



MULCRETE
ARCHITECTURAL
CONCRETE ADMIXTURES

TECHNICAL DATA SHEET

SUPERPLASTICIZER

High-performance polymer blend for GFRC, UHPC and Wet Cast
26 lb (12 kgs)

- Significantly increases concrete strength.
- Enhances flowability and workability.
- Reduces curing time.
- Eliminates air bubbles.
- Provides a smooth finish.
- Fully compatible with Mulcrete products.

Complies with ASTM C-494 Type S.
Prepared in accordance with the OSHA Hazard
Communication Standard (29 CFR 1910.1200) and GHS Revision 3.

SUPERPLASTICIZER – TECHNICAL DATA SHEET**PRODUCT NAME: SUPER PLASTICIZER****1. DESCRIPTION**

SUPERPLASTICIZER is a polymer-based superplasticizer designed as a high-range water reducer, air-excluding agent, and fluidizer for GFRC, UHPC, and Wet Cast concrete applications.

2. PROPERTIES

SUPERPLASTICIZER improves concrete performance by optimizing cement particle dispersion and reducing water demand while maintaining proper setting characteristics.

- Significantly increases concrete strength
- Improves flowability and workability
- Reduces curing time
- Eliminates air bubbles
- Provides a smooth and uniform finish
- Strong water-reducing and plasticizing effect
- High dispersion of cement particles
- Enhances color intensity in pigmented concrete products
- Fully compatible with Mulcrete products

3. SPECIAL CHARACTERISTICS

SUPER PLASTICIZER provides high efficiency in concrete mixes, allowing improved performance without compromising setting behavior or final strength.

4. APPLICATION

SUPERPLASTICIZER is recommended for GFRC, UHPC, and Wet Cast concrete mixes where increased workability, higher strength, and reduced water content are required.

Typical applications:

- GFRC concrete
- UHPC concrete
- Wet Cast concrete
- Precast concrete elements
- General concrete applications

5. DOSAGE AND METHOD OF ADDITION

SUPERPLASTICIZER is typically used at a recommended dosage of up to 0.1% of total cement content for vertical applications, and up to 1% for high-fluidity, self-consolidating mixes.

Method of addition:

- Dry blend SUPERPLASTICIZER with cement and aggregates to ensure uniform distribution.
- Gradually add mixing water while continuing to mix, allowing proper activation of the admixture.

Ensure sufficient mixing time to achieve complete and homogeneous dispersion within the concrete matrix.

6. GENERAL PROPERTIES

Property	Description
Chemical Base	Proprietary superplasticizer concrete admixture.
Physical Form	Powder



Property	Description
Water Reduction	High (ASTM C494 Type F / G)
Workability	Medium to High
Water Absorption	Low
Effect on Setting Time	Neutral to retarding (dosage dependent)

7. PACKAGING, STORAGE, AND TRANSPORTATION

Category	Description
Packaging	Plastic buckets of 15 lb and 26 lb (7 kg and 12 kg)
Storage	Store in tightly closed containers, in a cool, dry, and well-ventilated area
Shelf Life	Up to 12 months under recommended storage conditions
Transportation Requirements	No special restrictions under ADR, RID, or IMDG

8. REGULATORY COMPLIANCE

- Complies with ASTM C-494 Type S
- Prepared in accordance with OSHA Hazard Communication Standard (29 CFR 1910.1200)
- Classified and labeled in accordance with GHS Revision 3



9. LIMITATIONS

- Performance may vary depending on cement type, aggregate quality, and mix design.
- Not recommended for use without prior testing in critical structural applications.
- Overdosage may negatively affect workability and final concrete performance.

10. CURING RECOMMENDATIONS

Standard concrete curing practices must be followed to ensure optimal strength development and durability.

11. TECHNICAL DISCLAIMER

The information provided in this Technical Data Sheet is based on laboratory testing and practical experience.

Since conditions of use are beyond our control, no express or implied warranty is given.

The user is responsible for determining the suitability of the product for the intended application.

For health, safety, and environmental information, refer to the Safety Data Sheet (SDS).