GSM Construction Chemicals

ETHIOPLAST 557

Technical Datasheet

Product Description

ETHIOPLAST 557 is a high-performance, chloride-free liquid admixture formulated to enhance the properties of concrete. It is designed to substantially reduce water content in concrete mixtures while maintaining normal setting times. Its efficient dispersion in water makes it an ideal choice for improving workability and achieving higher early and later strength in concrete without increasing the water demand.



Recommended Uses

- Site mixed and precast concrete applications where enhanced workability and early strength gain are desired.
- Situations requiring a reduction in water-to-cement ratio without compromising the setting time.
- Projects demanding high strength concrete with reduced cement content.

Features and Benefits

- Chloride-Free: Safe for use in prestressed and reinforced concrete structures, avoiding the risk of corrosion.
- Water Reduction: Enables significant reductions in the water-to-cement ratio, facilitating the production of high-strength concrete without the need for excessive cement.
- Enhanced Workability: Improves the cohesion and particle dispersion within the concrete mix, reducing segregation and bleeding, and enhancing pumpability.
- Labor Efficiency: The powerful plasticizing effect minimizes the need for mechanical compaction, thereby reducing labor costs.
- Early Strength Gain: Accelerates strength development, which is particularly beneficial for precast concrete applications and projects requiring high early strength.

Application Instructions

- Dosage: Varies based on the specific requirements of the concrete mix and desired properties. Typically ranges from 0.2% to 2.0% by weight of cement.
- Mixing: Add ETHIOPLAST 557 to the mix water or directly to the concrete mix during the batching process. Ensure thorough mixing to achieve uniform dispersion.
- Compatibility: Compatible with a wide range of cement types and other concrete admixtures. Conduct a trial mix to confirm compatibility.

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Storage and Handling

- Store in a cool, dry place, protected from freezing and extreme heat.
- Ensure containers are sealed properly when not in use to maintain product quality.

Safety Precautions

- As with all chemical products, wear s • Wear appropriate personal protective equipment (PPE) when handling the product.
- Avoid contact with skin and eyes. In case of contact, rinse immediately with plenty of water.

Technical Support

For further technical assistance, including dosage optimization and compatibility testing, please contact the technical support team at GAST Solar Mechanics PLC. Our experts are committed to providing support and guidance to ensure the successful application of ETHIOPLAST 557 in your concrete projects.