



Spartan Chemical Company, Inc., 1110 Spartan Drive, Maumee, OH 43537
 Toll Free: 1-800-537-8990, Fax: 419-536-8423, Fax-On-Demand: 888-383-4666
 E-Mail: spartan@spartanchemical.com, Web Site: www.spartanchemical.com
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Floor Seal & Finish



This product meets the Green Seal™ standard for industrial and institutional floor-care products based on its reduced human and aquatic toxicity and reduced smog production potential.

No heavy metals. No formaldehyde. No VOC. No glycol ether. Very low ammonia. GREEN SOLUTIONS FLOOR SEAL & FINISH is a wise choice with respect for the environment.

TRADITIONAL PRODUCTS

Zinc cross-linked polymers
 Formaldehyde
 High levels of VOC (volatile organic compounds)
 Glycol Ethers

TRADITIONAL COMPOUND DESCRIPTION:

Zinc cross-linked acrylic copolymers are a basic building block of floor finishes. Small amounts of zinc may cause problems with the toxicity of sewage effluent and meeting discharge permit requirements.

Formaldehyde is commonly used as a preservative in zinc-free coatings because the absence of zinc increases the threat of spoiling. Formaldehyde, however, is a suspect carcinogen.

Volatile Organic Compounds evaporate as the finish dries. VOC's negatively affect indoor air quality and are regulated.

Glycol Ethers (commonly including Diethylene Glycol Monoethyl Ether and/or Dipropylene Glycol Mononethyl Ether) are commonly used in coatings for film formation. However, they are VOCs and exhibit human health concerns.

GREEN SOLUTIONS FLOOR SEAL & FINISH

Non-zinc cross-linked polymers
 Non-formaldehyde microbiocides
 No VOC (volatile organic compounds)
 No Glycol Ethers

GREEN SOLUTIONS COMPOUND DESCRIPTION:

Zinc-free copolymers are a basic building block of Green Solutions Floor Seal & Finish. This zinc-free alternative reduces effluent toxicity and offensive ammonia odors.

Non-formaldehyde microbiocides are used to preserve zinc-free coatings with the same efficiency as formaldehyde, but they are not suspected carcinogens.

VOC level is 0%.

Specialty Surfactant Blend is used as an alternative to glycol ethers in film formation. These surfactants are non-VOCs and have no human health concerns.

PRODUCT DESCRIPTION:

GREEN SOLUTIONS FLOOR SEAL & FINISH is an acrylic co-polymer based floor seal and finish. Formulated to contain only trace amounts of zinc, GREEN SOLUTIONS FLOOR SEAL & FINISH will not cause problems with sewage effluent.

HIGH SOLIDS/HIGH GLOSS/NON-YELLOWING:

Modern polymer technology affords formula features that include: exceptional clarity, depth of gloss, and superior durability, without yellowing.

MEETS GREEN SEALS GS-40 FORMULATING CRITERIA:

GREEN SOLUTIONS FLOOR SEAL & FINISH meets Green Seal's GS-40 formulating criteria for industrial and institutional floorcare products based on reduced human and aquatic toxicity and reduced smog production potential.

NO VOCs, NO GLYCOL ETHER, HEAVY METALS OR ZINC:

A specialty surfactant blend is used as an alternative to glycol ethers in film formation. These surfactants are non-VOCs and have been shown to have no human health concerns. Because of this less aggressive product formulation, this product must be protected from freezing.

CROSSLINKING POLYMERS:

Substituting alternative crosslinking agents to replace zinc, GREEN SOLUTIONS FLOOR SEAL & FINISH does not contribute to the monitoring issues of effluent for hazardous or suspect ingredients. Through unique formula constituents, GREEN SOLUTIONS FLOOR SEAL & FINISH maintains detergent resistance with all-purpose cleaners, yet removes easily with Green Solutions Floor Finish Remover and other various floor finish strippers.

NO VOC'S, LOW AMMONIA, NO FORMALDEHYDE:

VOC solvents that evaporate as the finish dries can contribute to unpleasant odors. VOCs also negatively impact indoor air quality and are regulated. In addition, GREEN SOLUTIONS FLOOR SEAL & FINISH has less than 1/10 of percent ammonia and no formaldehyde. GREEN SOLUTIONS FLOOR SEAL & FINISH produces no heavy chemical or other unpleasant odors. GREEN SOLUTIONS FLOOR SEAL & FINISH is unique and pleasant to use.

EASY TO APPLY:

Applies easily without mop drag. GREEN SOLUTIONS FLOOR SEAL & FINISH features superior plasticizers allowing for faster recoating of floors, superior leveling and a finish that responds well for gloss renewal without powdering.

EASY TO MAINTAIN:

GREEN SOLUTIONS FLOOR SEAL & FINISH is responsive to high-speed burnishers for renewed gloss. Detergent-resistant formula makes the finish easy to repair.

