

DATA SHEET FOR GROUNDWORX ULTRA ESD URETHANE TOP COAT

PRODUCT DESCRIPTION AND USE

GroundWorx Ultra ESD urethane top coat is a low odor, chemical resistant, aliphatic polyester ESD coating designed to provide static control properties. GroundWorx Ultra ESD top coat produces a nonyellowing, semi-gloss to satin finish and can be pigmented in a wide variety of colors. It can be installed in a wide variety of environments where the harmful effects of electrostatic discharge must be avoided. GroundWorx Ultra ESD urethane meets ESD Association (ESDA) standards and is compliant with ANSI/ESD S20.20-2014 recommendations for grounded static-control flooring.

TECHNICAL DATA

Physical Properties

- Flash Point (ASTM D3278) 187°F (86°C)
- Solids Content (ASTM D2369) 75%
- Mixed Viscosity (D2196) 300-500 cPs
- Volatile Organic Compounds < 250 g/l
- Cure Time @ 75°F:
 - ◊ Dry to touch, tack free: 8 hours
 - ◊ Fully dry: 16-24 hours
 - ◊ Full Cure: 7-14 days

Performance Properties

- Abrasion Resistance (ASTM D4060) 25 mg
- Coefficient of Friction (ASTM D2047, James Test) 0.55 – 0.65
- Tensile Strength (ASTM D2370) 6,160 PSI
- Elongation (ASTM D2370) 8%
- Impact (ASTM D2794) 140 in/lbs, direct & reverse
- Hardness (ASTM D3363) 2H
- Thickness 3-4 mils
- Electrical Resistance (ASTM F-150, ANSI/ESD S7.1)
 - ◊ Point to Point: $2.5 \times 10^4 - 1.0 \times 10^6$
 - ◊ Point to Ground: $2.5 \times 10^4 - 1.0 \times 10^6$
- Body Voltage Generation (ANSI/ESD STM97.2) < 15V
- Static Decay (ASTM F-101C) 5,000 - 0 Volts in <0.1 seconds

*Properties and results are based on laboratory testing at 72°F (22°C) and 50% RH, theoretical calculations, and estimates. Typical properties, as stated, are to be considered as representative of current production and should not be treated as specifications.

GENERAL INFORMATION

Storage

Materials should be stored in original un-opened containers indoors between 65°F (18°C) and 90°F (32°C) and at or below 50% RH.

Shelf Life

3 months from date of manufacture (un-opened)

Disposal

Dispose in accordance with federal, state, and local regulations.

Maintenance Guidelines

Allow floor coating to cure for at least 7 days before cleaning by mechanical means (i.e. sweeper, scrubber, disc buffer). Increased life of the floor will be seen with proper maintenance and will help maintain a fresh appearance. Regularly sweep to avoid retention of dirt and grime which can quickly dull the finish, decreasing the life of the coating. Spills should be removed as quickly as possible as certain chemicals may stain and can permanently damage the finish. Only soft nylon brushes or white pads should be used on your new floor coating. Premature loss of gloss can be caused by hard abrasive bristle Polypropylene (Tynex®) brushes.

Damages & Repairs

Heavy objects dragged across the surface will scratch any floor coating. Avoid gouging or scratching the surface. StaticWorx recommends protecting the floor with plywood, Masonite, or Ram boards whenever heavy equipment is being moved in or out of the space. Pointed items or heavy items dropped on the floor may cause chipping or concrete chip damage. Plasticizer migration from rubber tires can permanently stain the floor coating. If a rubber tire is planned to set on the floor for a long period of time, place a piece of acrylic sheet between the tire and the floor to prevent tire staining. Rubber burns from quick stops and starts from forklifts and lift trucks can heat the coating to its softening point, causing permanent damage and marking. Repair gouges, chips, and scratches as soon as possible to prevent moisture and chemical under cutting and permanent damage to the floor coating.

Usage

Installation of all products purchased must be by professional coatings installers. Unapproved modification to any StaticWorx product voids the warranty. The installer shall maintain a written record of field conditions (including, without limitation, surface and atmospheric conditions, usage rates, and lot numbers of products installed). StaticWorx reserves the right to inspect any installed product, installation, and/or maintenance records and records of field conditions and may conduct additional testing as is reasonably required to investigate any warranty claims. Warranty shall only apply for products or materials that have been paid for in full.

Moisture Vapor Transmission (MVT) and ASR (Alkali Silica Reaction) Disclaimer and Exclusion: Although rare, some floors at or below grade level are sometimes subjected to saturation by moisture from beneath the concrete floor slab. This moisture can travel through the concrete and collect between floor coatings, creating the potential for delaminating from hydrostatic pressure and or ASR. Conditions contributing to this include heavy rainfall, broken pipes, excess hydration within fresh concrete, and other factors or defective and old concrete. These factors are difficult, if not impossible, to predict. StaticWorx recommends testing for moisture and/or the presence of ASR in the concrete substrate prior to applying any polymer floor topping as detailed above. ASR can be predicted by a higher than normal pH within the concrete. If high pH should be detected, it is recommended that an independent lab test for ASR. If and when delamination of the floor occurs because of a moisture condition that exists beneath or in the concrete slab beyond the capacity of the individual product installed, or if a failure occurs due to ASR, the StaticWorx limited warranty will not apply.