GSM Construction Chemicals

ETHIOFlow WP 1

Technical Datasheet

Product Description

ETHIOFlow WP 1 is an advanced concrete integral liquid waterproofing admixture designed to significantly enhance the water resistance and durability of concrete structures. Formulated with a unique blend of surface-active agents, refined lignosulphonates, and organic polymers, ETHIOFlow WP 1 provides exceptional protection against water ingress, making it ideal for a wide range of structural concrete applications.



Uses

- Ideal for structural concrete constantly or intermittently in contact with water, such as sea walls, tunnels, basements, and exposed superstructures.
- Enhances the durability and impermeability of concrete structures.

Standard Compliance

- ASTM D 2111-1985
- ASTM C 494 Types A
- ASTM E96-00 ε1

Typical Properties

- Appearance: Dark brown liquid
- Specific Gravity: 1.11 @ 25±2°C
- Avg. Water Vapor Transmission: 0.00 (grains/h.ft²)
- Avg. Permeance (Perms): 0.00

Typical Applications & Advantages

- Suitable for below-ground waterproofing applications including water tanks, foundations, basements, and car parking areas.
- Reduces water permeability in concrete and mortar mixes.
- Applicable for mass concrete projects such as swimming pools, reservoirs, sea walls, and tunnels.
- Promotes lower water-cement ratios, resulting in increased strength and durability with maintained workability.
- Offers resistance to sulphate attack from sulphate-bearing groundwater.
- Compatible with readymix and site-batched concrete.

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Technical support

GSM offers comprehensive technical support, including on-site technical assistance, to specifiers, end-users, and contractors.

Instructions for Use

Compatibility

- Compatible with all types of Portland cements. Contact GSM for use with special cements.
- Do not add to dry cement or aggregates.

Dosage Rate

- Normal dosage range: 0.80-1.2 liters per 100 kg of cementitious material. Adjust dosage based on trials and specific requirements.
- Shake well before use.

Effects of Over Dosage

- Increased workability and slight set retardation.
- Slight increase in air content, with potential impact on ultimate strength due to air entrainment.
- Retarding effects more pronounced with Sulphate Resisting (SR) cement.

Packaging & Storage

- Available in 16-litre and 250-litre drums, or bulk deliveries to site storage tanks.
- Minimum shelf life of 12 months when stored under cover, out of direct sunlight.

Health & Safety Precautions

- Non-hazardous under current regulations. Avoid ingestion and contact with skin and eyes.
- Wear protective gloves and goggles. Rinse skin with water in case of contact; seek medical advice for eye contact or ingestion.

Important Note

The technical information provided is based on GSM's knowledge and experience. No warranty is given or implied. It is the customer's responsibility to ensure product suitability and to follow the recommended conditions of use.

This technical data sheet for ETHIOFlow WP 1 offers detailed insights into its properties, applications, and guidelines for use, designed to assist in achieving optimal waterproofing performance in concrete structures.