

PRODUCT DATA SHEET

Sikament[®]-650

HIGH PERFORMANCE WATER REDUCING AND RETARDING

CONCRETE ADMIXTURE

DESCRIPTION

Sikament[®]-650 is a highly effective superplasticizer for the production of free flowing concrete and is a substantial water reducing agent for promoting high strengths. It imparts excellent slump retention for prolonged periods.
Suitable for use in tropical and hot climatic conditions.

USES

Sikament[®]-650 is used as a superplasticizer in the production of free flowing concrete for:

- Slabs and foundations
- Walls, columns and piers
- Slender components with densely packed reinforcement
- Textured surface finishes

Sikament[®]-650 is also used as a water reducing agent for producing high early strength concrete for:

- Pre-cast concrete elements
- Pre-stressed concrete
- Bridges and cantilever structures
- Concrete where formwork must be removed quickly or early loading can be applied

CHARACTERISTICS / ADVANTAGES

Sikament[®]-650 provides the following properties.

As a superplasticizer:

- Substantial improvement in workability without adding water
- Long lasting control of slump loss
- Significant reduction of vibration during concreting

As a water reducer:

- Significant increase of high early strength
- High ultimate strength development
- Up to 25 % water reduction
- Increased water tightness
- No excessive air-entrainment
- No adverse shrinkage effect
- Improved surface finish
- Especially suitable for hot climates

APPROVALS / CERTIFICATES

Sikament[®]-650 follows the requirements of ASTM C494; Type G and EN 934-2

PRODUCT INFORMATION

Composition	Organic polymer blend
Packaging	200 L drum 1000 L flowbin Bulk delivery in tanker trucks is possible on request
Appearance / 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 +45 °C. Protect from direct sunlight and frost

Density	~1.23 kg/l	
Total Chloride Ion Content	Nil	(EN 934-2)

TECHNICAL INFORMATION

Concreting Guidance	<p>The standard rules of good concreting practice for production and placing must be observed when using Sikament®-650 in concrete. Refer to relevant standards.</p> <p>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.</p>
----------------------------	---

APPLICATION INFORMATION

Recommended Dosage	<p>0.6 - 2.0 % by weight of binder</p> <p>Higher dosages by weight of binder can be used depending on the mix design, raw materials, climatic conditions and concrete requirements.</p> <p>Trial mixes must be performed to establish the exact dosage rate required.</p>
Compatibility	<p>Sikament®-650 may be combined with all types of Portland cement and the following Sika products:</p> <ul style="list-style-type: none"> ▪ SikaPump® ▪ Sika® FerroGard®-901 ▪ SikaFume® ▪ Sika-Aer® ▪ Sika® Control-40 (stabilizer) <p>We recommend to perform trial mixes to establish the required performance when combined with the above products. Please consult our Sika Technical Department.</p>
Dispensing	<p>Sikament®-650) is added to the gauging water or simultaneously poured with it into the concrete mixer at the batching plant.</p> <p>Do not add Sikament®-650 directly to the dry mix.</p> <p>For optimum utilization of its high water reduction property we recommend thorough mixing at a minimal 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.</p>

IMPORTANT CONSIDERATIONS

When accidental overdosing occurs the set retarding effect and workability increases, however, no excessive amount of additional air will be entrained. During this period the concrete must be kept moist in order to prevent premature drying out.

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.

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 the exact product data and uses.

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 NORTHERN GULF

Bahrain / Qatar / Kuwait
Tel: +973 177 38188
sika.gulf@bh.sika.com
gcc.sika.com

SIKA SOUTHERN GULF

UAE / Oman / SIC
Tel: +971 4 439 8200
info@ae.sika.com
gcc.sika.com

SIKA SAUDI ARABIA

Riyadh / Jeddah / Damman
Tel: +966 11 217 6532
info@sa.sika.com
gcc.sika.com



ISO 9001: Sika UAE LLC,
Sika Gulf B.S.C. (c),
Sika Saudi Arabia Co. Ltd,
Sika Qatar LLC
ISO 14001: Sika UAE LLC,
Sika Gulf B.S.C. (c),
Sika Saudi Arabia Co. Ltd
OHSAS: Sika UAE LLC,
Sika Gulf B.S.C. (c)

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 OHSAS
18001.

Product Data Sheet

Sikament®-650

September 2016, Version 01.03
021302011000000962

Sikament-650-en-AE-(09-2016)-1-3.pdf

