

## SPECIALTY ADMIXTURES

Master Format #: 03 30 00 03 40 00 03 70 00

# EUCOSHIELD™

## INTEGRAL FINISHING ADMIXTURE



**EUCLID CHEMICAL**

### PRODUCT INFORMATION

#### PACKAGING

Packaged in 275 gal (1041 L) totes, 55 gal (208 L) drums and 5 gal (18.9 L) pails

#### SHELF LIFE

1 year in original, unopened container

#### SPECIFICATION/COMPLIANCES

ASTM C494 Type S

### DESCRIPTION

EUCOSHIELD is a ready to use liquid admixture designed for Type IL cements to be used as an integral finishing aid that reduces rapid moisture loss from the concrete surface by binding the internal water in the pore structure. EUCOSHIELD is especially effective when concreting operations must be performed in direct sun, wind, high temperatures, or low relative humidity. EUCOSHIELD also can be used to reduce excessive bleeding and segregation of concrete or mortar. EUCOSHIELD contains no added chlorides or chemicals known to promote the corrosion of steel. Eucoshield is compatible with most other admixtures commonly used in concrete including air entraining admixtures, Polycarboxylate-based HRWR admixtures (super plasticizers), conventional water reducing admixtures, and retarders.

### PRODUCT CHARACTERISTICS

#### FEATURES & BENEFITS

- Improves finishability
- Controls bleeding
- Provides thixotropic properties
- Reduces segregation during pumping

#### PRIMARY APPLICATIONS

- Formulated for use with Type IL cements
- High evaporation rate conditions such as high winds
- Concrete designs using gap-graded aggregates
- Lends itself well to manufactured sands without fines
- Pumping aid
- Anti-segregation aid for use with lightweight and heavyweight aggregates
- Self-Consolidating Concrete

### PRECAUTIONS/LIMITATIONS

- Do not allow material to freeze.
- Do not use for dry shake applications.
- Eucoshield can be used in conjunction with naphthalene products at low dosages. Trial mixes should be performed to ensure desired results.
- The Euclid Chemical Company recommends running trial batches prior to use to determine the effect on the workability, air entrainment, setting times, and hardened concrete properties.
- In all cases, consult the Safety Data Sheet before use.

## DIRECTIONS FOR USE

### DOSAGES

EUCOSHIELD dosage for flatwork applications, is typically 1-4 oz/100 lbs (65-260 mL/100 kg) of total cementitious. EUCOSHIELD is used to prevent rapid moisture loss from the concrete which in turn enhances finishing characteristics. Variables such as water/cement ratio, sand gradations and mix design play an important role in determining appropriate dosage rates. Trial mixes should be run to optimize dosing requirements. Higher dosage rates of EUCOSHIELD may be required depending on the concrete mix design and material properties.

**For Self-Consolidating Concrete:** Use at the rate of 1-8 oz/100 lbs (65-520 mL/100 kg) of total cementitious to control bleeding and segregation in SCC when polycarboxylate HRWR are used.

### DIRECTIONS FOR USE

Use EUCOSHIELD with the PLASTOL line of polycarboxylate based admixtures. Introduce EUCOSHIELD after all other products have been added to the mix.

Evaporation rate is a function of relative humidity, concrete temperature, air temperature and wind velocity. Plastic shrinkage cracking is a strong possibility when the rate of evaporation exceeds 0.2 lb/ft<sup>2</sup> /hr (1.0 kg/m<sup>2</sup>/hr). The chart in Fig. 2.1.5 of ACI 305, Hot Weather Concreting is useful in determining the evaporation rate under a given set of jobsite conditions. Use EUCOSHIELD when the above limit is exceeded

To further improve resistance to plastic shrinkage cracking, the addition of PSI FIBERSTRAND or TUF-STRAND synthetic fibers are recommended along with a curing compound such as KUREZ DR VOX (curing compound) or DIAMOND CLEAR VOX (curing & sealing).

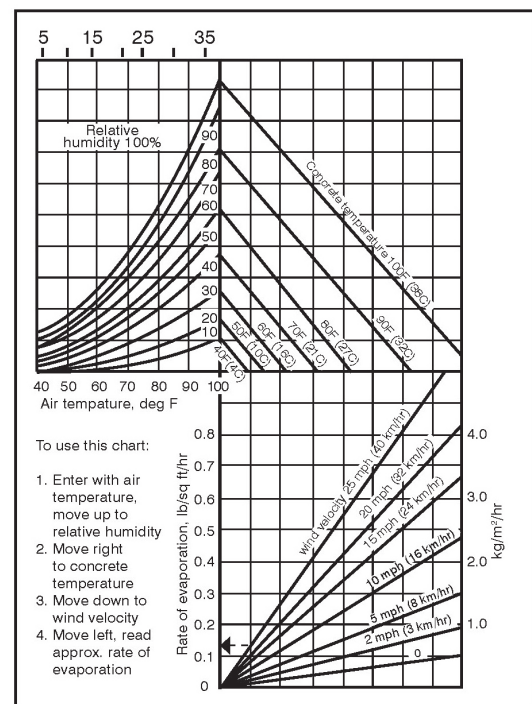


Fig. 2.1.5, ACI 305, Hot Weather Concreting