

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 minimise 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 air-entraining 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

gcpat.sg | For technical information: asia.enq@gcpat.com

We hope the information here will be helpful. It is based on data and knowledge considered to be true and accurate, and is offered for consideration, investigation and verification by the user, but we do not warrant the results to be obtained. Please read all statements, recommendations, and suggestions in conjunction with our conditions of sale, which apply to all goods supplied by us. No statement, recommendation, or suggestion is intended for any use that would infringe any patent, copyright, or other third party right.

WRDA, Daravair, Darex and AEA are trademarks, which may be registered in the United States and/or other countries, of GCP Applied Technologies, Inc. This trademark list has been compiled using available published information as of the publication date and may not accurately reflect current trademark ownership or status.

© Copyright 2016 GCP Applied Technologies, Inc. All rights reserved.

Printed in Singapore | 11/16 | 200-WRDA-272

GCP Applied Technologies Inc., 2325 Lakeview Parkway, Alpharetta, GA 30009, USA

GCP (Singapore) Pte. Ltd, 25 Tanjong Penjuru, Singapore 609024.

This document is only current as of the last updated date stated below and is valid only for use in Singapore. It is important that you always refer to the currently available information at the URL below to provide the most current product information at the time of use. Additional literature such as Contractor Manuals, Technical Bulletins, Detail Drawings and detailing recommendations and other relevant documents are also available on www.gcpat.sg. Information found on other websites must not be relied upon, as they may not be up-to-date or applicable to the conditions in your location and we do not accept any responsibility for their content. If there are any conflicts or if you need more information, please contact GCP Customer Service.

Last Updated: 2022-09-19

gcpat.sg/solutions/products/wrda-39