

TECHNICAL DATA SHEET

FLOWCON®-3001

High-range Water-reducing & Set-retarding superplasticizer

DESCRIPTION

FLOWCON®-3001 is a modern superplasticizer based on a modified polycarboxylate polymer. It allows the realisation of concrete with very low water / cement ratio, while maintaining consistent control over set retardation. It meets the standards for high-range water-reducing with set retarding admixtures.

USES

FLOWCON®-3001 is a high-performance concrete admixture engineered for applications demanding elevated compressive and flexural strengths. It imparts significant water-reducing capabilities while simultaneously optimizing the rheological and workability characteristics of freshly mixed concrete.

FLOWCON®-3001 is ideally suited for:

- ✓ Ready-mixed and pumped concrete
- ✓ High early strength
- ✓ Reinforced concrete
- ✓ Durable, high-performance concrete
- ✓ Slump flow between 100 to 220mm
- ✓ Mixes demanding up to 20% water reduction

KEY FEATURES

FLOWCON®-3001's key performance attributes include:

- High efficiency at low dosages, optimizing cost-effectiveness
- Extended workability with controlled early and late-age strength development
- Superior plasticizing effect, improving flowability, placement, and compaction
- Enhanced cohesion, reducing segregation and bleeding in the mix
- Improved pumpability and ease of transport in ready-mix applications
- Superior plasticizing effect, resulting in improved flow, placing and compaction characteristics
- Water reduction up to 20% depending on dosage*
- Promotes uniform hydration, reducing microcracking
- 28 days strength improved by up to 25 %*

* This will depend on dosage and mix design

TEST STANDARD

IS 9103, ASTM C494 Type D, F & G

PRODUCT INFORMATION

Composition	Polycarboxylate Ether (PCE)
Packaging	200 KG barrel or 1 MT IBC Tank
Shelf life	12 months from date of production if stored properly in undamaged un-opened, original sealed packaging.
Storage conditions	Store in dry conditions at temperatures between +10°C and +40°C. Protect from direct sunlight and frost.
Appearance and colour	Transparent Liquid
Density	~1.05 kg/l at 25°C
pH-Value	≥ 6
Total chloride ion content	< 0.2 %

APPLICATION INFORMATION

Recommended dosage

Standard dosage will vary from 0.3% to 1.5% by weight of cement. Exact dosage rates are dependent on the quality of cement, aggregates, water/cement ratio and ambient temperature. Therefore, in many cases it is advisable to carry out trial mixes. Higher dosage may be used if agreed by engineer and consultant. Stir well before use.

Compatibility

FLOWCON®-3001 may be combined with many other Flowtech products. Compatible with all types of cements and cementitious materials. Important: Always conduct trials before combining products in specific mixes and combinations.

PRODUCT DATA REFERENCE

All technical data provided in this Product Data Sheet are based on laboratory testing. Actual performance may vary depending on customization or specific site conditions and factors beyond our control.

IMPORTANT CONSIDERATIONS

When using FLOWCON®-3001 a suitable mix design has to be taken into account and local material sources shall be trailed.

FLOWCON®-3001 should not be added directly to dry cement. Excessive water, overdosing, or variations in aggregate, cement, or other cementitious materials may lead to issues such as bleeding, segregation, altered workability, or changes in setting time.

HEALTH AND SAFETY

For guidance on the safe handling, storage, and disposal of this chemical product, users must refer to the latest Safety Data Sheet (SDS), which contains detailed information on physical, ecological, toxicological, and other safety-related aspects.

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APPLICATION PROCEDURE

DISPENSING

FLOWCON®-3001 should be added to the gauging water or together with it into the concrete mixer. To achieve optimal water reduction, a wet mixing time of at least 60 seconds is recommended, depending on mixer type and conditions. Final dosing should begin only after 2/3 of the wet mixing time to avoid excess water in the mix.

LOCAL RESTRICTIONS

Please note that as a result of specific local regulations the declared data for this product may vary from country to country. Please consult the local Product Data Sheet for the exact product data.

LEGAL NOTES

The information and recommendations provided, particularly regarding the application and end-use of the product, are given in good faith based on our current knowledge and experience under standard conditions, assuming proper storage, handling, and use in accordance with our guidelines. However, due to variations in materials, substrates, and actual site conditions, no warranty is given—express or implied—regarding merchantability, fitness for a particular purpose, or any legal liability arising from the use of this information or product. Users are solely responsible for evaluating the product's suitability for their specific application. We reserve the right to modify product properties without prior notice. Compliance with third-party intellectual property rights must be ensured by the user. All sales are subject to our latest terms and conditions. Always consult the most current version of the local Product Data Sheet, available upon request.

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