

# Moisture Guard Data Sheet

## Part # MG

- **DESCRIPTION:** Concrete Solutions<sup>®</sup> Moisture Guard is a water based colloidal silicate densifier, which is nonhazardous, zero VOC's, and creates a permanent integral barrier that both densifies concrete through increased hydration and protects concrete from chemical attacks from a greatly reduced permeability. Moisture Guard is a proprietary formulation in an aqueous base, which is safe and easy to apply.
- **TYPICAL USES:** Moisture Guard is recommended as a densifier and moisture vapor blocker prior to the application of cementitious overlays, epoxy coatings, traditional flooring materials, and in concrete polishing applications. It can be used for related decorative concrete applications including flatwork, stamped and textured concrete, concrete counter tops, concrete masonry units, stucco, mortar, grout, and most any other Portland cement based surface.

#### **FEATURES & BENEFITS:**

- Exhibits deep a high degree of penetration without leaving any residue on the surface
- · Significantly decreases un-hydrated cement (free alkali) thereby increasing concrete's density
- · Greatly reduces permeability
- · Highly effective in protecting the concrete surface against acid & salt/chemical erosion
- Formulated using "green technology" and LEED credit qualification
- No harmful fumes or objectionable odors for trouble free applications on interior projects
- Ready to use formula allows for easy application and labor cost savings on the job
- LEED CREDIT CONSIDERATIONS: Materials and Resources: MR Credit 1.2 Building re-use. Environmental Quality: EQ Credits 4.2: Low emitting materials (VOC <25 g/L).</li>

HEMICAL PROPERTIES*:	Test	Result
Specific Gravity (grams/cc)	ASTM D-792	1.10
Volatile Organic Compounds per EPA method		0 g/l**
Theoretical Coverage – broom finish floors – hard troweled floors		150 – 200 sqft 200 – 300 sqft
Odor		slight
Color		semi-transparent white liquid
Shelf Life - Unopened Containers		24 months

\*Values calculated at 70°F (21°C).

\*\*Contains less than 25 g/l volatile organic compounds. Meets existing VOC (VOM) regulations for Waterproofing Sealers under the EPA's National AIM (Architectural and Industrial Maintenance) listings for all states including OTC, LADCO, CARB, and SCAQMD.

**SURFACE PREPARATION:** If coatings are present, use mechanical abrasion means to remove them. If grease or oil is present, the use of a good detergent/degreaser is recommended with an auto-scrubber machine or rarity single head machine. After application of any cleaner, rinse thoroughly, and ensure the removal of all standing water. Once dry, you must test the concrete for porosity by misting lightly with water. If the concrete darkens, then the surface is porous and ready to seal. If the water beads on the surface and does not penetrate easily, then the surface needs further cleaning or to be abraded mechanically.

**APPLICATION INSTRUCTIONS:** Moisture Guard may be applied to concrete of any age. Before applying, ensure that any previously applied sealer or other contaminant clogging the porosity of the concrete has been removed by mechanical abrasion. Ensure surface porosity by testing with a small amount of water. If the water stains the concrete immediately and disappears within 3 – 4 minutes into the surface, there is excellent porosity. If there is a delay in the darkening of the surface, or the water evaporates at a faster rate than penetration, or if you notice any surface water beading, If the surface is not porous and needs further mechanical abrasion. It is highly recommended to vacuum the surface prior to application to minimize surface cement dust and resulting free alkali and minimize surface reaction to increase depth of penetration.

Moisture Guard achieves best results if ambient temperatures are above 40°F (4°C) and below 90°F (32°C). Extreme weather conditions such as high wind or applications in full sun at high temperature will cause premature drying. In such extreme cases, mist the surface to be treated with water and apply Moisture Guard to the moistened surface. This allows the surface to stay wet long enough for increased reactivity and penetration.

Apply Moisture Guard at a coverage rate of 150 – 200 sq ft per gallon on broom finished floors and 200 – 300 sq ft per gallon on hard troweled floors. For best results, use a medium to high-pressure airless paint sprayer with .19

### **CONCRETE SOLUTIONS® MOISTURE GUARD** (continued):

aperture tip and apply with a 50% overlap with a single pass. On vertical surfaces, begin the application at the lowest point in elevation and work toward the highest point in an east-west manner, where north points toward the highest elevation point.

On flat surfaces, once you complete the application, broom or squeegee off any excess Moisture Guard to avoid puddling. After 24 hours minimum, damp mop or rinse with auto-scrubber and squeegee excess water and allow to dry prior to applying any topical coatings/glue/floor finishes. If moisture readings are high prior to the application of Moisture Guard, it is recommended to allow 48 – 72 hours prior to rinsing and applying any finishes.

**SURFACE AND TOOL CLEAN UP:** Moisture Guard is for use by qualified professional contractors and trained applicators. Although it is non-corrosive to skin, avoid prolonged skin contact. Wash skin with soap and water if exposed to avoid irritation.

HOW SUPPLIED: Moisture Guard is packaged in 1 gallon (3.78L) bottles, 5 gallon (18.9L) pails, and 55 gallon (207.9L) drums.

**STORAGE:** 40° – 90°F (4° – 32°C). Keep from freezing.

#### SAFETY PRECAUTIONS: Health Considerations: Consult the Rhino Linings® Safety Data Sheets (SDS)

Chemical systems require the use of proper safety equipment and procedures. Please follow the Rhino Linings<sup>®</sup> product SDS and Safety Manual for detailed information and handling guidelines.

**For Your Protection:** The information and recommendations in this publication are, to the best of our knowledge, reliable. Suggestions made concerning the products and their uses, applications, storage and handling are only the opinion of Rhino Linings Corporation. Users should conduct their own tests to determine the suitability of these products for their own particular purposes and of the storage and handling methods herein suggested. The toxicity and risk characteristics of products made by Rhino Linings Corporation will necessarily differ from the toxicity and risk characteristics developed when such products are used with other materials during a manufacturing process. The resulting risk characteristics should be determined and made known to ultimate end-users and processors.

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