WRDA® 39

Water-reducing initial set retarder

Product Description

WRDA®39 admixture is a ready-to-use aqueous solution of lignosulphonates and hydroxylated organic compounds together with strength enhancing agents. Ingredients are factory premixed in exact proportions to minmise handling, eliminate mistakes and guesswork.

WRDA 39 is formulated to comply with the following specifications for chemical admixtures for concrete: ASTM C 494, Type B and D; BS 5075: Part 1. WRDA 39 contains no added chloride.

One litre weighs approximately 1.13kg ± 0.02kg.

Application

WRDA 39 retards the initial and final set of concrete. It is used whenever a delay in setting time is desired to ensure sufficient delivery, placement, vibration or compaction time, such as in:

- Hot weather concrete
- Transit mix concrete
- Pre-stressed concrete

Properties

Water Reduction

WRDA 39 provides water reduction properties (typically 7 to 12%) along with set retardation in a concrete mix. This water-reducing action of WRDA 39 produces greater plasticity and workability in the fresh concrete and the strength and permeability of the hardened concrete are measurably improved.

Extended Setting Time

WRDA 39 is designed for use in jobs where high temperatures make extended setting times desirable. It is recommended only when the primary purpose is to delay and to control the setting time of the concrete.

Superior Strength-Enhancing Performance

The water reduction properties and dispersion characteristics together with superior strength-enhancing agents produces concrete with increased compressive strength at all ages.

Improve Impermeability

The reduced water-to-cementitious ratio, better dispersion and improved hydration characteristics also produce concrete with increased water-tightness due to reduced water-permeability.

Compatibility with Other Admixtures

WRDA 39 is compatible in concrete with all commercial airentraining admixtures such as DARAVAIR®or DAREX®AEA®. Due to the slight air-entraining properties of WRDA 39, the addition rates of Daravair or Darex AEA may be reduced by about 25%. By combining the separate effects of air entrainment and dispersion, the water requirement of concrete may be reduced by up to 15%. Each admixture should be added to the concrete separately.

Addition Rates

Addition rates for WRDA 39 will typically range from 200 to 800 mL/ 100 kg of cementitious material. The amount used will depend on the degree of retardation required under the job conditions. Longer setting times or higher temperatures will require higher addition rates. The maximum recommended dosage is 1,000mL / 100kg of cementitious material. Should conditions require using more than recommended addition rates, please consult your local GCP representative.

Dispensing Equipment

Please contact your local GCP representative for further information regarding the dispensing equipment for this product.

Packaging

WRDA 39 is available in 205L drums and in bulk. It contains no flammable ingredients. It will begin to freeze at about -2°C, but will return to full strength after thawing and thorough agitation.

Health and Safety

See WRDA 39 Material Safety Data Sheet or consult GCP Applied Technologies

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