

# EMSAC® 500 E

Item No 3333

# Silica-containing additive acc. to EN 13 263-1 for durable high-performance concrete

For producing concrete according to DIN EN 206-1 | DIN 1045-2

EMSAC® is a registered trademark of Elkem ASA.

# FIELDS OF APPLICATION

EMSAC® 500 E is a high-quality additive for producing dense and durable concrete.

EMSAC® 500 E optimises concrete's resistance against mechanical and chemical loads, attains high strengths and a long durability.

EMSAC® 500 E effects a tight and dense internal structure which ensures stabilisation of the concrete texture and minimises bleeding tendencies.

For the production of high-performance concrete with low water/cement ratios, use especially developed superplasticizers of the PANTARHIT®- line.

#### **DOSAGE**

Recommended dosage range 5-20 mass-% of the cement content;

is equivalent to 50 - 200 g or 36 - 143 ml per kg cement.

#### **WORKING PRINCIPLE**

EMSAC® 500 E is a very effective additive that reacts intensively with calcium hydroxide out of cement hydration.

EMSAC® 500 E improves the cohesive strength and the water retaining ability of fresh concrete. In hardened concrete it contributes improvement of tightness, strength and resistance against chemical and mechanical attacks.

#### **TECHNICAL DATA**

Homogeneity	homogenous
Colour	grey
Solid content	50 ± 2.5 mass-%
State	liquid suspension
Density	1.40 ± 0.03 g/cm <sup>3</sup>
Chloride content	< 0.10 mass-%
Workability	from +1 °C
Shelf life	approx. 6 months from date of production if stored properly
Storage conditions	Store in unopened, original sealed packag- ing between +5 °C and +25 °C. Protect from frost and insolation.



## PROCESSING INDICATIONS

EMSAC® 500 E has to be homogenised by agitation or circulation every time before using it and must be stirred thoughtfully after an undisturbed period of time (every 2-3 weeks).

EMSAC 500 E should be added to the mixture after the water has been added.

The mixing time must comply with the regulations defined in EN 206-1.

In order to distribute the microsilica slurry thoroughly it is suggested to increase the mixing time compared to concrete without microsilica.

This product is not classified as hazardous according to the CLP regulations. See safety data sheet for further information.

#### **PACKAGING**

- 30 I can
- 200 l barrel
- 1000 I container

## **SPECIAL INDICATIONS**

EMSAC® 500 E is highly abrasive. Convey with membrane pumps, eccentric worm conveyors or hose pumps!

#### **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 indication is neither a warran- ty 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.

Edition: 28 March 2022

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