V-MAR® VSC500 Data Sheet

Rheology-modifying admixture for Pervious Concrete ASTM C494 Type D

Product Description

V-MAR®VSC500 is a new generation liquid admixture designed to enable the production of superior quality pervious concrete by imparting an enhanced paste rheology and controlling the hydration of cementitious materials. V-MAR® VSC500 incorporates a unique, patented biopolymer, and is manufactured under closely controlled conditions to provide uniform, predictable performance.

The V-MAR®VSC500 admixture is supplied as a ready to use liquid. One gallon weighs approximately 8.7 lbs (1.05 kg/L). V-MAR®VSC500 contains no intentionally added chlorides. V-MAR®VSC500 meets the requirements of ASTM C494 as a Type D water-reducing and retarding admixture.

Uses

V-MAR®VSC500 is a multi-functional chemical admixture that, in general, does not require the co-addition of other admixtures. However, other products such as DARAWELD®C, RECOVER®, ZYLA®R, and air-entraining agents may also be included in the concrete mixture to accommodate special job conditions and specifications. V-MAR®VSC500 is intended for use in ready-mix concrete.

Typical Applications

- Parking lots
- Tennis courts, patios
- Foundations/floors for green house, zoos, aquatic centers
- Low volume pavements
- Residential roads, alleys and driveways
- Sidewalks, pathways
- Pavement edge drains

Product Advantages

- Produces superior and consistent quality pervious concrete mixtures
- Enhances productivity with improved concrete flowability and faster truck discharge
- Increases workability time
- Improves finishability and compaction
- Adds batching flexibility with broader moisture tolerances
- Reduces raveling potential in harsh environments

Benefits to Pervious Concrete

Pervious concrete made with V-MAR®VSC500 has unique advantages over conventional pervious concrete:

- **Consistent Quality:** Enables the production of superior quality mixes each and every time significantly reducing the concern for load to load mix variability possible with conventional pervious concrete.
- **Faster Truck Discharge:** Enables fresh concrete to rapidly discharge from the truck. Reduces on site truck time and enables the producer to carry more loads per day. Reduces contractor labor costs and round trip times allowing for faster project completion.
- **Broader Moisture Tolerance:** Ensures easier batching with less concern for wet loads. Provides flexibility and enables the producer to batch the concrete at the proper water content. Reduces quality control costs and the likelihood of loss loads thus improving truck yield.
- **Reduced Evaporation:** Provides the contractor with enhanced robustness against raveling under harsh environments. Allows for better scheduling with longer time to cover from the time of mix discharge.
- **Uniform Compaction:** Significantly enables production of consistent pavements with less effort, and reduces the potential of costly future repairs and losses.

Addition Rates

V-MAR®VSC500 is recommended for use at 7 to 15 fl oz/100 lbs (455 to 980 ml/100kg) of cementitious materials. However, mixture proportions and weather conditions may possibly require using dosage rates beyond this range.

Dispensing Equipment

A complete line of accurate, automatic dispensing equipment is available.

Packaging & Handling

V-MAR®VSC500 is available in bulk, totes, drums, and pails. V-MAR®VSC500 will freeze at about 28°F (-2°C) but will return to full functionality after thawing and thorough mechanical agitation.

This product or its use may be covered by US Patent Nos. 8,187,376; 8,317,918.

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