do not take internally.

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.