Deep Integral Sealer
DIS

# TECHNICAL DATA

**PRODUCT**
DIS, DEEP INTEGRAL SEALER. A colloidal Silicate base subsurface barrier.

**MANUFACTURER**

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**DESCRIPTION/USE/LIMITATIONS**
DIS is a cloudy white, water base, Colloidal Silicate, which internally (integrally) seals Portland cement concrete with a subsurface barrier. DIS is a permanent application that can be applied to existing concrete or newly placed concrete. When DIS is applied to concrete, it penetrates deeply below the surface porosity and capillary system reacting with concrete's unbound (free) constituents, such as alkali and/or inactivated calcium hydroxide residue. This unique reaction converts the DIS liquid, (which is virtually zero in solids) into a 100% solids colloidal silicate precipitate (gel) that is internally generated and very insoluble. This DIS gel forms and occupies the concrete's "surface" accessible porosity and internal tiny voids. The application of DIS will enhance the concrete's overall integrity as it supplements, densifies, waterproofs, and internally detoxifies without effecting the concrete's surface traction or bondability of other surface applications.

**DIS as a cure method:** DIS as a curing method is equal to or even better than water curing methods. When DIS is used as a curing method, ingredients are added to the existing capillary mix water allowing for a more complete hydration reaction process. This will result in additional hydrate product to fill the voids typically left behind as moisture exits the concrete. The end result is better curing and internal sealing of the concrete.

**DIS as a densifier/sealer:** DIS can be applied to already set concrete of any age. As DIS penetrates the concrete, a reactive process begins and the free alkali is converted to a calcium silicate hydrate gel. This process permanently seals and densifies the concrete. After the application of DIS, the concrete is waterproofed and more resistant to oils, acids, industrial chemicals and cleaners.

**Application:** In hot out door applications mist the concrete with out puddles, then apply DIS.

1. Use a medium to high-pressure airless sprayer with a .017 to .019 tip size.
NOTE: When an airless sprayer is not allowed for application, please contact the representative for alternative application methods.
2. All surface products other than concrete must be removed to allow the penetration of DIS.
3. Apply DIS to the point of saturation at the rate of 150 to 200 square feet per gallon. Use an overlapping pattern of 10% to 15%.
4. Some areas of the concrete may have a larger porosity rate and the DIS will absorb at a much faster rate. These areas should have a second application of the DIS.
5. When applying other coatings to the concrete, wait 24 hours. Rinsing may be needed if the DIS purged the concrete of impurities.
6. Do not apply DIS to frozen or near frozen concrete.

**TECHNICAL DATA**

**Physical:** Liquid
**Color:** Cloudy White (dries clear)
**Odor:** None
**Specific Gravity:** 1 - 10
**pH:** ±11.5
**Clean-up Solvent:** Water
**R-Factor Increase:** Up to 20%
**Flammability:** None
**Toxicity:** None
**Surface Bond Quality:** Excellent
**Chloride Screenability:** Excellent
**Spill Clean-up:** Dilute / Flush with water
**Paintability:** Excellent
**VOC Compliant:** Yes / None
Please see MSDS for additional information.