

### TDS & Application Guide

#### Description

UltraSeal is a specially formulated, one-part moisture cured Aliphatic-Polyurethane sealer for floors and walls. This coating has low odor, contains no VOCs or HAPs, and is UV light stable. The system develops a hard, high-gloss, wear resistant, and flexible thin film top coat. It can be supplied as clear gloss, clear matte, or tinted gloss.

#### UltraSeal Features & Benefits

- Solvent free, zero VOC, zero HAPs, very low odor
- Recommend 3-4 mil thick application, 400-500 sf/gallon
- Single component with long working time
- High Gloss and Matte options
- Excellent adhesion, good for direct to concrete
- Excellent wear resistance, better abrasion resistance than most polyaspartics
- Very good elongation and tensile strength
- Excellent UV light resistance, good for direct sunlight, will not yellow or chalk.
- Finish colors include: Clear gloss, Clear satin, and Tinted gloss
- High chemical and mold resistance
- Environmentally safe and meets all USDA/FDA guidelines
- Excellent stain resistance to ketchup, iodine, coffee, etc.
- Brings life to Acid-stained concrete

#### Applications

- Over prepared concrete floors
- Over stained concrete or decorative epoxy floors
- Protective coating for floors and walls
- Interior or exterior protective coatings

#### Product Details

Packaging	Single component packaging: 1- gallon, 5-gallon pails
Color	Clear gloss, Matte clear, Tinted gloss
Shelf Life	12 months in unopened containers
Pot life @ 73F	60+ minutes in open air
Tack free time @ 73F	8+ hours
Re-coat window @ 73F	12-20 hours
Pencil Hardness (ASTM D-3363)	4H+
Impact resistance (ASTM D-2794)	Passes 160 in-lb. (direct and indirect)
Elongation (ASTM D-2370-98)	40%
Taber Abrasion (ASTM D4060-14)	9 mg loss
Coefficient of friction (ASTM D-2047)	>0.6
Tensile strength (ASTM D-2370-98)	3427 psi
Light traffic @ 73F	24 hours
Full cure	5 days
Application Temperature	60-80F, <70% RH
VOC Content	1 g/L
Allowable MVR	3 lbs./1000 sq.ft. per 24 hours per ASTM F1869 (Calcium Chloride Test)

## Chemical Resistance

After 5-day full cure

Motor Oil	R	25% Sulfuric Acid	R
Gasoline	R	25% Acetic Acid	R
Diesel Fuel	R	10% Nitric Acid 85%	LE
Brake Fluid	R	Phosphoric Acid	LE
Anti-Freeze	R	10% Hydrogen	R
Hydraulic Fluid	R	Peroxide 25%	R
Brake Cleaner	R	Hydrochloric Acid IPA	R
Acetone	R	MEK	R
Xylene	R	Iodine	R
Jet Fuel	R	Skydrol	R
Salt Water	R	Alcohol	R
Vinegar	R	Household Bleach	R

R-Recommended      LE-Limited Exposure (2 hours)      NR-Not Recommended

## Surface Preparation

If applying over existing, glossy coating, thoroughly sand surface with 120-320 grit sand paper to ensure a strong bond. After sanding, vacuum surface to remove all dust. Do not use water to clean surface prior to coating, and Urethane is highly moisture sensitive.

If applying over acid-stained concrete, be sure surface is clean and dry. Follow acid stain manufacturers procedure for cleaning and neutralizing surface prior to installation of this product.

Over concrete, UltraSeal is self-priming, but concrete should have CSP 2-3 profile to promote best adhesion. Concrete must be aged 28 days or longer and requires MVER of 3 lbs./1000 sq.ft./24 hours or less per ASTM F1869.

## Mixing & Application

No mixing is required for this single component urethane sealer. Keep containers tightly sealed when not using the product.

This material applied thickness should not exceed 5 mils, as thick film buildup can cause foaming of the sealer. Typical application thickness is 4 wet mils or less.

Use a non-shedding, urethane/epoxy grade, high density, short nap roller. When using a squeegee, pull the material to thin mil thickness and back roll with above described roller. Apply at a rate of 400 sf/gallon or more, do not apply thicker than 400 sf per gallon rate. Re-coat window is 12-20 hours after installation.

For matte finish option, add pre-measured additive to one gallon of urethane, and mix at low speed for approximately 60 seconds or until you achieve uniform consistency.

Best when applied between temperatures of 50F to 80F, with humidity levels between 40-60%.

For slip resistance, you can integrate aluminum oxide, "sharks grip" aggregate, or similar aggregate to achieve desired texture.

NOTE: UltraSeal is sensitive to moisture, keep containers closed as much as possible. Do not allow to puddle.

## Clean Up

UltraSeal can be cleaned with MEK or Acetone.

Dispose of excess material in accordance with local, state, and federal regulations.

## Storage

UltraSeal must be stored in closed containers, between temperatures 50-80°F, to avoid evaporation of the water. Do not allow to freeze.

## **Safety Precautions**

### **HEALTH CONSIDERATIONS**

As with all epoxies, good hygienic habits must be observed, and the wearing of protective clothing and gloves is advised. Before using any S3 Surface Solutions, LLC. product, please read and follow the product Safety Data Sheet (SDS). Use this product only as directed. Keep out of the reach of Children.

### **FOR YOUR PROTECTION**

The data, statements and recommendations set forth in this product information sheet are based on research and development work which has been carefully conducted by S3 Surface Solutions, LLC. and we believe such data, statements and recommendations will serve as reliable guidelines. This product is subject to numerable uses under varying conditions over which we have no control, and accordingly, we do NOT warrant that this product is suitable for any use. Users are advised to test the product in advance to make certain it is suitable for their installation conditions and uses.

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