

Superplasticizing Precast Concrete Admixture

DESCRIPTION

TamCem 412P is a superplasticizer for precast concrete which complies with the requirements of EN 934-2. TamCem 412P is a non-chloride liquid admixture, designed as a high range water reducer/superplasticizer for precast concrete.

It is specially formulated for enhanced workability of concrete mix designs that require high early-age strength which are using more demanding cement. TamCem 412P contains state-of-the-art polycarboxylate ether polymers and specialist dispersing agents. It is compatible with all cement meeting recognised international standards.

TamCem 412P requires a similar dosage compared to most stable superplasticizers but provides workability characteristics for high consistent, flowable concrete with greatly reduced water demand.

KEY BENEFITS

- › Optimises water-cement ratio for high early and ultimate strengths, allowing cementitious contents to be minimised.
- › High consistency provides easy placement and compaction.
- › Excellent cohesion, zero segregation and minimal bleed water with extremely high levels of concrete workability.
- › Good initial slump retention for easier placement and delivery control, but then stiffens and sets quickly.
- › High elastic modulus, low shrinkage and creep are achievable using graded coarse and fine aggregates.
- › Permits low permeability and high durability concretes to be produced.
- › Reduced entrapped air, delivering superior finishes with reduced honeycombing.

TYPICAL APPLICATIONS

- › Precast concrete application
- › Improving mixing efficiency optimising the mixing cycle
- › High performance / strength concrete
- › Highly flowable concrete
- › Highly durable concrete
- › Fibre reinforced concrete

PACKAGING

TamCem 412P 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 and sustainable options.

TECHNICAL DATA

TamCem 412P	
Form	Liquid
Colour	Light Brown
Density (kg/l)	1.06 ± 0.02
pH	6 ± 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 0.5 – 0.9% of cementitious binder content. The higher dosage rate such as with self-compacting concrete applications is for high consistence products.

An independent dispenser and feed line must be used during the application. TamCem 412P can be added into the mixing water to obtain complete dispersion, or preferentially, added after most of the water has been mixed into the concrete. Addition to any dry concrete mix is not recommended.

TamCem 412P is compatible with most other TamCem admixtures. Please consult your local Normet representative if required.

STORAGE

TamCem 412P should be kept dry and out of direct sunlight, stored at room temperature above 4°C. If these conditions are maintained and the product packaging remains sealed, then a shelf life of one year can be expected. TamCem 412P will freeze but will return to full functionality after thawing and thorough remixing.

HEALTH & SAFETY

TamCem 412P 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.