

# HA-BE SILICA FLUID

Item No 3300/E

# Liquid microsilica for high quality and durable concrete

# FIELDS OF APPLICATION

HA-BE SILICA FLUID is a high quality concrete additive for the production of tight and durable concrete. Therefore the main application area is concrete meeting the highest standards as far as strength, water tightness and resistance against chemical attack are concerned.

For the production of high performance concrete with a low water/cement ratio especially adapted superplasticisers such as PANTARHIT<sup>®</sup> series recommended.

### DOSAGE

The generally dosage range is 2.0 - 10.0 mass-% of the cement content.

### STANDARD COMPLIANCE

HA-BE SILICA FLUID complies to ASTM C-1240.

The chemical and physical requirements are regularly tested.

# WORKING PRINCIPLE

Due to its very even dispersion, HA-BE SILICA FLUID is a very effective admixture that reacts intensively with the calcium hydroxide out of the cement hydration.

In fresh concrete the addition of HA-BE SILICA FLUID improves the cohesive strength and the water retaining ability of the mixture.

In hardened concrete it contributes to the improvement of tightness, strength and resistance against chemical and mechanical attack.

**TECHNICAL DATA** 

Homogeneity	shake before using
Colour	grey
Chemical base	microsilica
State	liquid
Density	1.37 ± 0.03 g/cm <sup>3</sup>
Chloride content*	< 0.3 mass-%
SiO <sub>2</sub> content *	> 85 %
Loss on ignition*	max. 6.0
SO <sub>3</sub> content *	< 1.0 %
Na <sub>2</sub> O equivalent *	< 2.0 %
Oversize 45 µm*	max. 10 %
Pozzolanic activity in- dex	min. 105 %
Specific surface area*	min. 15 m²/g
Shelf life	approx. 1 year from date of production if stored properly
Storage conditions	Store under cover, out of direct sunlight and protect from extremes of temperature.

\*Tested in dry form



## **PROCESSING INDICATIONS**

HA-BE SILICA FLUID should be regularly agitated to remain homogenous (twice daily).

Refer to the corresponding Method Statement for further information.

#### COMPATIBILITY

HA-BE SILICA FLUID is suitable for designs containing OPC or SRC cement, fly ash (PFA), ground granulated blast furnace slag (GGBS) and Bentonite.

When using other Ha-Be admixtures in the same grout mixture, the products should be added separately and must not be blended prior to addition! Using more than one admixture requires suitability and preliminary tests in order to ensure the required combination of its effects is attained.

## PACKAGING

- 301 can
- 200 l barrel
- 1000 l container
- loose by bulk supply

#### **HEALTH & SAFETY**

This product is not classified as hazardous according to the current regulations. Refer to the corresponding Material Safety Data Sheet for further advice.

#### REMARKS

This information describes the application- and processing possibilities of a product and its operation principles under regular conditions. Having no influence on the further application and processing, especially in conjunction with other construction materials, the given indications are neither a warranty in respect of the product's properties or its fitness for a particular purpose nor a full instruction of use. This information, any other recommendation or verbal advice are not binding and do not infer to any liability or legal demand.

Due to continuous further development, the most recent Technical Data Sheet is valid and will be supplied on request. All orders are accepted subject to our current general terms and conditions.

The management system of Ha-Be Egypt is certified to ISO 9001:2015.



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SUITABILITY- AND PRE-TESTS ARE NECESSARY BEFORE APPLYING THE CONCRETE ADMIXTURE!