

Superplasticising Concrete Admixture

DESCRIPTION



TamCem 60 is a new generation superplasticiser for concrete. It contains state of the art polycarboxylate ether polymers and is specially formulated to give exceptionally high water reduction, enhances workability and offers superior slump retention. It is a non-chloride liquid admixture which has been formulated to comply with the requirements of EN 934-2 (Table 3.1 and 3.2) and ASTM C 494 for Type F high range water reducing/superplasticising admixtures. TamCem 60 is compatible with all cements meeting recognised international standards.

TamCem 60 is based on versatile polycarboxylate copolymer technology. Its unique long chain molecular structure enhances the dispersion of cement particles, by means of dual electrostatic repulsion, whereas conventional BNS and SMF based superplasticisers, will only undergo single repulsion. Superior slump retention is achieved by the enhancement of side chain graft density.

TamCem 60 requires a lower dosage compared to conventional superplasticisers but provides extreme workability characteristics for high slump, flowable, self-compacting concrete with greatly reduced water demand.

KEY BENEFITS

- > High water reduction which provides high early and ultimate strengths, low permeability and high durability of the concrete.
- > High flowability provides easy placement and compaction.
- > Excellent cohesion, zero segregation and minimal bleed water with extremely high levels of concrete workability.
- > Exceptional slump retention and easier placement and delivery control especially under warm climatic conditions.

- > High elastic modulus, low shrinkage and creep are achievable using graded coarse and fine aggregates.
- > Superior finishes with reduced honeycombing.

TYPICAL APPLICATIONS

- > High performance concrete
- > Improving mixing efficiency during large pour
- > Highly flowable concrete
- > Highly durable concrete
- > High strength concrete
- > Ready-mixed concrete
- > Sprayed concrete
- > Self compacting concrete
- > Mass concrete
- > Pumped concrete and wet sprayed concrete
- > Long distance transportation
- > Helping to reduce environmental impact

TECHNICAL DATA

TamCem 60	
Form	Liquid
Colour	Red/Brown
Density (g/cm ³)	1.07 ± 0.02
Solids Content (%)	27.00 ± 1.30
pH	5.0 ± 1.0
Chloride Ion Content (%)	< 0.1
All at 20°C	

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

APPLICATION GUIDELINES

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.

Typical dosage is 800 ml / 100 kg of cementitious binder. Should application conditions require a higher dosage rate such as with self-compacting concrete (SCC) applications, consult your local Normet representative.

An independent dispenser and feed line must be used during the application. TamCem 60 can be added to the mixed concrete or into the mixing water but addition to any dry concrete mix is not recommended.

Whilst any information and/or specification contained herein is to the best of our knowledge, true and accurate, we always recommend that a trial be carried out to confirm suitability of the product. Please note regional climatic conditions may cause a variation in the performance of the product. No warranty is given or implied in connection with any recommendations or suggestions made by us or our representatives, agents or distributors. The information in this data sheet is effective from the date shown and supersedes all previous data. Please check with your local Normet office to confirm that this is current issue.

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TamCem 60 is compatible with most TamCem admixtures. Please consult your local Normet representative if required.

Do not blend with other superplasticisers, water-reducers and / or set accelerators.

PACKAGING

TamCem 60 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 60 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.

When TamCem 60 is exposed to ultra violet light the product will change colour and become redder. This does not affect the performance of the product.

TamCem 60 will freeze at approximately -4°C but will return to full functionality after thawing and thorough mild mechanical agitation.

HEALTH & SAFETY

TamCem 60 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.