Blue

Finishing Aid/Evaporation Retardant

ACEiT™ Industries Inc.

DESCRIPTION

ACEiT Blue is a finishing aid and evapo-retardent that is dispensed in a liquid form and applied directly to freshly placed concrete. When applied before troweling and during finishing it greatly assists during the finishing of all types of concrete construction and ehances finishing while protecting the concrete from rapid evaporation, crusting, flash setting, and the formation of cold joints. It may also be sprayed on the surface of the concrete after troweling to add an additional level of protection.

ACEiT Blue is a low viscosity water based liquid, that is a ready to use (RTU) concrete finisher. The unique “Blue” color dissipates upon exposure to UV light where it becomes clear and transparent. The proprietary blend of highly concentrated Rheology Enhancing Ethers, Non-Surfactant Surface Tension Reduction Compounds and Water Retention Extracts, forms an integral/dissipating/ monomolecular film, that does not prohibit the bonding of other materials such as striping paints or sub-sequential layers of concrete, color, or adhesives. Blue is inert, non reactive, non-corrosive, and will not react with any other compounds of concrete, admixtures, equipment, or any surface and topical treatments applied to the concrete. Blue meets the specifications and standards of ACI 302.1R-96

BENEFITS

- ☑ **Increases Qualtiy of Finish**
- ☑ **Extends Fresh Working Time**
- ☑ **Reduces Finishing Surface Friction**
- ☑ **Increases Surface Workability**
- ☑ **Increases Surface Paste Consistency**
- ☑ **Increases Surface Durability**
- ☑ **Reduces Surface Permeability**
- ☑ **Increases Freeze/ Thaw Durability**
- ☑ **Retards Evaporation Moisture Loss**
- ☑ **Decreases Hydration Cracking**
- ☑ **Reduces Frequency of Flash Setting**
- ☑ **Resilient to High Winds/ Temperatures**

DIRECTIONS FOR USE

Application of **ACEiT Blue** finishing aid is typically one gallon per 100 -200 square feet. The material is typically applied by use of a mechnical pump from a bulk tank, or through a portable hand sprayer. No special tanks, hoses, or spraying nozzles are required. **ACEiT Blue** application rate is subjective to the mix design’s gradation and cement content, and weather conditions. Consistent coverage is recommended and with or patented “Blue” color, the application is visible on the surface area. **ACEiT Blue** can also be added through the water system on trowel machines that are equipped with on-board spraying equipment. Avoid over spraying or when you see pondng. Steadily add until you achieve your desired results. All application equipment should be thoroughly washed with clean water after each application.

STORAGE

ACEiT Blue should be stored in an area that prevents freezing. Freezing can cause segregation.

Blue

Finishing Aid/Evaporation Retardant

ACEiT™ — Industries Inc.—

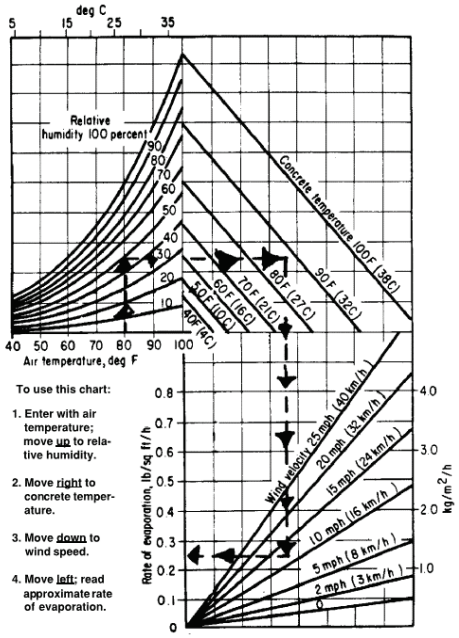
PACKAGING

ACEiT Blue is sold and shipped in 275 gallon plastic totes, 55 gallon drums, and 5 gallon buckets. Additional container sizes will be considered upon request.

Do not let **ACEiT Blue** freeze, if it does it can be reconstituted by warmin and recirculation while adding small amounts of clean water to restore it to it's original viscosity. Typical life is approximately 6-12 months in sealed factory container.

GENERAL CONCRETE INFORMATION FROM ACI 305 AND WHY PROTECTING CONCRETE IS IMPORTANT

HOT WEATHER CONCRETING



Concrete temperature, F (C)	Air temperature, F (C)	Critical evaporation rate			
		0.2 lb/ft²/h (1.0 kg/m²/h)	0.15 lb/ft²/h (0.75 kg/m²/h)	0.10 lb/ft²/h (0.50 kg/m²/h)	0.05 lb/ft²/h (0.25 kg/m²/h)
		Relative humidity, %*			
105 (41)	95 (35)	85	100	100	100
100 (38)	90 (32)	80	95	100	100
95 (35)	85 (29)	75	90	100	100
90 (32)	80 (27)	60	85	100	100
85 (29)	75 (24)	55	80	95	100
80 (27)	70 (21)	35	60	85	100
75 (24)	65 (19)	20	55	80	100

*Relative humidity, % which evaporation rate will exceed the critical values shown, assuming air temperature is 10 F (6 C) cooler than concrete temperature and a constant wind speed of 10 mph (16 km/h), measured at 20 in. (0.5 m) above the evaporating surface.
Note: Based on NRMCA-PCA nomograph (Fig. 2.1.5), results rounded to nearest 5%.

Plastic-shrinkage cracking is frequently associated with hot weather concreting in arid climates. It occurs in exposed concrete, primarily in flatwork, but also in beams and footings, and may develop in other climates when the surface of freshly cast concrete dries and subsequently shrinks. Surface drying is initiated whenever the evaporation rate is greater than the rate at which water rises to the surface of recently placed concree by bleeding. High concrete temperatures, high wind speed, and low humidity, alone or in combination, cause rapid evaporation of surface water. The rate of bleeding, on the other hand, depends on concrete mixture ingredients and proportions, on the depth of the member being cast, and on the type of consolidation and finishing. Because surface drying is initiated when evaporation rate exceeds bleeding rate, the probability of plastic-shrinkage cracking therefore increases whenever the environmental conditions increase evaporation, or when the concrete has a reduced bleeding rate. For example, concrete mixtures incorporating fly ash, silica fume, or fine cements frequently have a low to negligible bleeding rate, making such mixtures incorporating fly ash, silica fume, or fine cements frequently have a low to negligible bleeding rate, making such mixtures highly sensitive to surface drying and plastic shrinkage, even under moderately evaporative conditions (ACI 234R).