

PRODUCT DATA SHEET

Sika® Retarder-425 IN

Retarding admixture for Roller Compacted Concrete

DESCRIPTION

Sika® Retarder-425 IN is a retarder which imparts controlled delay in concrete setting time, while enhancing ease of compaction.

USES

Sika® Retarder-425 IN is used typically where minimising cold joints is of importance in large pours or where concrete is exposed to rapid drying environment. Typical applications are

- Roller compacted concrete e.g. in dams
- Slip form concrete in silos, canals in hot and dry climates
- Hot weather concreting

Sika® Retarder-425 IN is highly effective in, low slump, low w/b concrete.

CHARACTERISTICS / ADVANTAGES

Sika® Retarder-425 IN provides the following beneficial properties:

- Permits large, continuous pours, in multiple layers, without cold joints.
- Enables easy compaction of stiff mixes.
- Improves density of concrete by reducing permeability due to its plasticizing action.
- Enables controlled extension of initial set.
- Significantly enhances rate of strength gain once the final set is attained.

APPROVALS / STANDARDS

Conforms to IS 9103 / ASTM C494 Type B

PRODUCT INFORMATION

Chemical base	Poly hydroxyl compound
Packaging	275kg drum
Appearance / Colour	Dark brown liquid
Shelf life	12 months from date of production
Storage conditions	Frost: If frozen or if precipitation has occurred, the Product may be used after thawing slowly at room temperature and intensive mixing. The Product must be stored in original, unopened and undamaged sealed packaging in dry conditions at temperatures between +5 °C and +40 °C. Protect from direct sunlight and frost. Always refer to the packaging.
Density	~1.17 kg/l at 25°C
pH-value	≥ 6

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APPLICATION INFORMATION

Recommended Dosage

• 0.2% to 1% by weight of cement.

The dosage rates given above are for typical usages, they are not meant as absolute limits, as other dosages may be utilized in special cases according to specific job conditions.

Note: Preliminary laboratory trials are always recommended to determine the optimum consumption and injection parameters.

Contact Sika Technical Services for additional information.

SYSTEM INFORMATION

Compatibility

The Product is compatible with all standard cement types. For use with other cements contact your local Sika technical service for information. The Product can be combined and is recommended for use with other Sika products, such as:

- Sika® Retarder setting retarders
- SikaRapid® hardening accelerators
- Sika® Stabilizer workability improver, for example Sika® Stabilizer VMA series to modify viscosity
- SikaControl® durability and quality enhancer, for example SikaControl® AER series to improve frost and thaw resistance
- SikaFume® silica fume strength and durability enhancer
- Sika® Separol® mould release agents
- Sika® Antisol® curing compounds

Always conduct trials before combining different products. Contact Sika Technical Services for additional information.

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.

IMPORTANT CONSIDERATIONS

When accidentally over dosing occurs it will retard the setting. But the ultimate strength will not be affected, if adequate care is taken.

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 safety-related data.

APPLICATION INSTRUCTIONS

MIXING

The Product is a ready-to-use liquid that is added to the concrete during the mixing process. Optimal performance is obtained if the Product is dispensed into the concrete mix after the addition of 50–90 % of mixing water. Avoid adding the Product to dry materials. The Product should not be pre-mixed with other admixtures. If other admixtures are to be used in concrete containing the Product they must be dispensed separately.

After adding the Product allow enough mixing time to secure a homogenous concrete. If necessary, continue mixing and add additional Product to obtain the required properties.

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 exact product data and uses.

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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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