EASY TO RESTORE:

Dilute GREEN SOLUTIONS FLOOR SEAL & FINISH 1:2 and use as a mop-on restorer or for high-speed equipment. Spraybuff with GREEN SOLUTIONS FLOOR SEAL & FINISH at 1:4 or high speed dry buff to renew and enhance gloss.

WHY ZINC FREE POLYMERS?

Cross-linked polymers, those incorporating zinc, were developed to help maintain an acceptable level of floor protection and appearance. Zinc was selected over other usable metals because of its color, economics and its low toxicity. Prior to using zinc crosslinking, floor finish manufacturers used polymers that were frequently damaged by daily mopping with alkaline cleaners. These cleaners would react with the polymer, causing it to slowly dissolve. Formulating with zinc crosslinked polymers overcame this problem as well as adding increased durability.

Crosslinking allowed floor finish manufacturers to market floor finishes that balanced detergent resistance and removability. Floors could be easily cleaned without harming the polish and, since zinc reacts readily with ammonia and other amines, strippers containing these materials could easily dissolve the polymer once again.

If zinc crosslinking has provided these benefits for over 35 years, why then is the floor polish industry looking at chemistry that does not contain zinc? The answer can be found in the Clean Water Act. Zinc is found on both the 65 Toxic Pollutants and the 126 Priority Pollutants lists. This has forced Publicly Owned Treatment Works (POTW's) and sewer districts to monitor certain zinc-using industrial and institutional customers so they do not exceed threshold levels of zinc in their wastewater. Stripping a floor of a floor polish that contains zinc and disposing the residue down the drain may add to an already elevated level that periodically could exceed the mandated limits at the point of discharge.

DIRECTIONS FOR USE:

Some individuals may be sensitive to ingredients in this product. Before using, read product label and MSD sheet. Wet floors may be slippery. Prevent pedestrian traffic with signs or barricades.

INITIAL APPLICATION:

1. Completely strip all old floor finish with Spartan Green Solutions Floor Finish Remover.
2. Remove the stripping solution and follow with two to three clear-water rinses. Allow to dry.
3. Apply GREEN SOLUTIONS FLOOR SEAL & FINISH in a uniform, thin coat. Let dry thoroughly: normal conditions, 30 minutes; high humidity, 45 minutes or longer. Apply subsequent coats in the same manner. Three to five coats are recommended.

MAINTENANCE:

1. Dust mop or sweep floor as necessary. Spartan water-based Dust Mop/Dust Cloth Treatment is recommended.
2. Damp mop using Spartan Green Solutions All Purpose Cleaner.
3. To easily repair traffic areas between finish applications:
 - a. **Conventional Machines:** Spray-buff using Spartan's Green Solutions Floor Seal & Finish diluted 1:4. You may also use Green Solutions Floor Seal & Finish as a mop-on restorer, diluted 1:2. Traffic lanes may be recoated as necessary.

- b. **High Speed Machines:** Mix one gallon of Green Solutions Floor Seal & Finish with two gallons of water (1:2). Saturate clean mop and wring thoroughly. Apply thin coat of diluted Green Solutions Floor Seal & Finish and let dry. Dry buff or burnishes using a non-aggressive polishing pad. Traffic lanes may be recoated as necessary.
4. For heavily soiled areas, machine scrub using the recommended dilution of Green Solutions All Purpose Cleaner and re-coat.

NOTE: For best maintenance results, always use Spartan Green Solutions All Purpose Cleaner and Green Solutions Floor Finish Remover as well as cold water dilutions.

SPECIFICATION DATA:

Total Solids - 26.5%

Non-Volatile Solids - 21.5%

Specific Gravity - 1.02 @ 24°C/75°F

pH (Concentrate) - 7.8 - 8.2

Stability

- a. Storage @ 24°/75°F - One year minimum
- b. Accelerated @ 49°C/120°F - 60 days minimum
- c. Protect from freezing

Gloss (Gardner)

- a. 1 coat - 80-85
- b. 2 coats - 85-90

Static coefficient of friction meets or exceeds 0.5 as determined by ASTM method D 2047.

Coverage - 2,000 to 3,000 square feet per gallon depending on application method and porosity of floor.

PACKAGING:

Green Solutions FLOOR SEAL & FINISH is packaged in 275-gallon reusable totes; HDPE (High Density Polyethylene) 55, 30, and 15-gallon drums; 5-gallon pails; and gallons, four per case. Standard label copy is available in both English and Spanish. Ready-to-use labels are also available.

Be sure to read all Directions, Precautionary and First Aid Statements on product labels before use of this or any Spartan product. If questions remain, consult your employer or a physician. Material Safety Data Sheets for all Spartan products are available from your authorized Spartan distributor or by visiting www.spartanchemical.com.

GUARANTEE:

Spartan's modern manufacturing and laboratory control insure uniform quality. If dissatisfied with performance of product, any unused portion may be returned for credit within one year of the date of manufacture.