

## DESCRIPTION



TamCem 67 is a new generation superplasticiser for high early strength concrete. It contains state-of-the-art polycarboxylate ether polymers and is specially formulated to give high water reduction, enhanced workability and offers superior early age strength development. TamCem 67 specially designed for precast concrete applications. It is a non-chloride liquid admixture which has been formulated to comply with the requirements of EN 934-2 and ASTM C 494 for Type F high range water reducing/superplasticising admixtures. TamCem 67 is compatible with all cements meeting recognised international standards.

TamCem 67 is based on versatile polycarboxylate co-polymer technology. Its unique long chain molecular structure enhances the dispersion of cement particles, by means of steric hindrance, whereas conventional SNF and SMF based superplasticisers, will only undergo less powerful electrostatic repulsion. In addition to the polycarboxylate co-polymers, TamCem 67 also contains components capable of increasing the rate of early age hardening of the concrete at ambient and low temperatures.

## 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.
- > High early age strength can be obtained even at low temperatures

- > Can partly replace steam curing at low water/cement ratios
- > High elastic modulus, low shrinkage and creep are achievable using graded coarse and fine aggregates.
- > Superior finishes with reduced honeycombing

## TYPICAL APPLICATIONS

- > Precast concrete
- > High performance concrete
- > Improving mixing efficiency during large pour
- > Highly durable concrete
- > High strength concrete
- > Self-compacting concrete as well as low slump concrete
- > Concrete road constructions

## TECHNICAL DATA

TamCem 67	
Form	Liquid
Colour	Light Brown
Density (g/cm <sup>3</sup> )	1.09 ± 0.02
pH	7.0 ± 1.0
Conventional Dry Material Content (%)	33.0 ± 1.5
Viscosity (mPa-s)	65 ± 10
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 0.4 - 1.4% 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 67 can be added to the mixed concrete or into the mixing water but addition to any dry concrete mix is not recommended.

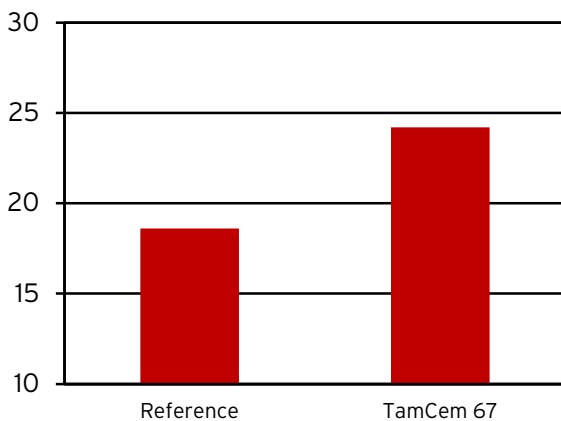
TamCem 67 is compatible with most TamCem admixtures. Please consult your local Normet representative if required.

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

The Table below shows an example of the accelerating effect of TamCem 67 on a thermal cured mortar.

Mortar mix and curing	Reference	TamCem 67
Cement (CEM II A-V 42.5R)	450 g	450 g
Standard sand (CEN)	1350 g	1350 g
Water	190 g	190 g
Water/Cement Ratio	0.422	0.422
TamCem 67 (% of cement)	No admixture	1.0
Mixing and filling of moulds	30 minutes at 20°C	
Thermal curing	5 hours at 50°C	
Cooling and demoulding	30 minutes at 20°C	
Density of cured mortar prisms (kg/dm <sup>3</sup> )	2.37	2.19

Compressive strength at 6 hrs (MPa)



## PACKAGING

TamCem 67 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 67 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 67 will freeze at approximately -4°C but will return to full functionality after thawing and thorough mild mechanical agitation.

## HEALTH & SAFETY

TamCem 67 should only be used as directed. We always recommend that the Safety data sheet (SDS) 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.