

## Superplasticising Concrete Admixture

### DESCRIPTION

TamCem 18 is a new general superplasticizer for concrete. It contains polycarboxylate ether polymers and is specially formulated to give exceptionally high water reduction and impact extreme workability and slump retention. It is a non-chloride liquid admixture which has been formulated to comply with the requirements of ASTM C 494 for type G water-reducing, high range and retarding admixtures. It fully meets the requirements of BS5075: Part 3: 1985 for retarding superplasticizing admixtures and JIS A6204 "Chemical Admixtures for Concrete". It is compatible with all cements meeting recognized international standards.

TamCem 18 requires a low dosage compared to conventional superplasticisers but provides greater workability characteristics for high slump, flowable concrete with a reduced water demand.

### KEY BENEFITS

- > Chloride-free
- > High water reduction that enhances high early and ultimate strengths, low permeability and makes the concrete highly durable
- > High flowability allows for easy placement and compaction
- > Good cohesion, no segregation, minimal bleed water and extremely high levels of workability of the concrete
- > Enhanced slump retention, easier placement and delivery control especially under hot conditions
- > High elastic modulus, low shrinkage and creep are achievable with proper controlled coarse and fine aggregates
- > Superior finishes with reduced honeycombing

### TYPICAL APPLICATIONS

- > High performance concrete
- > Mixing logistics efficiency during large pour
- > Highly flowable concrete
- > Highly durable concrete
- > High strength concrete
- > Ready-mixed concrete
- > Mass concrete
- > Pumped concrete
- > Long distance transportation

### TECHNICAL DATA

TamCem 18	
Form	Liquid
Colour	Brown
Density (g/cm <sup>3</sup> )	1.10 ± 0.015
Chloride Ion Content	< 0.1%
All at 25°C	

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

### APPLICATION GUIDELINES

#### Compatibility

TamCem 18 is compatible with most TamCem admixtures. Please consult your local Normet representatives if required.

Do not mix with other superplasticizers and/or water-reducers.

#### Dosage and batching

Dosage can be adjusted to meet mix design requirements or to meet specific job site conditions. Trial concrete mixes must be carried out to determine the appropriate dosage.

An independent dispenser and feed line must be used during the application. TamCem 18 can be added to the mixed concrete or into the mixing water. Addition to any dry concrete mix is not recommended.

Typical dosage is 800 ml – 1200 ml / 100 kg of cementitious binder.

### PACKAGING

TamCem 18 is supplied in IBCs, drums and bulk. Packaging size may vary subject to local regulations and requirements, please contact your local Normet representative for more details.

## STORAGE

TamCem 18 should be kept dry and out of direct sunlight, stored at room temperature above 0°C. If these conditions are maintained and the product packaging remains sealed, then a shelf life of one year can be expected.

TamCem 18 will freeze at approximately -4°C but will return to full functionality after thawing and thorough mild mechanical agitation.

## HEALTH & SAFETY

TamCem 18 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.