PLASTOL 5500



HIGH RANGE WATER REDUCING ADMIXTURE

DESCRIPTION

PLASTOL 5500 is a high solids polycarboxylate based plasticizing admixture for high performance concrete applications. Excellent setting characteristics, up to 40% water reduction and superior compressive and flexural strengths make PLASTOL 5500 an ideal superplasticizer. For self-consolidating concrete or regular concrete where water reduction is required, this high performance, third generation admixture makes placing and finishing easier. PLASTOL 5500 does not contain any added chlorides.

PRIMARY APPLICATIONS

- · Prestressed/precast concrete
- Self-consolidating concrete
- High performance concrete
- · Low water to cement ratio concrete

- · Mass concrete
- · High slump, flowable concrete
- · High early strength concrete

FEATURES/BENEFITS

Plastic Concrete

- Up to 40% water reduction
- Superior slump gain
- · Improved cement hydration
- Low dose

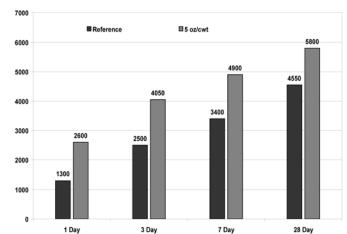
Hardened Concrete

- · Increased early and late age strengths
- Reduced permeability
- Increased durability
- Quicker stripping times

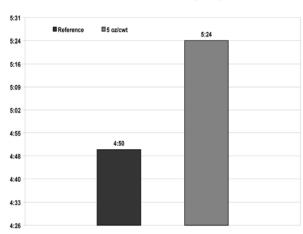
TECHNICAL INFORMATION

Performance Data:

The following test results were achieved using typical ASTM C 494 mix design requirements, 517 lb/yd³ (307 kg/m³) cement content and similar (± 0.5)% air content. These results were obtained under laboratory conditions with materials and mix designs meeting the specifications of ASTM C 494. Changes in materials and mix designs can affect the dosage response of PLASTOL 5500.



Plastol 5500 Compressive Strength Results (psi)



Plastol 5500 Set Time Results (hr:min)

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PACKAGING

PLASTOL 5500 is packaged in bulk, 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.

SPECIFICATIONS/COMPLIANCES

PLASTOL 5500 complies with the following specifications:

- ASTM C 494, Types A and Type F
- AASHTO M 194

DIRECTIONS FOR USE

PLASTOL 5500 can be added to the initial batch water or directly on the freshly batched concrete and mixed for approximately 5 minutes or 70 revolutions. However, better results have been observed batching directly on the freshly batched concrete. It should not come into contact with dry cement or other admixtures until mixed thoroughly with the concrete batch.

PLASTOL 5500 is typically used at dosages of 2 to 10 oz per 100 lbs (130 to 650 mL per 100 kg) of cementitious material. Other dosages are acceptable with prior testing and confirmation of the desired performance with specific materials being used.

For any concrete application including Self-Consolidating Concrete (SCC), the dosage of PLASTOL 5500 will vary depending on the mix design, local materials, and individual needs of the concrete producer. Trial mixes should be run to verify plastic and hardened performance with local materials. If the material gradations are not optimum for SCC, a viscosity modifier may be used to improve the quality of the mix. Please consult a local Euclid Chemical Sales Professional for trial mixtures and dosage recommendations.

PLASTOL 5500 is compatible with most admixtures including air-entraining agents, accelerators, most water-reducers, retarders, shrinkage reducers, corrosion inhibitors, viscosity modifiers, and microsilica; however, each material should be added to the concrete separately. Please contact a Euclid Sales Professional for any compatibility issues.

PRECAUTIONS / LIMITATIONS

- Care should be taken to maintain Plastol 5500 above freezing; however, freezing and subsequent thawing will not harm the material if thoroughly agitated. Never agitate with air or an air lance.
- Test batches/mix designs/sample slabs may be required due to variations in local cement and aggregates.
- Keep concrete from freezing until a minimum strength of 1000 psi (7 MPa) is reached.
- · Add to mix independent of other admixtures.
- If re-dosing Plastol 5500 at the jobsite, it is recommended that the air content is checked to conform to job specifications.
- In all cases, consult the Material Safety Data Sheet before use.

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