

CoatMasters®

A registered trademark of IMRAE Corporation

TECHNICAL DATA SHEET

PRODUCT DESCRIPTION:

CM 9007 is an admixture made of advanced silicon emulsion formulated to be added during the mixing of cement, water, and other aggregate medium. This liquid emulsion is recommended to be added by completely mixing with the total water required for hydration prior into adding to the mix. This result to a complete homogenous mix, and ensures efficient bonding to silicates during the hydration of cement.

CM 9007 will immediately bond with silica and block any fluid passages in the concrete matrix rendering it completely sealed from any type of fluid penetration. The effect will prevent many other types of fluid to be blocked penetrating its capillary walls. A microscopic membrane will form but will not exceedingly affect the surface tension of the walls, thus enabling other coating materials to be applied. The gloss and sheen of the surface will not change.

CM 9007 provides long lasting protection against water vapor permeability, and resistance to staining and/or color deterioration. The product will naturally protect color, and continuously provide a breathable porous substrate.

TECHNICAL DATA:

Appearance of Liquid: Opaque milky liquid

Specific Gravity: 0.982 – 0.986

pH: 8.0 – 9.0

Flash point, °C / °F: 90 / 194

Freeze thaw limit stability, °C / °F: 0 / 32

Shelf Life: 1-Year

Meets Federal and State VOC limit requirements for volatile organic components (VOC). Complies with South Coast Air Quality Management District (SCAQMD) VOC limit.

ADDITION RATES:

Addition of CM 9007 can vary depending on the degree of water repellency required. Our recommended start rates are as follows:

5.0 to 15.0 fluid oz / 100 - lbs of cement

300 to 450 milliliters / 100 – lbs of cement

Important Note: From our trials we found it effective to add CM 9007 as a solution in water (minimum of 50% water required for hydration), particularly for low water and cement mix ratio prior into adding to the mix. All the aggregates and cement must be added first, prior into adding CM 9007 in water solution. Do not intermix with other admixtures, or add simultaneously to cause direct contact of fluids.

MIX CONDITIONS AND REQUIREMENT DURING CURING:

The concrete mix must be always homogenous to ensure good workability. For mix design formulations using regular or super plasticizers commonly made from polycarboxylates, tests must be performed to hold water by at least 25% of water from the mix. If additional water is required, add in increments to check for desired workability.

The material will conform to its original phase rheology, and will not alter properties of fluidity. For regular concrete the slump will not change. However, if preparing an established SCC (self-consolidating concrete) mix with desired flow, the water to cement mix ratio may need to be reduced.

The concrete may appear blotchy within 24-hours due to evidence of bonding occurring in the concrete matrix. However, this will completely normalize to its natural color appearance as it continues to cure, will change rapidly in a few hours. To accelerate expose the casted concrete to the sun to facilitate reaction of silicate bonding.

STORAGE AND DISPOSSAL:

The product must be stored in a cool and dry place, always seal container after using. The shelf-life of the product is at least 1-year in 77 deg F storage condition, and longer depending on conditions. Avoid the material from freezing, before using mix the product thoroughly until appearance is homogenous in appearance. Empty containers must be disposed according to you local city, state, and federal guidelines. Do not throw liquid portions to any drains, avoid spills, and always protect the environment.

PACKAGING:

The product is available is available in 1-gallon F-type, 5-gallon, and 55-gallon drums.

TECHNICAL SUPPORT:

Technical service support is available to answer any questions regarding mix design formulations, safety, and product application at no obligation. Please call (951) 413-0240, and ask for Technical Service Support Pacific time 8 AM – 5 PM.

DISCLAIMER:

The information and recommendations made are on our own studies and research that are believed to be accurate. However, no guarantee of their accuracy is given mainly due to variation in batch usage and possible complexity in mix design formulas with other admixtures other than what is claimed. The customer must conduct its appropriate mix design trials to ensure that the optimum water to cement level is consistently maintained.