Sika ViscoFlow®-1228 R

CONCRETE ADMIXTURE FOR HIGH FLOW / SELF-COMPACTING CONCRETE

DESCRIPTION
Sika ViscoFlow®-1228 R is a third generation superplasticiser for concrete and mortar. It is particularly developed for the production of high flow concrete with exceptional flow retention properties and significant reduction in bleeding and segregation.

USES
Sika ViscoFlow®-1228 R facilitates excellent flowability with optimal cohesion and longer slump retention properties.

Sika ViscoFlow®-1228 R is used for the following types of concrete:
- High flow concrete
- Self-compacting concrete (S.C.C.)
- High strength concrete
- Watertight concrete

The combination of high water reduction, excellent flowability and long slump retention provides clear benefits in the above mentioned applications.

CHARACTERISTICS / ADVANTAGES
Sika ViscoFlow®-1228 R acts by surface adsorption on the cement particles producing a sterical separation effect. Concrete produced with Sika Sika ViscoFlow®-1228 R exhibits the following properties:
- Excellent flowability (resulting in highly reduced placing and compacting efforts)
- Strong self-compacting behaviour
- Improved shrinkage and creep behaviour
- Increased carbonation resistance of the concrete
- Improved finish
- Reduce tendency to bleeding and segregation

Sika ViscoFlow®-1228 R does not contain chlorides or other ingredients which promotes steel corrosion. Therefore, it may be used without restriction for reinforced and pre-stressed concrete construction.

PRODUCT INFORMATION

<table>
<thead>
<tr>
<th>Chemical base</th>
<th>Modified aqueous solution of modified polycarboxylate copolymers</th>
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<tbody>
<tr>
<td>Packaging</td>
<td>200 L drums</td>
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<tr>
<td>Appearance / Colour</td>
<td>Liquid / Turbid</td>
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<tr>
<td>Shelf life</td>
<td>12 months from date of production if stored properly in undamaged unopened, original sealed packaging.</td>
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<tr>
<td>Storage conditions</td>
<td>Store in dry conditions at temperatures between +5 °C and +30 °C. Protect from direct sunlight and frost.</td>
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<tr>
<td>Density</td>
<td>1.048 ± 0.01 kg/L</td>
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<tr>
<td>Total Chloride Ion Content</td>
<td>&lt; 0.1% w/w</td>
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TECHNICAL INFORMATION

Concreting Guidance
With the use of Sika ViscoFlow®-1228 R, concrete of the highest quality is produced. The standard rules of good concreting practice (production as well as placing) must also be observed with Sika ViscoFlow®-1228 R concrete. Fresh concrete must be cured properly.

APPLICATION INFORMATION

Recommended Dosage

<table>
<thead>
<tr>
<th>Category</th>
<th>Dosage</th>
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<tbody>
<tr>
<td>For soft plastic concrete</td>
<td>0.2 - 0.6% by weight of binder</td>
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<tr>
<td>For flowing and self compacting concrete (S.C.C.)</td>
<td>0.6 - 1.6% by weight of binder</td>
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Compatibility
Sika ViscoFlow®-1228 R may be combined with the following products:
- Plastiment® P121R
- Plastiment® VZ
- Sika® Fume
- SikaFibre®

Do not use viscocrete / viscoflow series combined with sikament series.
To produce flowing and / or self-compacting concrete, special concrete mix design is required.
Pre-trials are recommended and mandatory if combinations with the above products are required.
Please consult our Technical Service Department.

APPLICATION INSTRUCTIONS

DISPENSING
Sika ViscoFlow®-1228 R is added to the gauging water or simultaneously poured with it into the concrete mixer. For optimum utilisation of its high water reduction property and slump keeping property, we recommend to add Sika ViscoFlow®-1228 R into “wet” concrete mixture and then thorough mixing at a minimal wet mixing time of 60 seconds.
The addition of the remaining gauging water (normally 5% of designed water quantity to fine tune concrete consistency) may only be started after two-thirds of the wet mixing time, to avoid surplus water in the concrete.
When added directly to the freshly mixed concrete, the plasticizing effects is more pronounced.
When accidental overdosing occurs, Sika ViscoFlow®-1228 R does not entrain excessive amounts of air, however the set retarding effect increases.

LOCAL RESTRICTIONS
Note that as a result of specific local regulations the declared data and recommended uses for this product may vary from country to country. Consult the local Product Data Sheet for the exact product data and uses.

ECOLOGY, HEALTH AND SAFETY
For information and advice on the safe handling, storage and disposal of chemical products, users shall refer to the most recent Safety Data Sheet (SDS) containing physical, ecological, toxicological and other safety-related data.

BASIS OF PRODUCT DATA
All technical data stated in this Data Sheet are based on laboratory tests. Actual measured data may vary due to circumstances beyond our control.
LEGAL NOTES

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.