



PLASTOL™ ULTRA 209

HIGH RANGE WATER REDUCER - SUPERPLASTICIZER

EUCLID CHEMICAL

PRODUCT INFORMATION

PACKAGING

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

ASTM C494, Type A & F

AASHTO M194

DESCRIPTION

Plastol Ultra 209 high range water reducing admixture uses the latest advancements in polycarboxylate chemistry and is formulated to meet the demands of the precast / pre-stressed industry. PLASTOL ULTRA 209 maximizes cement efficiency and maintains air stability. PLASTOL ULTRA 209 also improves concrete flow, finishing, and surface appearance. It provides compressive and flexural strength gains that many other water reducing admixtures can't achieve with low dosage. PLASTOL ULTRA 209 contains no added chlorides or chemicals known to promote the corrosion of steel and is compatible with most admixtures however, each chemical should be added separately to the mix.

PRODUCT CHARACTERISTICS

FEATURES & BENEFITS

- Quick form stripping times
- Allows for cement reduction
- Improved air content stability
- Greatly improves durability and finished appearance
- Reduces segregation, bleeding, cracking and permeability
- Reduces water requirement for higher strength at all ages
- Superior slump gain with improved workability / finishability
- Produces very high early strengths with Type I and Type III cement
- Low dosage with high efficiency and improved cement hydration allows for lower cement content

PRIMARY APPLICATIONS

- Pervious Concrete
- Ready mix concrete
- Heavily reinforced concrete
- High performance concrete
- High early strength concrete
- Precast / prestressed concrete
- Self Consolidating Concrete (SCC)
- Very flowable, high slump concrete

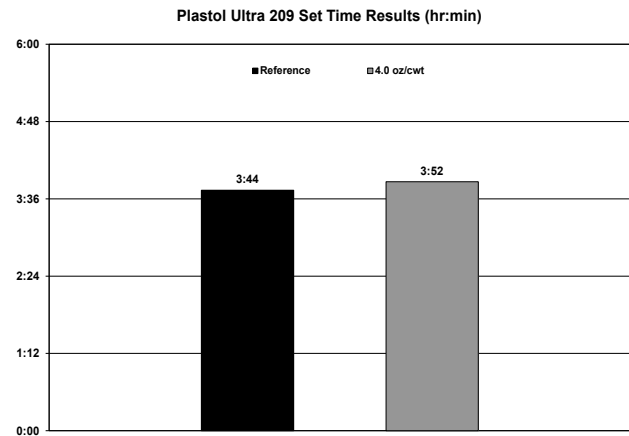
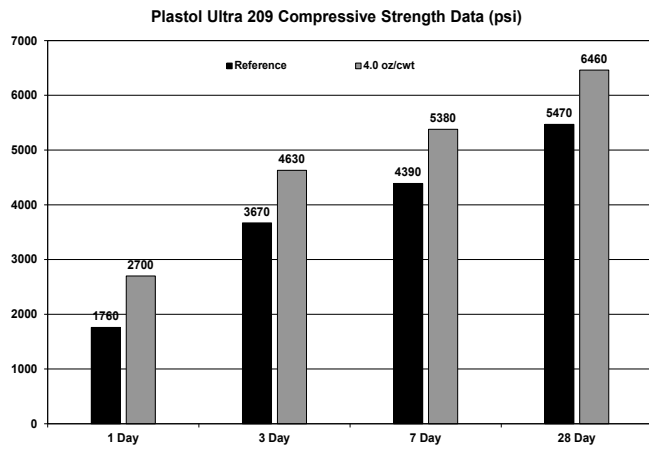
PRECAUTIONS/LIMITATIONS

- Care should be taken to maintain PLASTOL ULTRA 209 above freezing; however, freezing and subsequent thawing will not harm the material if thoroughly agitated. Do not agitate with air or an air lance.
- If re-dosing PLASTOL ULTRA 209 at the job site, it is recommended that the air content of the concrete mix is checked to conform to job specifications.
- Add to mix independent of other admixtures.
- In all cases, consult the Safety Data Sheet before use.

TECHNICAL INFORMATION

PERFORMANCE DATA

The following test results were achieved using typical ASTM C494 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 C494. Changes in materials and mix designs can affect the dosage response.



DIRECTIONS FOR USE

PLASTOL ULTRA 209 has a recommended dosage range of 2-12 oz/100 lbs (130-780 mL/100 kg) of cementitious material. PLASTOL ULTRA 209 can provide excellent performance for most applications at dosage rates of 2-7 oz/100 lbs (130-460 mL/100 kg) of cementitious material. For SCC concrete or high performance mixtures dosage rates of 7-12 oz/100 lbs (460-780 mL/100 kg) of cementitious material can be used. PLASTOL ULTRA 209 can be added to the initial batch water or directly on the freshly batched concrete and mixed for 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.

For any concrete application including Self Consolidating Concrete (SCC), the dosage of PLASTOL ULTRA 209 will vary depending on the mix design, local materials, and individual needs of the concrete producer. Trial mixes should be done 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.

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