

BUILDING TRUST

PRODUCT DATA SHEET Sika[®] Retarder G-1

WATER REDUCING AND RETARDING CONCRETE ADMIXTURE

DESCRIPTION

A set retarding concrete admixture with moderate water reduction. Admixture for controlling setting time of concrete for RCC (Roller Compacted Concrete) and Ready mix concrete.

USES

Sika[®] Retarder G-1 can be used for high quality concrete in difficult conditions such as:

- High temperature
- Long haul
- Extended retardation concrete
- Ready mix concrete
- Roller compacted concrete
- Wherever high quality dense concrete is required

CHARACTERISTICS / ADVANTAGES

Sika[®] Retarder G-1 provides the following beneficial properties :

- Increased setting time at elevated temperature
- Long-lasting control of slump loss
- Very good for ready mix concrete plants where long haulage is needed
- Improved workability without increasing water
- Reduced water without loss of workability
- Increased ultimate strength
- Reduced shrinkage and creep
- Improved surface finish
- Chloride-free does not attack reinforcement

APPROVALS / STANDARDS

ASTM C 494 Type B, D. IS 9103

Chemical Base	Modified Ligno Sulphonate
Packaging	275 kg/ Bulk on request
Appearance / Colour	Dark Brown liquid
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 +5°C and +40°C. Protect from direct sunlight and frost.
Density	~1.26 kg/l at 25°C
pH-Value	≥ 6

PRODUCT INFORMATION

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APPLICATION INFORMATION

Recommended Dosage	0.1 - 2.0% by weight of cement. Actual dosage to be finalised on the basis of site trials
Compatibility	Sika [®] Retarder G-1 may be combined with many other Sika [®] Products. Compatible with all types of cements and cementitious materials. Important: Always conduct trials before combining products in specific mixes and contact our Technical Service Department for information about specific combinations.

APPLICATION INSTRUCTIONS

CLEANING OF TOOLS

Clean all tools and application equipment with water immediately after use.

DISPENSING

Sika® Retarder G-1 can be added into the mixing water or directly into the concrete mixer after 50 - 70% of the mixing water has been added.

The addition of Sika[®] Retarder G-1 to dry aggregate or cement is not recommended.

To achieve optimum performance a minimum wet mixing time, which is depending on the mixing conditions and the mixer performance, of 60 seconds is recommended.

LIMITATIONS

Excessive water addition or overdosing may delay setting time of concrete. But ultimate strength will not be affected.

BASIS OF PRODUCT DATA

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.

LOCAL RESTRICTIONS

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 Material Safety Data Sheet containing physical, ecological, toxicological and other safetyrelated data.

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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