

LAMPIRAN

Sika® Viscocrete® - 10

High Performance Superplasticiser



| | |
|--------------------|---|
| Description | <p>Sika®Viscocrete® -10 is a third generation superplasticiser for concrete and mortar. It is particularly developed for the production of high flow concrete with exceptional flow retention properties.</p> <p>Complies with A.S.T.M. C 494-92 Type F</p> |
| Uses | <p>Sika®Viscocrete® -10 is especially suitable for concrete mixes with prolonged transportation time and long workability, powerful water reduction and excellent flowability.</p> <p>Sika®Viscocrete® -10 is suitable for the production of both precast concrete and ready mix concrete.</p> <p>Sika Viscocrete facilitates extreme water reduction, excellent flowability with the same time optimal cohesion and highest self compacting behaviour.</p> <p>Sika®Viscocrete® -10 is mainly used for the following applications :</p> <ul style="list-style-type: none"> <input type="checkbox"/> Concrete with a very high water reduction (up to 30%) <input type="checkbox"/> High performance concrete <input type="checkbox"/> Concrete in summer and with a prolonged transportation and workability time <input type="checkbox"/> Watertight concrete <input type="checkbox"/> Ready mix Concrete <input type="checkbox"/> Self compacting Concrete <input type="checkbox"/> High Strength Concrete <input type="checkbox"/> Watertight Concrete <input type="checkbox"/> Mass Concrete |
| Advantages | <p>Sika®Viscocrete® -10 as a powerful superplasticiser acts by different mechanisms.</p> <p>Through surface adsorption and sterical effects separating the binder particles the following properties are achieved :</p> <ul style="list-style-type: none"> <input type="checkbox"/> Extremely powerful water-reduction, resulting in high density, high strength and reduced permeability <input type="checkbox"/> Excellent plasticising effect, resulting in improved flowability, placing and compacting behaviour. Therefore suitable for the production of self compacting concrete. <input type="checkbox"/> Improved shrinkage and creep behaviour <input type="checkbox"/> Reduced rate of carbonation of the concrete <input type="checkbox"/> Improved watertight behaviour <p>Sika®Viscocrete® -10 does not contain chlorides or other ingredients promoting corrosion of steel reinforcement. It is therefore suitable for reinforced and</p> <hr/> <p>prestressed steel.</p> |

Product Data

| | |
|----------------------------|--|
| Appearance / Colour | Turbid Whitish Liquid |
| Packaging | 200 kg drums (non returnable) Bulk delivery |

| | | |
|---|--|------------------------------|
| Shelf-Life | 12 months from date of production if stored properly in original and unopened packaging | |
| Storage Condition / | Dry, shaded place, Protect from direct sunlight and frost. | |
| Technical Data | | |
| Chemical Base | Modified polycarboxylate in water | |
| Density | Specific density: | approx. 1.06 kg/l (at +20°C) |
| pH-Value | 4.25 ± 0.5 | |
| System Information | | |
| Dosage | Recommended dosage for a concrete with high workability | |
| | For soft plastic concrete binder | 0.2 – 0.6% by weight of |
| For flowing and self compacting concrete (S.C.C.) | 0.5 – 1.8% by weight of binder | |
| Application Conditions / Limits | | |
| | Sika®Viscocrete® -10 may be combined with the following products : | |
| | Plastocrete R | |
| | Plastiment RTD-01 | |
| | Plastiment VZ | |
| | SikaFume | |
| | Sika AER | |
| | Pre-trials are recommend if combinations with the above products are required. Please consult our Technical Service Department. | |
| | To produce flowing and/or self-compacting concrete, special concrete mix design is required. Pre-trials are mandatory. Please consult our Technical Service Department | |
| Application Instructions | | |
| Dispensing | Sika®Viscocrete® -10 is added to the gauging water or simultaneously added with water into the concrete mixer. To take advantage of the high water reduction, a wet mixing time of at least 60 seconds is recommended. To avoid excess water in the concrete, final dosage must start after 2/3 of wet mixing time only. | |
| Application Method / Tools The standard rules of good concreting practice, concerning production as well as placing, are to be followed. | | |
| | Fresh concrete must be cured properly and as early as possible. | |
| Cleaning of Tools Clean all tools and application equipment with water immediately after use. Hardened/cured material can only be mechanically removed. | | |
| Notes on Application Limits If frozen and/or if precipitation has occurred, Sika®Viscocrete® -10 may be used after thawing slowly at room temperature and after intensive mixing. | | |
| Protective Measure Upon contact with skin, wash off with water and soap. In case on contact with eyes or mucous membrane, rinse immediately with clean water and seek <u>medical attention without delay.</u> | | |
| Important Notes All technical data stated in this Product Data Sheet are based on laboratory tests. Actual data may vary due to changing conditions beyond our control. Residues of material must be removed according to local regulations. Fully cured material can be disposed of as household waste under agreement with the responsible local authorities. | | |



Detailed health and safety information as well as detailed precautionary measures e.g. physical, toxicological and ecological data be obtained from the safety data sheet.

