



# PLASTOL ULTRA 209

## HIGH RANGE WATER REDUCING ADMIXTURE

### DESCRIPTION

**PLASTOL ULTRA 209** high-range water-reducing and superplasticizing admixture is formulated using advanced polycarboxylate technology, specifically engineered for concrete to provide maximum water reduction, slump, flow, and improved finishing characteristics while maintaining consistent air contents from initial batching to final placement. In addition, PLASTOL ULTRA 209 provides high compressive strengths, flexural strength, and excellent setting characteristics. PLASTOL ULTRA 209 can be used to reduce the total cement content and used in combination with supplementary cementitious materials. PLASTOL ULTRA 209 does not contain added chlorides or chemicals known to promote the corrosion of steel.

### PRIMARY APPLICATIONS

- Precast/pre-stressed concrete
- Self-Consolidating Concrete (SCC)
- High slump, flowable concrete
- Low water to cement ratio concrete
- High early strength concrete
- Ready-mix concrete
- Flatwork and mass concrete
- Pervious concrete

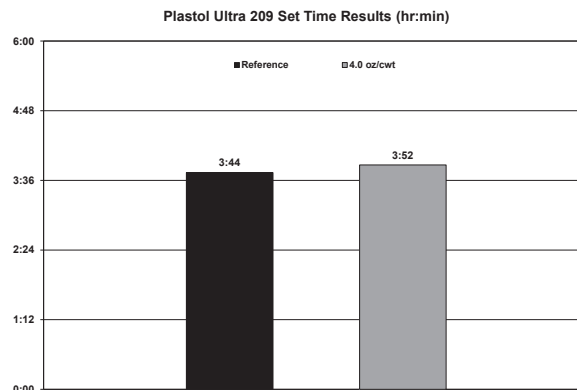
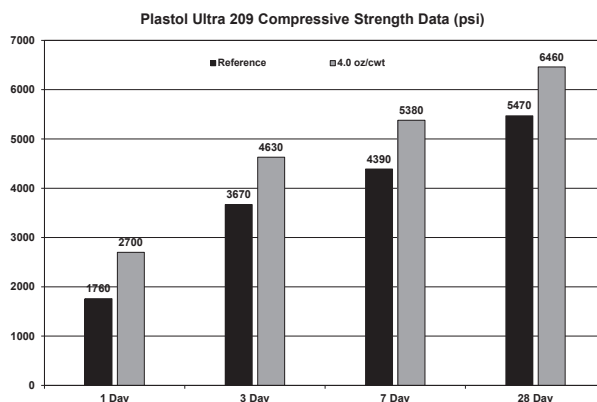
### FEATURES/BENEFITS

- Superior slump gain
- Consistent control of air content
- Improved cement hydration
- Low dosage
- Higher early and ultimate strengths
- Lowers number of rejected concrete loads
- Quicker stripping times
- Aids in concrete placement and reduces labor cost
- Improved finishability

### TECHNICAL INFORMATION

#### Performance Data:

The following test results were achieved using typical ASTM C 494 mix design requirements, 517 lb/yd<sup>3</sup> (307 kg/m<sup>3</sup>) cement content and similar ( $\pm 0.5$ )% 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 ULTRA 209.



## PACKAGING

PLASTOL ULTRA 209 is packaged in bulk, 275 gal (1041 L) totes, 55 gal (208 L) drums and 5 gal (18.9 L) pails.

## SHELF LIFE

6 months in original, unopened container.

## SPECIFICATIONS/COMPLIANCES

PLASTOL ULTRA 209 admixture meets the requirements of ASTM C494/C494M and AASHTO M-194 as Type A & F admixtures.

## DIRECTIONS FOR USE

PLASTOL ULTRA 209 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 ULTRA 209 is typically used at dosages of 2 to 12 oz per 100 lbs (130 to 780 mL per 100 kg) of cement. Higher 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 ULTRA 209 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 ULTRA 209 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.

## 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.
- Add to concrete mix independent of other admixtures.
- In all cases, consult the Safety Data Sheet before use.

Rev. 11.14

**WARRANTY:** The Euclid Chemical Company ("Euclid") solely and expressly warrants that its products shall be free from defects in materials and workmanship for one (1) year from the date of purchase. Unless authorized in writing by an officer of Euclid, no other representations or statements made by Euclid or its representatives, in writing or orally, shall alter this warranty. EUCLID MAKES NO WARRANTIES, IMPLIED OR OTHERWISE, AS TO THE MERCHANTABILITY OR FITNESS FOR ORDINARY OR PARTICULAR PURPOSES OF ITS PRODUCTS AND EXCLUDES THE SAME. If any Euclid product fails to conform with this warranty, Euclid will replace the product at no cost to Buyer. Replacement of any product shall be the sole and exclusive remedy available and buyer shall have no claim for incidental or consequential damages. Any warranty claim must be made within one (1) year from the date of the claimed breach. Euclid does not authorize anyone on its behalf to make any written or oral statements which in any way alter Euclid's installation information or instructions in its product literature or on its packaging labels. Any installation of Euclid products which fails to conform with such installation information or instructions shall void this warranty. Product demonstrations, if any, are done for illustrative purposes only and do not constitute a warranty or warranty alteration of any kind. Buyer shall be solely responsible for determining the suitability of Euclid's products for the Buyer's intended purposes.