

PRODUCT DATA SHEET

Sika® Plastiment®-101

WATER-REDUCING AND RETARDING CONCRETE ADMIXTURE

DESCRIPTION

Sika® Plastiment®-101 is a highly effective water reducing agent with controlled retardation over a wide dosage range.

Suitable for use in tropical and hot climatic conditions.

USES

Sika® Plastiment®-101 is used for producing high quality concrete in applications such as:

- Ready mixed concrete
- Fair faced concrete
- High temperature concreting
- Difficult placing conditions
- Long transportation distances

FEATURES

Sika® Plastiment®-101 provides the following properties:

- Long slump retention at high concrete temperature
- Increased setting time in hot weather
- Reduced water without loss of workability
- Increased strength
- Reduced shrinkage and creep
- Better surface finish
- Economic

CERTIFICATES AND TEST REPORTS

Sika® Plastiment®-101 follows the requirements of ASTM C494; Types B & D and EN 934-2

PRODUCT INFORMATION

Composition	Lignosulphonate
Packaging	1000 L flowbin Bulk supply in tanker trucks possible on request
Appearance and colour	Brown liquid
Shelf life	12 months from date of production if stored properly
Storage conditions	Store in undamaged, unopened, original sealed packaging in dry conditions at temperatures between +5 °C and +50 °C. Mix well before use.
Density	~1.16 kg/l (+25 °C)
Total chloride ion content	Nil (EN 934-2)

TECHNICAL INFORMATION

Concreting guidance

The standard rules of good concreting practice for production and placing must be observed when using Sika® Plastiment®-101 in concrete. Refer to relevant standards.

Fresh concrete must be cured properly especially at high temperatures in order to prevent plastic and drying shrinkage. Use Sika® Antisol® products as a curing agent or apply wet hessian.

APPLICATION INFORMATION

Recommended dosage

0.2 - 1.0 % by weight of binder.
Higher dosages by weight of binder can be used depending on the mix design, raw materials, climatic conditions and concrete requirements.
Trial mixes must be performed to establish the exact dosage rate required.

Compatibility

Sika® Plastiment®-101 is suitable for mixes containing all types of cement and supplementary cementitious materials such as: Microsilica (Silica Fume), Fly Ash (PFA), GGBS (Ground Granulated Blast Furnace Slag) and the following Sika products:

Sikament®, SikaPlast®, Sika® ViscoCrete®, SikaPump®, Sika® FerroGard®, SikaFume®, SikaFiber®, Sika® Aer, Sika® Stabilizer, SikaControl®

We recommend for trial mixes to be performed to establish the required performance when combining Sika® Plastiment®-101 with the above products or other admixtures. Please consult our Sika Technical Department.

Dispensing

Sika® Plastiment®-101 is added to the gauging water or simultaneously poured with it into the concrete mixer at the batching plant.

Do not add Sika® Plastiment®-101 directly to the dry mix.

For optimum utilization we recommend thorough mixing at a minimum wet mixing time of 60 seconds.

The addition of the remaining gauging water (to fine tune concrete consistency) may only be started after two-thirds of the wet mixing time to avoid surplus water in the concrete.

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.

IMPORTANT CONSIDERATIONS

- Before pouring suitability tests on the fresh concrete must be carried out.
- Take special care that formwork is properly installed and secured.
- If frozen and/or if precipitation has occurred, it may only be used after thawing slowly at room temperature and intensive mixing.
- When using Sika® Plastiment®-101 a suitable concrete mix must be designed for the local material sources and trial mixes performed to verify suitability.
- When accidental overdosing occurs the set retarding effect and workability increases. Additional air may also be entrained. During this period the concrete must be kept moist in order to prevent premature drying out.

ECOLOGY, HEALTH AND SAFETY

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.

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.

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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ISO 9001, 14001, 45001 – SGS
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ISO 9001, 14001 – SGS
Sika Saudi Arabia Limited
ISO 9001, 14001 – TÜV
Sika MB Construction Chemicals LLC
Sika Construction Chemicals
for Manufacturing LLC
ISO 9001 – LMS
Sika MB LLC

All products are supplied under
a management system certified
to conform to the requirements
of the quality, environmental
and occupational health &
safety standards ISO 9001, ISO
14001 and ISO 45001.



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March 2025, Version 01.01
02130301100000600