

# Technical Data

## H2O ZioTHANE Low Gloss

### DESCRIPTION

**Floorguard® H2O ZioTHANE Low Gloss** is a two component, water-based, aliphatic high performance, low gloss urethane floor sealer/topcoat. H2O ZioTHANE Low Gloss exhibits excellent abrasion resistance, chemical resistance, and UV stability, with no objectionable solvent odors associated with other urethanes.

### Considerations

- **Ideal for chemical exposure areas, auto facilities, air craft hangers, warehouses, etc.**
- **Recommended when a low odor, durable, abrasion resistant coating is needed**
- **Recommended for coating concrete or top-coating epoxy coatings**
- **Do not freeze product**
- **No top coat required**

### Chemical Resistance

Reagent	Rating
Acetic Acid-5%	C
Xylene	D
Mek	B
Gasoline	D
10% Sodium Hydroxide	E
50% Sodium Hydroxide	D
10% Sulfuric Acid	D
10% Hydrochloric Acid	D
20% Nitric Acid	C
Ethylene Glycol	D

**A-not recommended, B-2 hour term splash spill, C-8 hour term splash spill, D-72 hour immersion, E-long term immersion**

### Physical Properties

Solids by Weight	Mixed = 60% (±2%)
Solids Content, % vol	Mixed = 55% (±2%)
VOC	10 grams/liter
Colors	Available in clear only
Recommended Film Thickness	4-5 mils wet thickness per coat
Coverage per Gallon	300-350 ft <sup>2</sup> @ 4-5 mils wet thickness
Packaging Information	Available in 3 gallon and 15 gallon kits
Mix ratio	2 parts A to 1 part B
Abrasion Resistance	Taber adrasor CS-17 calibrase wheel with 1000 gram total load and 500 cycles = 23 mg loss
Shelf Life	6 months in unopened containers
Impact Resistance	Gardner Impact, direct = 161 in.lb. (passed)
Low Gloss, 60°F	<20@ Erichsen Glossmeter
Flexibility	No Cracks on a 1/8" mandrel
Adhesion	>320 psi @elcometer (concrete failure, no delamination, over primer/coating)
Viscosity	Mixed= 500-650 cps
DOT Classifications	Not regulated
Application Temps	55-95°F

### Cure Schedule: (70°F)

Pot Life	1 Hour minimum
Tack free (dry to touch)	5-7 hours
Recoat or topcoat	7-12 Hours
Light foot traffic	24 hours
Full Cure (Heavy Traffic)	3-5 Days

## Limitations

- If product is left uncovered after mixed, air contact may cause product to skim off.
- Colors or gloss may be affected by high humidity, low temperatures, chemical exposure, or exposure to lighting such as sodium vapor lights.
- For best results use a 3/8" nap roller
- Slab on grade requires moisture barrier
- Substrate temperature must be 5°F above dew point
- All new concrete must be cured for at least 30 days
- Physical properties are typical values and not specifications
- Tire contact may cause staining and discoloration
- Additional coats should be applied before a twenty four hour time period has elapsed, otherwise, it may be necessary to slightly roughen and degloss the previous coat

## MIXING AND APPLICATION INSTRUCTIONS

**SUBSTRATE PREPARATION:** Preparation methods may vary depending on the system being applied. When installing a one or two coat thin build system (3-10 mils dry) mechanical scarification until a suitable profile is achieved is recommended. Floor systems that are higher than 10 mils dry, a fine brush blast (shot blast), is recommended. To assure a trouble free bond, all dust, oil, dirt, foreign contaminants and laitance must be removed. It is recommended to perform a moisture test to determine that the concrete has an appropriate vapor barrier. This can be done by placing a 4'X4' plastic sheet on the substrate and taping down the edges. Once 24 hours has passed, and the substrate is still dry below the plastic sheet, then the substrate does not show signs of eventual hydrostatic pressure problems that may later cause disbonding. This test does not guarantee, however, that there may not be future hydrostatic pressure issues in the future.

**PRODUCT STORAGE:** Product must be stored in an area that will bring the product to room temperature prior to using. Continuous storage should be between 60 and 90 degree F. Keep from freezing

**PRODUCT MIXING:** Kits should be mixed in their entirety. Pre-mix both Part A and Part B before making any batches. If partial kits are to be used, the product mixing ratio is 2 parts A to 1 part B. After the two parts are combined, mix well with slow speed mixing equipment until the material is thoroughly mixed and streak free, avoid whipping air into the product when mixing.

