

Rheology Modifying Admixture for Concrete

## DESCRIPTION

TamCem RMA 79 is a high performance, rheology modifying, liquid concrete admixture based on modified silicates, specifically developed for improving the performance of wet and hardened concrete such as sprayed concrete, pre-mixed and precast concrete.

## TYPICAL APPLICATIONS / KEY BENEFITS

### SPRAYED CONCRETE

#### Typical Applications:

- > Temporary and permanent rock support in mining and tunnelling
- > Slope stabilisation
- > Grouting

#### Features and Benefits:

- > Reduces / replaces silica fume / micro silica
- > Enhances sprayability properties
- > Reduces rebound reducing material waste
- > Increases build thickness in a single pass
- > Increases very early strength
- > Reduces or eliminates dust generation creating a safer, healthier environment
- > Increases mix design robustness allowing some moisture and gap-grading tolerances

### PRE-MIXED CONCRETE

#### Typical Applications

- > Self-consolidating concrete
- > Flooring and paving
- > RCC and slip-form
- > Deep foundations
- > Lightweight concrete
- > Pervious concrete

#### Features and Benefits

- > Enhances concrete cohesion, reducing bleeding and segregation
- > Does not affect other concrete plastic properties (slump life, air content)
- > Increases early strength development
- > Reduces pumping pressures
- > Increases the use level of manufactured sand
- > Increases mix design robustness allowing some moisture and gap-grading tolerances.

### PRECAST CONCRETE

#### Typical Applications

- > Self-consolidating concrete
- > Decorative and architectural concrete
- > Pre-stressed elements
- > Zero-slump / masonry concrete

#### Features and Benefits

- > Improves aesthetic surface finish and shape stability reducing voids, bug holes.
- > Enhances concrete cohesion, reducing bleeding and segregation
- > Increases early strength development.
- > Increases mix design robustness allowing some moisture and gap-grading tolerances

## TECHNICAL DATA

TamCem RMA 79	
Colour	Cream
Appearance	Aqueous suspension
Density (g/cm <sup>3</sup> )	1.1 - 1.2
pH	11.0 - 13.0

All technical data stated herein is based on tests carried out under laboratory conditions.

## APPLICATION GUIDELINES

TamCem RMA 79 is pre-mixed and ready to use. It is recommended that TamCem RMA 79 be added to the mixer by means of automatic dispensing equipment as the last component of the batch sequence with the tail water.

TamCem RMA 79 is compatible with most conventional concrete admixtures (i.e. WR, MWR, HWR, Re, Ac and AEA types) and with other additives (SCMs, fibers, pigments) used in concrete.

#### Dose Rate

The dose rate of TamCem RMA 79 varies depending on the application, mix consistency, SCM type and content, cement type and content, w/c ratio and aggregate type and grading.

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### Sprayed Concrete / Shotcrete

In mixes for temporary and rock support or slope stabilisation, the typical dosage rate is between 0.4 – 1.5% by weight of cement.

### Pre-mixed Concrete

In general pre-mixed concrete when used as a cohesion and pumping enhancer the dosage rate is between 0.5 – 1.0% by weight of cement.

In Self-Compacting Concrete (SCC) and high slump concrete to reduce bleeding and segregation the dosage rate is between 1.0 – 2.0% by weight of binder.

### Precast Concrete

In general precast concrete as a cohesion and early strength enhancer, the dosage rate is between 0.5 – 1.0% by weight of cement.

In Self-Compacting Concrete (SCC) reducing bleeding and segregation increasing concrete stability, the dosage rate is between 0.5 – 1.5% by weight of binder.

### PACKAGING

TamCem RMA 79 is available in 1000 Litre IBC containers. Packaging size may vary subject to local regulations and requirements.

### STORAGE

TamCem RMA 79 should be stored at room temperature (min 10°C and max 35°C), kept out of direct sunlight. TamCem RMA 79, when well maintained, in the original unopened packaging can be expected to have a shelf life of 12 months.

### HEALTH & SAFETY

TamCem RMA 79 should only be used as directed. We always recommend that the Safety data sheet is carefully read prior to application of the material. Our recommendations for protective equipment should be strictly adhered to for your personal protection. The Safety data sheet is available upon request from your local Normet representative.