

# PRODUCT DATA SHEET

## Sika<sup>®</sup> Retarder-50

### SET RETARDING/STABILISING ADMIXTURE

#### PRODUCT DESCRIPTION

Sika<sup>®</sup> Retarder-50 is a liquid admixture developed for the control of cement hydration. Sika<sup>®</sup> Retarder-50 retards/stabilises concrete mixes without negatively influencing their quality.

#### USES

Sika<sup>®</sup> Retarder-50 allows the production of retarded/stabilised concrete.

Sika<sup>®</sup> Retarder-50 is mainly used for the following applications:

- A wide range of applications where set retarding/stabilising is requested

#### CHARACTERISTICS / ADVANTAGES

Sika<sup>®</sup> Retarder-50 retards/stabilises the hydration of the cement.

- Strong retardation/stabilising to overcome long haulage distances
- High resistance to segregation with reduced bleed
- Extended workability
- Provides higher ultimate strengths

#### APPROVALS / STANDARDS

Conforms to the requirements of BS EN 934-2 Table 8 DoP 02 14 02 03 100 0 000030 1088, certified by Factory Production Control Body 0086, Certificate 541325, and provided with the CE mark

#### PRODUCT INFORMATION

<b>Chemical Base</b>	Hydrocarboxylate and carbohydrate blend
<b>Packaging</b>	18 litre drum, 200 litre drum, 1000 litre IBC
<b>Appearance / Colour</b>	Pale Straw Liquid
<b>Shelf Life</b>	12 months from date of production if stored properly in undamaged unopened, original sealed packaging.
<b>Storage Conditions</b>	Store in dry conditions at temperatures between +5°C and +25°C. Protect from direct sunlight and frost.
<b>Density</b>	1.22 Kg/Litre
<b>pH-Value</b>	8.0 ± 1.0
<b>Total Chloride Ion Content</b>	<0.1% w/w
<b>Specific Advice</b>	Equivalent Sodium Oxide as % Na <sub>2</sub> O w/w: <10.0%

---

## APPLICATION INFORMATION

---

<b>Recommended Dosage</b>	0.2 – 2.0% by weight of cement
<b>Compatibility</b>	Sika® Retarder-50 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.
<b>Dispensing</b>	<ul style="list-style-type: none"><li>▪ Sika® Retarder-50 is added to the gauging water or added with it into the concrete mixer.</li><li>▪ A wet mixing time, which is depending on the mixing conditions and mixer performance, of at least 60 seconds is recommended.</li><li>▪ When added on site the truck mixer shall rotate its drum at maximum revolutions for at least 1 minute per m<sup>3</sup> concrete and a minimum of 5 minutes to achieve a uniform mix.</li></ul>

---

## 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 early as possible.

### NOTES ON APPLICATION / LIMITATIONS

- When using Sika® Retarder-50 a suitable mix design has to be taken into account and local material sources shall be trialled.
- Sika® Retarder-50 shall not be added to dry cement.
- Overdosing will result in an increase in setting time. Large overdoses of retarders/stabilisers can produce very long setting times and even small overdoses can have this effect if the initial dose is high.
- Support from our Technical Service Department is recommended.
- Frost: If frozen and / or if precipitation has occurred, Sika® Retarder-50 may be used after thawing slowly at room temperature followed by intensive remixing.

### CLEANING OF TOOLS

Clean all tools and application equipment with water immediately after use. Hardened / cured material can only be removed mechanically.

## 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.

## 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.

## 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.

## 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.

**SIKA LIMITED**

Watchmead  
Welwyn Garden City  
Hertfordshire, AL7 1BQ  
Tel: 01707 394444  
Web: [www.sika.co.uk](http://www.sika.co.uk)  
Twitter: @SikaLimited

**SIKA IRELAND LIMITED**

Ballymun Industrial Estate  
Ballymun  
Dublin 11, Ireland  
Tel: +353 1 862 0709  
Web: [www.sika.ie](http://www.sika.ie)  
Twitter: @SikaIreland



Product Data Sheet  
Sika® Retarder-50  
January 2019, Version 03.01  
021406011000000030

SikaRetarder-50-en-GB-(01-2019)-3-1.pdf

