

# HYGRA-GEL

## STABILIZING CONCRETE ADMIXTURE

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HYGRA-GEL is a hygroscopic agent and a viscosity modifier that can be used in the concrete mix **OR** on the surface as a curing enhancer and troweling aid. HYGRA-GEL is nontoxic, V.O.C. compliant, biodegradable, and nonflammable. HYGRA-GEL works on concrete flat work, stucco, plaster, pool plaster, silica fume concrete, cement toppings, latex modified mixes, and wet and dry process shotcrete. HYGRA-GEL is a superb troweling aid letting the trowel slide over the slick surface eliminating the ripping effect of a dragging trowel. HYGRA-GEL improves freeze thaw durability by binding any free water in the mix and by stopping the formation of capillary tubes and bleed water, resulting in a closed cell concrete not as susceptible to deicing chemicals and water intrusion.

When used as an **INTEGRAL CONCRETE ADMIXTURE**...

- HYGRA-GEL is added to the mix at the rate of 8 ounces per 100 lbs. of cement.
- HYGRA-GEL is a viscosity modifier.
- HYGRA-GEL's gelling action virtually eliminates surface water bleeding by holding the hydration water integrally in the mix.
- HYGRA-GEL reduces surface moisture evaporation and wind crusting due to high wind, high heat, low humidity, and direct sunlight.
- HYGRA-GEL greatly reduces capillarity and improves workability and cohesiveness.
- HYGRA-GEL does not form any bond breaking membrane which would prevent future sealing, coating, or surface treatment.
- HYGRA-GEL neutralizes the effects of hot, windy weather, potentially eliminating shrinkage and surface cracking.

When sprayed on fresh concrete as a **CURING ENHANCER**...

- HYGRA-GEL is mixed at 1 part HYGRA-GEL to 9 parts of potable water. Spray apply a uniform coating of diluted HYGRA-GEL to the freshly poured, screeded concrete. If the concrete prematurely sets, reapply diluted HYGRA-GEL and continue troweling. Diluted HYGRA-GEL covers about 150 square feet per gallon.
- HYGRA-GEL will gel up the free water holding the moisture hygroscopically until it reacts chemically.
- HYGRA-GEL reduces surface moisture evaporation and wind crusting due to high wind, high heat, low humidity, and direct sunlight.
- HYGRA-GEL eliminates plastic surface shrinkage cracking.
- HYGRA-GEL does not form any bond breaking membrane which would prevent future sealing, coating, or surface treatment.
- HYGRA-GEL neutralizes the effects of hot, windy weather, potentially eliminating shrinkage and surface cracking.

HYGRA-GEL is a superb admixture for either wet or dry process **SHOTCRETE**. In addition to all the benefits above, it **virtually eliminates rebound** and promotes proper curing of the concrete.

- In the wet process, HYGRA-GEL is added to the mix at the rate of 8 ounces per 100 lbs. of cement. It increases lubricity, making pumping easier.
- In the dry process, HYGRA-GEL is added to the water that is pumped to the nozzle at the rate of 1 part HYGRA-GEL to 9 parts water.

**H.M.I.S. CODES:** HEALTH = 1, FLAMMABILITY = 0, REACTIVITY = 0, PERSONAL PROTECTION = C (GLOVES, GOGGLES, APRON)

**SHIPPING NAME:** Concrete Admixture – Waterbased – Not regulated

**PACKAGING:** 1 gallon (3.78 L), 5 gallon (18.9 L) pails, 55 gallon (208 L) drums, 265 gallon (1000 L) containers

**STORAGE:** 40° F to 90° F. Protect from freezing and excessive heat.

**SHELF LIFE:** 1 year properly stored

**FREIGHT CLASS:** Class 55

**CAUTIONS:** HYGRA-GEL is compatible with most other admixture types, however they should be added separately to the mix to avoid any possible chemical interaction. For example, air entraining agents based on vinsol resin and superplasticizer based on naphthalene-sulfonate are not compatible in the same admixture tank with HYGRA-GEL, but they can be added separately if needed. HYGRA-GEL contributes to air entrainment levels. It is recommended that any separate air entraining agent additions to the concrete mix should be reduced at least 50% when using HYGRA-GEL, and the resulting mix should then be checked for accuracy to stay within the desired level. NOTE: Due to the viscosity modifying characteristics of HYGRA-GEL and the effects on water permeability, air entrainment levels measured by the standard pressure volume meter may not be accurate, and should be re-checked by weight difference interpolation versus a control. Keep from freezing. If frozen, loosen cap, lid, or bung and allow solution to thaw and mechanically agitate before using. The solution can then be used.

**WARNINGS:** Avoid contact with skin and eyes. Wear protective clothing and safety glasses during application. Keep away from food and drink. Do not take internally. Refer to product M.S.D.S. (Material Safety Data Sheet) for further health and safety information. FOR INDUSTRIAL USE ONLY. KEEP OUT OF REACH OF CHILDREN.

**LIMITED WARRANTY:** This product is warranted to be merchantable quality when used according to the instruction herein. It is not warranted to be suitable for any purpose or use other than the general purpose for which it is intended. Liability under this warranty is limited to the replacement of the product as purchased if found to be defective upon inspection by the manufacturer. This limited warranty is issued and accepted in lieu of all other expressed warranties and explicitly excludes liability for consequential damages. Buyer assumes all risk and liability from use of this product.