



TerraSeal

Technical Data Sheet

Product Description

TerraSeal is designed to be used as a stand-alone thin film system, a silica broadcast system, and the topcoat for the **TerraRich®** system. It provides continuous chemical protection while providing a high-gloss, non-blushing finish for an outstanding appearance. It can be applied from 16-65 mils in smooth or anti-skid applications with moderate physical requirements and intermittent chemical exposure. **TerraGrip** can be added to **TerraSeal** to provide slip resistance.

TerraSeal is a two component 100% solids epoxy coatings cured with a cycloaliphatic amine.

Features and Benefits

Nonporous: Prevents chemical migration to the substrate which can cause disbonding and environmental contamination.

100% Solids: Low odor makes it ideal for use in Pharmaceutical and Food & Beverage facilities.

Attractive: High gloss finish with excellent gloss and color retention. Orange Peel finish available.

Chemical Resistant: Provides resistance to many common industrial chemicals. Consult manufacturer for recommendations.

Excellent Adhesion: May be applied over damp concrete.

Hygienic: Sealed surface allows easier cleaning.

Applications

Pharmaceutical Plants
Food and Beverage Plants
Commercial Kitchens
Dairies
Wastewater Treatment
Loading Docks
Mechanical Rooms
Production Lines

Application Overview

Environment

Apply when air, surface, and material temperatures are between 65°F and 90°F. The surface temperature must be at least 5° above the dew point to prevent moisture condensation.

Substrate

The concrete must be structurally sound and free of oil, grease, and other contaminants. When applying directly to concrete, the concrete must first be prepared by shot blasting, scarifying or acid etching to create a surface profile equivalent to 40-60 grit sandpaper.

Mixing

Part “A” should be mechanically pre-mixed for 60 seconds before adding Part “B”. After adding Parts “A” and “B” together, mix for 90 seconds. Do not hand mix.

Application

Immediately pour activated product on the substrate and, using a squeegee, pull out the material at the desired coverage rate.

Rolling

Using a 3/8” nap non-shedding roller, roll the product in both directions to ensure even coverage.

Recoating

If additional coats are desired, they must be applied within 24 hours, or the cured material must be sanded before application.

Please refer to TerraSeal Application Instructions for complete application details. Information here is summarized and is to be used only as a guideline.

Recommended Uses

- Finish coat over **TerraRich®** or **PT Clad** heavy-duty topping
- 50 mil anti-skid system for:
 - splash and spill chemical exposure
 - light to medium service areas

Thin film system

- light service areas

Clear sealer for TerraQuartz® and TerraChip® systems

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Product Limitations

Rising Temperatures

Concrete will outgas during periods of rising temperatures. To prevent bubbling, always apply when the application and cure temperatures will be constant or decreasing.

Cracks

Moving cracks in the substrate are likely to transfer to the coating unless treated properly.

Moisture

All concrete surfaces should be tested for moisture before applying a seamless coating. Water vapor transmission upwards through on-grade (or below grade) concrete slabs may result in system failure. If moisture emissions exceed 3 lbs./1000 sq. ft./24 hours per ASTM F1869, or concrete relative humidity exceeds 75% per ASTM F2170, use of TerraPrime MM may be required prior to application of the coating system. Contact the manufacturer before application

Safety

This product is intended to be installed by experienced professionals. Read the SDS and product label for complete safety information before using. Avoid contact with all materials to prevent irritation. Use only with adequate ventilation.

Safety glasses, gloves, and protective clothing should be worn at all times while handling this product. Avoid exposure to eyes and skin as isocyanate resins and amine hardeners can cause mild to severe skin irritation.

Maintenance

Do not wash the floor within 5 days of installation. Exposure to water before the floor is completely cured may dull the finish. Damp mop as needed with a clean mop head and clean, warm water with a mild detergent or degreaser. Rinse thoroughly to avoid leaving residue. When using a new cleaner for the first time, test clean an inconspicuous area to ensure compatibility with the floor.

Storage

Store material in a cool, dry location away from flames. When stored properly, the shelf life will be a minimum of 1 year.

Warranty

American Industrial warrants its products to be free of defects in material and workmanship. This warranty specifically excludes the following: problems due to irregularities in the substrate, failures caused by moisture migration through the substrate, changes in color and gloss. Claims must be made within 12 months of installation of material.

Physical Properties

Components	2	
Mix Ratio (A:B)	2:1	
Solids	100%	
Packaging	3 gallon kit	2 gal A/1 gal
Coverage	16-20 mil system	150-200 1st coat 150-200 2nd coat Seal coat for broadcast system 75-100 sq. ft/ga
Application Temperature	65°F-90°F	
Viscosity (mixed)	500 cps	
Working Time (72°F)	30 minutes	
Cure Time	10 hours (foot traffic) 10-24 hours (recoat)	
Flash Point	Part A: >200°F Part B: >200°F	
Shelf Life	12 months	
USDA: Food and Beverage	Meets requirements.	

Performance Properties

Adhesion (ASTM D-4541)	>450 psi (concrete fails)
Hardness (ASTM D-2240)	84 Shore D
Abrasion Resistance (ASTM D-4060) cs-17 wheels, etc	75 mgs.
Maximum Service Temperature	220°F

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