

# DATA SHEET FOR **GROUNDWORX ULTRA MVR PRIMER**

## PRODUCT DESCRIPTION AND USE

StaticWorx **GroundWorx Ultra MVR** primer is a 100% two-component epoxy primer specially formulated to deeply penetrate concrete slabs to reduce moisture vapor transmission. **GroundWorx Ultra MVR** primer provides a Class 1 Vapor Suppression rating when applied over a properly prepared and cured concrete substrate at specified application thickness. It provides enhanced protection against failure of epoxy and urethane coatings due to elevated concrete moisture and moisture vapor levels.

## FEATURES

- 100% solids
- Excellent moisture tolerance
- Low Odor
- Blush resistant
- Low Viscosity
- Resistance to High Alkalinity
- Meets Requirements for ASTM F3010-13 (Standard Practice for Two-Component Resin Based Membrane-Forming Moisture Mitigation Systems)

## CAPACITIES

- May be used on concrete exhibiting readings up to 25 lbs. (ASTM F1869-11)
- Effective at concrete relative humidity levels of <RH levels 99% (ASTM F2170-11)

## PACKAGING

### 15 Gallon Kit:

- (x2) GWX ULTRA MVR-A/5SF (Package contains 5 gal)
- (x1) GWX ULTRA MVR-B/5
- Volume Mix Ratio: 2A:1B

## MATERIAL PROPERTIES

Properties and results are based on laboratory testing at 72°F (22°C) %50 RH.

Properties	Test Method	Results
Pot Life	SHYODO (150 Gram Mass)	25 minutes
Volume Solids (mixed)	ASTM D2369	100%
Mixed Viscosity	ASTM D2196	800-1200 cPs
Compressive Strength	ASTM D695	15,000 psi
VOC Content	ASTM D3960	0 g/l
Tensile Strength	ASTM D638	9500 psi
Permeance	ASTM E-96 (water)	20 mils - .065 16 mils - .080 10 mils - .12
Bond Strength	ASTM D7234	>200 psi
Dry Time (Gardener Circular Dry Time-Dry Hard)	10 hours	
Flexural Strength	ASTM D790 (Break Point)	16,000 psi

## INSPECTION AND APPLICATION

**Caution! Follow all precautions and instructions prior to installation.**

### SUBSTRATE

The standard concrete substrate must be free of curing membranes, silicate surface hardener, paint, or sealer and be structurally sound. Do not coat if concrete contains Type III Portland Cement. If you suspect concrete has been treated or sealed, proceed with complete removal process. Consult your StaticWorx representative for further instruction if silicate hardeners or membranes have been utilized. Concrete must have a minimum internal tensile strength of 200 psi when tested in accordance of ASTM C1583. Concrete must have a maximum relative humidity of 95% when tested as per ASTM F2170.

### MOISTURE

Moisture and moisture vapor transmission rates are dynamic in nature and may change over time. Initial testing does not guarantee future results. StaticWorx must be consulted if a written moisture mitigation warranty is required prior to product use.

### CONTAMINATION AND SURFACE DEFECTS

Factors including the migration of oils, chemicals, excessive salts or Alkali Silica Reaction (ASR) in the concrete from will elevate the risk and may cause adhesion failures. Testing prior to application is always recommended.

If contaminates including oil, silicone, mold release agents and/or other materials are present, resinous flooring systems may fisheye or crawl away from the surface. All surface contaminates should be removed with a suitable detergent prior to application. Solvent cleaning of silicone based contaminates is NOT RECOMMENDED. Please contact StaticWorx technical service for additional recommendations.

### TEMPERATURE AND HUMIDITY

During the application and cure of the coating, the substrate temperature, material temperature and room conditions must be maintained between 65°F (18°C) and 90°F (32°C). Relative Humidity (RH) should be limited to 30-80%. DO NOT apply coatings unless the surface temperature is more than five degree over the dew point.

### PREPARATION

Surface dirt, grease, oil and contaminates must be removed by detergent scrubbing and rinsing with clean (clear) water.

### MECHANICAL PREPARATION

Shot Blasting to a CSP #3 or greater is required method of preparation. Diamond grinding shall be limited only to areas where shot blasting is not possible.

### CRACKS AND JOINTS

All static non-moving cracks must be cleaned out and coated with GWX Ultra MVR primer prior to filling with a polymer or cementitious crack filler. Cracks primed with GWX Ultra MVR can also be filled by thickening the GWX Ultra MVR with a fumed silica thickening agent such as Cab-O-Sil or approved equal. Moving control joints must be cleaned out and honored. Prime sides of the joint with GWX Ultra MVR and let cure prior to installing a flexible joint material such as GWX Ultra polyurea joint filler. Do not apply GWX Ultra MVR directly over flexible joint fillers.

## APPLICATION EQUIPMENT

- Protective equipment and clothing as called for in the SDS (Safety Data Sheet)
- Jiffy<sup>®</sup> Mixer Blade model ES
- Clean container for mixing material
- Low speed high torque drill motor
- Foam or solid core, fiber free roller covers
- Application Squeegee

## MIXING

The mix ratio for GWX Ultra MVR is 2 gallons Part A to 1 gallon of Part B by volume. Mix the two components together for a minimum of 3 minutes with a Jiffy<sup>®</sup> ES mix blade attached to a slow speed drill. Mix only enough material at one time that can be applied without exceeding the pot life.

**Note:** Once this material is mixed it can't be resealed for later use. Material must be used as is. Do not thin or reduce with solvent.

## APPLICATION

GWX Ultra MVR may be applied to the floor surface using a flat or notched squeegee. Pour material out immediately and spread over floor. Leaving the material to sit in the pail longer than 5 minutes will result in an increase of viscosity and reduce performance properties. Back roll and evenly spread the wet coating using a solid core or foam roller. Care should be taken to overlap and cross lap, but not over roll the coating introducing air to the surface.

## SPREADING RATE

To achieve full vapor transmission and class 1 designation, GWX Ultra MVR must be applied at a total film thickness of at least 16 mils. This can be achieved as either a single coating, or in two applications steps. The first coat must be a minimum of 8 mils. When out-gassing of the concrete is suspected or encountered, two coats are recommended. The first coat must be a minimum of 8 mils. GWX Ultra CPU color pack may be added on the second coat only in a two-coat application to aid in hiding and color development. The maximum allowable color pack addition is 3 fl. oz per mixed gallon of GWX Ultra MVR.

## CURE TIME AND RECOAT

GWX Ultra MVR must be allowed to cure a minimum of 8 hours at 70°F before application of additional primer, epoxy or urethane coating. Coating must be cured sufficiently enough to accept foot traffic without encountering tackiness or leaving permanent footprints. The maximum re-coat time is 36 hours. If the maximum re-coat expires, the cured GWX Ultra MVR must be lightly sanded with a 100 grit sandpaper or sanding screen and another coat of GWX Ultra MVR must be applied at a minimum of 10 mils.

READ SDS (SAFETY DATA SHEET) FOR SAFETY AND PRECAUTIONS. USE PRODUCT AS DIRECTED FOR INDUSTRIAL USE ONLY. KEEP OUT OF REACH OF CHILDREN.

## **Caution**

Heavy objects dragged across the surface will scratch all floor coatings. Avoid gouging or scratching the surface. Pointed items or heavy items dropped on the floor may cause chipping or concrete pop out damage. Repair gouges, chip outs, and scratches as soon as possible to prevent moisture and chemical under cutting and permanent damage to the floor coating.

## **Technical Support**

For application questions, please contact your StaticWorx representative or technical service department at 617-923-2000.

## **Disposal**

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