GSM Construction Chemicals

ETHIOPLAST 570

Technical Datasheet

Product Description

ETHIOPLAST 570 is an advanced, chloride-free water-reducing plasticizer and retarder for concrete, designed to improve the workability and strength of concrete mixes. Formulated from selected sugar-reduced lignosulphonate materials, ETHIOPLAST 570 is supplied as a dark brown liquid that disperses instantly in water. By efficiently dispersing the fine particles within the concrete mix, it enhances the effectiveness of the water content, leading to improved consistency and workability without the need for additional water.



Recommended Uses

- Suitable for ready-mix concrete applications where prolonged workability and controlled setting times are desired.
- Ideal for use in hot weather concreting to reduce water demand and improve the concrete's resistance to cracking and shrinkage.
- Effective in applications requiring enhanced durability and strength of concrete structures.

Features and Benefits

- Water Reduction: Significantly reduces water demand in concrete mixes, leading to higher compressive strengths at all ages without compromising workability.
- Workability Enhancement: Increases the workability of concrete, making it easier to place and finish, especially in hot weather conditions.
- Durability Improvement: Produces concrete with lower permeability, enhancing its durability and reducing the risk of water penetration.
- Retardation of Initial Set: Offers the advantage of workability retention with a controlled retardation of the concrete's initial set, beneficial in ready-mix applications.
- Chloride-Free: Safe for use in all types of concrete, including prestressed and reinforced concrete structures, without the risk of corrosion.

Application Instructions

- Dosage: Recommended dosage ranges from 0.2% to 2.0% by weight of cement, depending on the specific requirements of the mix and desired properties.
- Mixing: Add ETHIOPLAST 570 to the mixing water or directly into the concrete mixer at the beginning of the mixing cycle to ensure even distribution throughout the concrete.
- Compatibility: Can be used with a wide variety of cements and is compatible with other admixtures. A preliminary test is recommended to confirm compatibility.

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Storage and Handling

- Store in a cool, dry area away from direct sunlight and extreme temperatures.
- Keep containers tightly closed when not in use to preserve product quality and effectiveness.

Safety Precautions

- As with all chemical products, wear suitable protective clothing, gloves, and eye protection during use.
- In case of contact with skin or eyes, rinse immediately with plenty of water and seek medical advice if necessary.

Technical Support

GAST Solar Mechanics PLC provides comprehensive technical support for ETHIOPLAST 570, including assistance with dosage optimization, compatibility testing, and application advice. Our team is dedicated to ensuring the successful use of our products in your concrete applications.