

Sika® ViscoFlow® 1000

High range water reducing/superplasticising concrete admixture with enhanced workability retention

Construction

Product Description

Sika® ViscoFlow® 1000 is a liquid admixture for concrete based on unique polycarboxylate polymers technologies. Sika® ViscoFlow® 1000 is designed as a high range water reducer or superplasticiser. It is particularly suited for use in concretes that require low water/cement ratios and / or high water reductions with excellent workability retention properties of up to 3 hours.

Sika® ViscoFlow® 1000 meets the requirements of BS EN 934-2 table.

Uses

Sika® ViscoFlow® 1000 is a unique product that is suitable for the production of ready mixed concrete

- Applications that require extended consistence retention without delayed setting
- Suitability for use across broad range of consistence classes from S3 – SF3
- High performance concrete
- Self compacting concrete
- High rise/pumped concrete
- Slip form concrete
- Improved effectiveness in higher ambient temperatures

Characteristics / Advantages

High range water reductions resulting in higher strengths and densities

- Extended consistence retention
- Improved cohesion properties
- Improved early and ultimate strengths
- Excellent placement characteristics
- Improved rheology
- Improved durability
- Reduced segregation and bleeding
- Reduced drying shrinkage
- Reduced mix costs

Tests

Approvals / Standards

Conforms to the requirements of BS EN 934-2 Tables 3.1 & 3.2 DoP 02 13 01 01 100 0 000853 1088, certified by Factory Production Control Body 0086, Certificate 541325, and provided with the CE mark



Product Data

Form

Appearance / Colours Clear to slightly hazy liquid

Packaging 25 litre, 200 litre, 1000 litre IBC

Storage Conditions / Shelf Life 12 months from date of production if stored properly in undamaged containers, in dry conditions at temperatures between +5°C and +25°C.
Protect from direct sunlight and frost.

Technical Data

Chemical Base Modified polycarboxylate

Density 1.075 kg/l (at +20°C)

pH Value 5.0 ± 1.0

Freezing Point +1°C

Chloride Ion Content <0.1% w/w (chloride free)

Air Entrainment Negligible, minimal increase

Effect on Setting Extension to normal setting time

Effect of Overdosing Increased workability and segregation

Alkali Content <0.35% w/w

Mechanical / Physical Properties

System Information

Application Details

Consumption / Dosage 0.3 - 0.8% by weight of cement

Application Conditions / Limitations

Compatibility Sika® ViscoFlow® 1000 may be combined with many other Sika products.
Important: Always conduct trials before combining products in specific mixes and contact our Technical Service Department for information and advice about any specific combinations.

Application Instructions

Dispensing	<p>Sika® ViscoFlow® 1000 should be dispensed through suitable calibrated dosing equipment.</p> <p>Sika® ViscoFlow® 1000 is added to the gauging water or added with it into the concrete mixer.</p>
Application Method / Tools	<p>The standard rules of good concreting practice, concerning production and placing, are to be followed.</p> <p>Laboratory trials shall be carried out before concreting on site, especially when using a new mix design or producing new concrete components.</p> <p>Fresh concrete must be cured properly and curing applied as soon as possible.</p>
Notes on Application / Limitations	<p>When using Sika® ViscoFlow® 1000 a suitable mix design has to be taken into account and local material sources shall be trialled.</p> <p>Sika® ViscoFlow® 1000 shall not be added to dry cement.</p> <p>Excessive water addition or overdosing may cause bleeding or segregation.</p> <p>Support from our Technical Service Department is recommended.</p> <p>Frost: If frozen and / or if precipitation has occurred, Sika® ViscoFlow® 1000 may be used after thawing slowly at room temperature followed by intensive remixing.</p>
Value Base	<p>All technical data stated in this Product Data Sheet are based on laboratory tests. Actual measured data may vary due to circumstances beyond our control.</p>
Local Restrictions	<p>Please note that as a result of specific local regulations the performance of this product may vary from country to country. Please consult the local Product Data Sheet for the exact description of the application fields.</p>
Health and Safety Information	<p>For information and advice on the safe handling, storage and disposal of chemical products, users shall refer to the most recent Material Safety Data Sheet containing physical, ecological, toxicological and other safety-related data.</p>
Legal Notes	<p>The information, and, in particular, the recommendations relating to the application and end-use of Sika products, are given in good faith based on Sika's current knowledge and experience of the products when properly stored, handled and applied under normal conditions in accordance with Sika's recommendations. In practice, the differences in materials, substrates and actual site conditions are such that no warranty in respect of merchantability or of fitness for a particular purpose, nor any liability arising out of any legal relationship whatsoever, can be inferred either from this information, or from any written recommendations, or from any other advice offered. The user of the product must test the product's suitability for the intended application and purpose. Sika reserves the right to change the properties of its products. The proprietary rights of third parties must be observed. All orders are accepted subject to our current terms of sale and delivery. Users must always refer to the most recent issue of the local Product Data Sheet for the product concerned, copies of which will be supplied on request.</p>
CE Labelling	<p>EN 934-2:2009 is a candidate "harmonized" European Standard and fully takes into account the requirements of the European Commission mandate M128. Products related to concrete, mortar and grout, given under the EU Construction Products Directive (89/106/EEC) and intended to lead to CE marking.</p> <p>CE-labelled as per Annex ZA.3, table ZA.2 conformity 2+ and fulfil the requirements of the given mandate of the EU Construction Products Directive (89/106/CE).</p>



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