Surabaya :
 Puri Niaga Blok G No. 29, Jl. Raya Rungkut Menanggal 11, Surabaya Tel : 031-8690202 ; Fax : 031-8682123 Medan :
 Kawasan Industrial " Medan Star ", Tanjung Morawa Km.1 9,2
 Jl. Pelita Raya Blok R No.32, Deli Serdang 20362 Tel : 061-7941200 ; Fax : 061-7940822 Batam :
 Jl. Laksamana Bintan,Komp. Bumi Riau Makmur Blok E No.3,
 Sungai Panas , Batam
 Tel : 0778-424928 ; Fax : 0778-450189

Technical Data Sheet

Edition 2, 2005

Identification no.

02 01 01 05 000 0 000019

Version no. 0010

SikaFume®

SikaFume®

Densified Silica Fume

Description

SikaFume is a new generation concrete additive in a fine powder form based on Silica fume technology.

SikaFume is used as a high effective additive for the production of high quality concrete.

Use

Complies with ASTM C 1240-00

SikaFume is used to increase the density, durability and compressive strength of concrete.

Advantages

The use of SikaFume improves the performance characteristics of concrete in the following ways :

- ☐ Increased workability over a longer period of time.
- ☐ Improved cohesiveness and stability of green concrete
- ☐ Durability greatly increased.
- ☐ Water permeability of concrete greatly reduced
- ☐ Permeability to gases greatly decreased
- ☐ Greatly improved resistance to carbonation
- ☐ Infiltration of chlorides greatly reduced
- ☐ Very high early and ultimate strengths

SikaFume contains no chlorides or other potentially corrosive substances. It can therefore be used with complete safety in reinforced and prestressed concrete

Dosage

3% - 10% by weight of cement

SikaFume is compatible with most of Sika admixtures.

Please consult our Technical Service Division for further information.

Instruction for Use SikaFume should be dry-mixed with other concrete components before the mixing water is added. After the water is added, further mixing is required to allow the even distribution of ingredients throughout the mixed concrete.

For increased effectiveness, it is advisable to incorporate a super plasticizer such as Sikament-range into the concrete mix.

It is advisable to carry out trial mixes to establish exact dosage rate required.

Technical Data

Form

Powder

Colour

Greyish

Bulk Density

Approx. 0.60 kg/ ltr

Shelf life

Minimum 3 years if stored properly in its original bag in dry place



Table of Contents

Storage

Packaging

Dry, shaded place

20 kg bag

**Handling
Precautions:**

SikaFume is powder product.
Wearing a mask is advisable when pouring the product into the mixer.

- ~ Avoid contact with skin and eyes
- ~ Wear protective gloves, mask and eye protection during work
- ~ If skin contact occurs, wash skin thoroughly.
- ~ If in eyes, hold eyes open, flood with warm water and seek medical attention without delay.

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 product 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.

Construction



PT. Sika Indonesia
Jl. Raya Cibinong- Bekasi km. 20
Limusnunggal- Cileungsi BOGOR
16820 - Indonesia Tel. +62 21
8230025 Fax +62 21 8230025
Website : www.sika.co.id e-mail:
sikacare@id.sika.com

Branches
Surabaya :
Puri Niaga Blok G No. 29, Jl. Raya Rungkut Menanggal 11, Surabaya
Tel : 031-8690202 ; Fax : 031-8682123 Medan :
Kawasan Industrial " Medan Star " Tanjung Morawa Km.19,2
Jl. Pelita Raya Blok R No.32, Deli Serdang 20362
Tel : 061-7941200 ; Fax : 061-7940822 Batam :
Jl. Laksamana Bintan, Komp. Bumi Riau Makmur Blok E No.3,
Sungai Panas , Batam
Tel : 0778-424928 ; Fax : 0778-450189