**Product Application:** Use a brush or 3/8" nap roller to apply the mixed material. Maintain temperatures within the recommended ranges during the application and curing process. Properly prime the substrate. It is best to maintain a wet edge to avoid roller marks. Direct sunlight or high temperatures may cause visible roller making during application. Applying the product too thin or over rolling the product, may result in roller marks. Uneven applications can vary the look and gloss of the floor. The easiest way to install this product is, after mixing it, pour the product into a flower watering container, then pour the product onto the floor as evenly as possible. Do not pour it all out onto the floor, only pour out in small sections. Once you pour out the first section, begin rolling it out evenly. Do not over roll or cross hatch, it's not necessary, and will cause roller marks. When you are near the end of the first section, then take the watering container and begin pouring out a new section, pouring directly into the ribbon that remained. Continue this process until the entire floor has been rolled out. The pot life may seem to be longer, however, it is not recommended to apply product beyond one hour of it being mixed. Once a batch is mixed, start applying right away. If the area does not have control joints, it's recommended to make smaller batches. Over rolling the floor can also cause roller marks in the finished look. After the product is mixed, the air exposure may cause skinning on the top of the product if container is left uncovered. Simply remove the thin layer, and re-mix product and apply. After an extended period of time, any product not used, may foam up and expand.

**Recoat or Topcoating:** Installing multiple coats of this product is acceptable. If recoating this product, be sure that all of the volatile components have evaporated from the coating during the curing process. Refer to the cure schedule as a guideline to follow, however it is best to test the coating before recoating or topcoating. Pressing your thumb on the coating to ensure a fingerprint impression is not visible, is a good way to determine if ready to recoat. If there is no impression visible, then coating the floor can be done. Note, colder temperatures require longer cure times before product can be recoated. Prior to coating the floor, make sure there are no contaminants exist. If contaminants or a blush exists, remove with a standard detergent cleaner and ensure floor is clean and dry prior to coating. When recoating this product with subsequent coats of urethane, make sure to apply the recoat within the 24 hour time frame. It is recommended to degloss the previous floor prior to coating to ensure a trouble free bond.

**Cleanup, Floor Cleaning and Restrictions:** Use PM solvents for cleanup. When cleaning the floor, CAUTION! Some cleaners may affect the color of the installed floor. Test each cleaner used in a small area, ensuring no damage occurs. Restrict the use of the floor to light traffic and non-harsh chemicals until the floor is fully cured, refer to the cure schedule. Allow the floor to remain completely dry during the curing process.

## Warranty

**Floorguard Products®** warrants that our products are manufactured to strict quality assurance specifications and that the information supplied by us is accurate to the best of our knowledge. Such information supplied about our products is not a representation or a warranty. It is supplied on the condition that you shall make your own tests to determine suitability of our product for your particular purpose. Listed physical properties are typical and should not be construed as specifications. NO WARRANTY IS MADE, EXPRESSED OR IMPLIED, REGARDING SUCH OTHER INFORMATION, THE DATA ON WHICH IT IS BASED, OR THE RESULTS YOU WILL OBTAIN FROM ITS USE. NO WARRANTY IS MADE, EXPRESSED OR IMPLIED, THAT OUR PRODUCT SHALL BE MERCHANTABLE OR THAT OUR PRODUCT SHALL BE FIT FOR ANY PARTICULAR PURPOSE. NO WARRANTY IS MADE THAT THE USE OF SUCH INFORMATION OR OUR PRODUCT WILL NOT INFRINGE UPON ANY PATENT. We shall have no liability for incidental or consequential damages, direct or indirect. Our liability is limited to the net selling price of our product or the replacement of our product, at our option. Acceptance of delivery of our product means that you have accepted the terms of this warranty whether or not purchase orders or other documents state terms that vary from this warranty. No representative is authorized to make any representation or warranty or assume any other liability on our behalf with any sale of our products. Our products contain chemicals that may CAUSE SERIOUS PHYSICAL INJURY. BEFORE USING, READ THE MATERIAL SAFETY DATA SHEET AND FOLLOW ALL PRECAUTIONS TO PREVENT BODILY HARM.