



REMR MATERIAL DATA SHEET CM-SE-1.15

CONCRETE SEALER: THOMPSON'S WATER SEAL (Supersedes previously issued CM-SE-1.15)

1. NAME

Thompson's Water Seal

2. MANUFACTURER

E. A. Thompson Co., Inc.
825 Crossover Lane, Suite 240
Memphis, TN 38117
Telephone: (901) 685-7555

3. DESCRIPTION

Thompson's Water Seal is a clear solution of polymerized organic and inorganic solids carried in an aliphatic solvent. It contains no silicone, mercuric, or lead compounds.

4. USES & LIMITATIONS

Uses: It is used for waterproofing porous materials such as concrete.

Thompson's Water Seal is also used for curing concrete through controlled hydration. In the same operation, it will harden and dustproof the concrete.

Because of its capacity to eliminate "dry-wet" cycles, Thompson's Water Seal will help prevent deterioration of concrete surfaces.

Limitations: Application should be made in a dry atmosphere with ambient temperature of product and surface being treated above 40° F at time of application.

5. MANUFACTURER'S TECHNICAL DATA

Characteristic

Flash point	above 100° F
Viscosity	3.5 ± 1 centipoises
Solids	10.3%
Resistance to abrasion	excellent
Attraction of dust	none
Solvent	Nonphotochemically reactive mineral spirits
Appearance	Clear, colorless liquid
Weight/gallon	6.75 lb/gal
Storage	Do not store above 120° F
Solubility in water	Not soluble in water

Exceeds Federal specifications TT-C-555b and SS-W-110C for water repellency.

Tests of Thompson's Water Seal used for curing or waterproofing concrete show that surface hardness against abrasion is 260 percent greater than untreated concrete (Law Engineering Testing Co., Shilstone Testing Laboratory, and others). Tests by Southwest Research Institute (Report SWRI Project 03-3335-003, 1974) prove that at 300 cycles of freezing and thawing, using 3-percent salt water as a thawing medium, concrete specimens with a concrete design equal to the ones used by Texas and California Highway Departments, Thompson Water Seal surpassed the best former treatments by more than 250 cycles of freezing and thawing.

Warranty: E. A. Thompson Co., Inc., warrants the quality and performance of this product when used according to directions and will refund the purchase price or replace this product within 1 year from date of purchase if it is defective. E. A. Thompson Co., Inc., shall not be liable for the cost of labor, direct, incidental, or consequential damage.

Packaging: Thompson's Water Seal is packaged in 1-gal containers, 5-gal pails, 30-gal drums, and 55-gal drums.

6. MANUFACTURER'S GUIDANCE FOR APPLICATION

Surface preparation:

Surfaces to be treated just be thoroughly dry, clean, and free from oil, grease, tar, dirt, or loose mortar. Efflorescence, if present, should be removed. Seams, joints, and cracks should be filled with appropriate caulking material.

Application: Any common method of application such as spray, brush, or roller may be used with no special skills or equipment required. Oversprays on glass, metal, plastic, or other materials should be wiped clean with similar solvent before drying.

Because of the extreme variations in porosity, coverage will vary due to condition and texture of surface.

Concrete will require approximately 150 sq ft/gal for the first coat and 300 sq ft/gal for the second coat.

7. CORPS OF ENGINEER'S EVALUATION

Physical and mechanical properties:

Percent solid
ASTM D 1644, Method A): 9.8%

Percent water absorption (ambient temperature) (ASTM C 642):

1 day	0.84%
2 days	1.52%
4 days	2.19%
7 days	2.86%

Ratio of percent water absorption for treated to nontreated specimen (2-day submersion):

32.3%

Percent water transmission:

2 days	1.60%
4 days	2.38%
7 days	3.04%

Ratio of percent water transmission for treated to nontreated specimen (7-day diffusion):

86.1%

8. ENVIRONMENTAL CONSIDERATIONS

Reasonable caution should guide the preparation, repair, and cleanup phases of sealant activities involving potentially hazardous and toxic chemical substances. Manufacturer's recommendations to protect occupational health and environmental quality should be carefully followed. Material safety data sheets should be obtained from the manufacturers of such materials. In cases where the effects of a chemical substance on occupational health or environmental quality are unknown, chemical substances should be treated as potentially hazardous toxic materials.

9. AVAILABILITY & COST

Availability: Thompson's Water Seal Waterproofing Formula is available at most construction supply houses and paint and hardware stores throughout the United States and in many foreign countries. Warehouse stocks are maintained in most major cities.

Cost: Cost is available from local distributors.

10. TECHNICAL SERVICES

E. A. Thompson Co., Inc., maintains a staff specializing in waterproofing and chemical treatments of various construction materials. A collection of laboratory and field reports is available. Detailed instructions on application and use of Thompson's Water Seal products on various materials are furnished on request. Assistance with individual problems is also available without cost or obligation.