

PRODUCT DATA SHEET

Sika® ViscoCrete®-3045 Ease

(formerly MasterEase® 3045)

New superplasticizer technology for Low Viscosity Concrete

DESCRIPTION

Sika ViscoCrete-3045 Ease is a superplasticizer/high range water reducer developed recently by R & D laboratories of Master Builders Solutions. Sika ViscoCrete-3045 Ease is designed to impart exceptional rheological properties to fresh concrete. It improves considerably the placing and finishing of concretes and enhances the pumping of concrete for all construction activities.

USES

Sika ViscoCrete-3045 Ease is based on an innovative polymer chemistry. Its action differs from traditional superplasticizers to the extent that the adsorption of polymers of Sika ViscoCrete-3045 Ease on binder particles is provided by a flexible chemical bond which does not impede the flow of concretes. This significantly improves rheological behavior of concretes low yield stress, low viscosity with additional feature of long workability retention.

Low Viscosity Concrete is an innovative concept dedicated to the viscosity (rheology) of concretes. This concept not only allows the achievement of a significant reduction in concrete viscosity but also optimizing the performance of concrete.

FEATURES

Sika ViscoCrete-3045 Ease is recommended for the production of self-compacting concrete, requiring low viscosity, long workability retention and high compressive strength.

Sika ViscoCrete-3045 Ease is specially formulated for the concrete industry for applications in the general civil and building sites.

It can be used for the realization and achievement of the following:

- Precast and Site Mix concretes
- Superior Concrete pumping
- Reduction of Concrete waste
- Ease of compacting and finishing of concrete
- High performance and ultra-high strength concrete
- Concrete for low environmental impact and high in mineral additions
- Architectural concrete

Sika ViscoCrete-3045 Ease delivers many advantages both, in the fresh concrete on hardened concrete. At fresh state, optimizing the rheology:

Decrease in the viscosity of concretes at constant W/C

- Improved pumping (lower pressure and longer distance)
- Better response to vibration, greater Ease of Pumping
- Superior finishing, and smoothing operations
- Excellent flexibility, mobility, and flow of self-compacting concrete.

Reduction possible to the W/C ratio without affecting the viscosity of concretes.

- New windows for technical and economic optimization of concrete mix designs (addition and types of binder, choice of aggregates)
- High strength and resistance to segregation workability retention over 120 minutes without retardation.
- Good compatibility with all types of cement and mineral additions.

In the cured state, improvement of sustainability

- Excellent early and late compressive strength, improvement of quality of surface finishes
- As part of a reduction of W/C
 - Increased mechanical resistance
 - Decreased porosity and permeability
 - Decreased shrinkage and cracking
 - Enhanced durability

CERTIFICATES AND TEST REPORTS

Complies with ASTM C-494 Type F

PRODUCT INFORMATION

Packaging	1,000 L / IBC
Shelf life	12 months from the date of production If stored properly in undamaged, original, sealed packaging
Storage conditions	Store in dry conditions, protected from direct sunlight at temperature between 5°C and 40°C
Appearance and colour	Yellowish to Light Brown liquid
Density	1.070 - 1.110 kg/L @ 25°C
pH-Value	5.0 - 9.0

APPLICATION INFORMATION

Recommended dosage	<p>Recommended range: 400ml to 2000ml per 100kg cement.</p> <p>The optimal effect is generally achieved by dosing Sika Viscocrete-3045 Ease in the concrete mix after addition 70% of water in the mixer. However, it is possible to dose Sika Viscocrete-3045 Ease on aggregates directly.</p> <p>For other uses, please contact your local Sika representative. To use in synergy and combination with another Sika Solutions' product range, please consult your local Sika representative.</p>
---------------------------	--

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.

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.

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.

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 (Thailand) Limited
700/37 Moo 5 Amata City Chonburi
Industrial Estate, T. Klong Tamhru
A. Muang, Chonburi 20000, Thailand
Tel : +66 3810 9500
E-mail : sikathai@th.sika.com
Website: tha.sika.com



SikaViscoCrete-3045Ease-en-TH-(02-2024)-1-1.pdf

Product Data Sheet
Sika® ViscoCrete®-3045 Ease
February 2024, Version 01.01
02130100000003081

