

PRODUCT DATA SHEET

Sika® ViscoCrete®-4100 (GB)

WATER REDUCING CONCRETE ADMIXTURE WITH ENHANCED WORKABILITY RETENTION

PRODUCT DESCRIPTION

Sika® ViscoCrete®-4100 (GB) is a liquid admixture for concrete based on a unique blend of polycarboxylate polymers technologies. Sika® ViscoCrete®-4100 (GB) is designed as a water reducer or plasticiser. It is particularly suited for use in concretes that require excellent workability retention properties of 4 hours+.

USES

Sika® ViscoCrete®-4100 (GB) is a unique product that is suitable for the production of ready mixed concrete

- Applications that require extended and stable consistence retention without delayed setting
- Suitability for use across broad range of consistence classes from S2 – SF3
- High-performance concrete
- Workability retention in self-compacting concrete when used in conjunction with an additional super-plasticiser
- High-rise/pumped concrete
- Improved effectiveness in higher ambient temperatures

PRODUCT INFORMATION

Chemical Base	Modified polycarboxylate
Packaging	20 litre, 200 litre and 1000 litre available
Appearance / Colour	Brown liquid
Shelf Life	12 months from date of production if stored properly in undamaged containers.
Storage Conditions	Store in dry conditions at temperatures between +5°C and +25°C. Protect from direct sunlight and frost.
Density	1.06kg/l (at +20°C)
pH-Value	4.9
Total Chloride Ion Content	<0.1% (Chloride free)

CHARACTERISTICS / ADVANTAGES

Water reduction 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

APPROVALS / STANDARDS

Conforms to the requirements of BS EN 934-2 Table 2. DoP 37812116, certified by Factory Production Control Body 1029 and provided with the CE mark DoP 63459977, certified by Factory Production Control Body 0120 and provided with the UKCA mark

TECHNICAL INFORMATION

Specific Advice

Air Entrainment: Negligible, minimal increase
 Effect on Setting: Extension to setting time dependant on dosage
 Effect of Overdosing: Increased workability and segregation

APPLICATION INFORMATION

Recommended Dosage

0.2 - 1% by weight of cement

Compatibility

Sika® ViscoCrete®-4100 (GB) 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.

Dispensing

Sika® ViscoCrete®-4100 (GB) should be dispensed through suitable calibrated dosing equipment.
 Sika® ViscoCrete®-4100 (GB) is added to the gauging water or added with it into the concrete mixer.

VALUE BASE

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.

ECOLOGY, HEALTH AND SAFETY

REGULATION (EC) NO 1907/2006 - REACH

User must read the most recent corresponding Safety Data Sheets (SDS) before using any products. The SDS provides information and advice on the safe handling, storage and disposal of chemical products and contains physical, ecological, toxicological and other safety-related data.

APPLICATION INSTRUCTIONS

Application Method/Tools

The standard rules of good concreting practice, concerning production and placing, are to be followed. Laboratory trials shall be carried out before concreting on site, especially when using a new mix design or producing new concrete components.
 Fresh concrete must be cured properly and curing applied as soon as possible.

Notes on Application/Limitations

- When using Sika® ViscoCrete®-4100 (GB) a suitable mix design has to be taken into account and local material sources shall be trialled.
- Sika® ViscoCrete®-4100 (GB) shall not be added to dry cement.
- Excessive water addition or overdosing may cause bleeding or segregation.
- Support from our Technical Service Department is recommended.

Frost:

If frozen and / or if precipitation has occurred, Sika® ViscoCrete®-4100 (GB) may be used after thawing slowly at room temperature followed by intensive re-mixing.

LOCAL RESTRICTIONS

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.

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.

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