

TECHNICAL DATA SHEET

RITEMIX SP193

Superplasticizing, High Range Water Reducing Admixture

PRODUCT DESCRIPTION

RITEMIX SP193 is a chloride free workability retention admixture based on selected synthetic polymers. It is supplied as a brown solution which instantly disperses in water.

RITEMIX SP193 disperses the fine particles in the concrete mix, enabling the water content of the concrete to perform more effectively. The increased workability, cohesion and retardation minimizes loss of workability.

CUSTOMER BENEFITS

- Gives increased working life to fresh concrete.
- Increased workability without extra water, reducing placing time and costs.
- Improves cohesion, minimizing segregation and improving surface finish.
- Aids pumping by improving cohesion and reducing workability loss.
- Allows a reduction in water:cement ratio, enhancing with reduced shrinkage cracking potential.
- Chloride free, safe for use in pre-stressed and reinforced concrete.
- Can be used with concrete containing micro-silica and other cement replacements.

Standards compliance

RITEMIX SP193 conforms with ASTM C494 as **Type G**.

Dosage

The optimum dosage of **RITEMIX SP193** to meet specific requirements should always be determined by trials using the materials and conditions that will be experienced in use. The normal dosage range is 0.6 to 1.5 liters/100kg.

Use at other dosages

Dosages outside the typical range quoted above may be used if necessary and suitable to meet particular mix requirements.

Contact Technical Department for advice in these cases.

Effects of overdosing

An overdose of double the amount of **RITEMIX SP193** will result in a significant increase in retardation as compared to that normally obtained. Provided that adequate curing is maintained, the ultimate strength of the concrete will not be impaired by increased retardation and will generally be increased. The effects of overdosing will be further increased if sulfate resisting cement or cement replacement materials are used. Over-dosage is also likely to cause increased air entrainment, which will tend to reduce strength. The degree of this effect will depend on the particular mix design and overdose level.

Instructions for use

Mix design for workability retention

The mix design should be one suitable for use as a pump mix. To obtain the best results for workability retention, the initial workability should be above 150 mm slump. The retardation and improved cohesion provided by **RITEMIX SP193** then act to enhance the workability retention characteristics. Advice on mix design for flowing concrete is available from Magna Prime Chemical Technologies, Inc.

In correctly designed flowing concrete, the improved dispersion of the cement particles and the more efficient use of mixing water will improve mix cohesion. The improved cohesion obtained with **RITEMIX SP193** will also help to minimize bleed and segregation. After initial trials, minor modifications to the mix design may be made to optimize performance.

Compatibility

RITEMIX SP193 is compatible with other Magna Prime admixtures used in the same concrete mix. All admixtures should be added to the concrete separately and must not be premixed together prior to addition. The resultant properties of concrete containing more than one admixture should be assessed by the trial mixes.

RITEMIX SP193 is suitable for use with all types of Portland cements and cement replacement materials. The use of a combination of admixtures in the same concrete mix and or cement replacements may alter the setting time. Trials should always be conducted to determine such setting times.

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Dispensing

The correct quantity of **RITEMIX SP193** should be measured by means of a recommended dispenser. Normally, the admixture should then be added to the concrete with the mixing water to obtain the best results. Contact Magna Prime for advice regarding suitable equipment and its installation.

Note 1: CPL Regulations 1984 Supply - Schedule 1

Note 2: HSE publication Guidance Note EH40

PACKAGING

RITEMIX SP193 is available in 20 liters and 200liter (drums).

Storage

RITEMIX SP193 has a minimum shelf life of 12 months provided the temperature is kept within the range of 2°C to 50°C. Should the temperature of the product fall outside this range contact Magna Prime for advice.

Freezing point: Approximately -4°C

Precautions

Health and safety

RITEMIX SP193 does not fall into the hazard classifications of current regulations (see notes 1 and 2 below). However, it should not be swallowed or allowed to come into contact with skin and eyes.

Suitable protective gloves and goggles should be worn.

Splashes on the skin should be removed with water. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. If swallowed seek medical attention immediately - **do not** induce vomiting.

For further information consult the Safety Data Sheet available for this product.

Fire

RITEMIX SP193 is water based and non-flammable.

Cleaning and disposal

Spillages of **RITEMIX SP193** should be absorbed onto sand, earth or vermiculite and transferred to suitable containers. Remnants should be hosed down with large quantities of water. The disposal of excess or waste material should be carried out in accordance with local legislation under the guidance of the local waste regulatory authority.