

Emsac[®] 500E Slurry

Concrete applications – Product data sheet

1. Description

Emsac[®] 500E is an aqueous suspension of Elkem Microsilica[®], certified to EN 13263 ‘Silica fume for concrete’. In use, Elkem Microsilica[®] improves the performance of concrete and mortar formulations. It acts physically to optimise particle packing of the concrete or mortar mixture and chemically as a highly reactive pozzolan.

2. Application

Suitable for all concrete and mortar applications where the benefits of silica fume are required:

- Higher compressive strength
- Increased durability - Longer service life
- Better rheology - Control segregation & bleed

Emsac[®] 500E is supplied as an aqueous suspension (slurry) with a solids content of 50% by mass and is easy to handle and pump. Batch Emsac[®] 500E into the concrete mixer and mix thoroughly ensuring full dispersion. Dosage varies depending on application. Contact Elkem for information & advice.

3. Storage & handling

Emsac[®] 500E is a stable product. However, to prevent the natural process of segregation, the product should be regularly agitated to remain homogeneous. Emsac[®] 500E should not be allowed to freeze as this renders the product unfit for use.

4. Quality assurance

Elkem Silicon Materials’ management system for development, processing & supply of Elkem Microsilica[®] is certified to ISO 9001.

5. Chemical & physical properties

The properties of Emsac[®] 500E are regularly tested in accordance with EN 13263.

Property	Unit	Value
SiO ₂	%	Minimum 85.0
SO ₃	%	Maximum 2.0
Cl	%	Maximum 0.3
Free CaO	%	Maximum 1.0
Free Si	%	Maximum 0.4
Loss on ignition	%	Maximum 4.0
Specific surface area	m ² /g	Min. 15.0, Max. 35.0
Pozzolanic activity index	%	Minimum 100
Dry mass content	%	50 ± 2

6. Packing

The product is available in 200 litre drums, 1 m³ containers and bulk road tanker. Please contact our representative for more details.

7. Health, safety & environment

Refer to Product Safety Information (PSI) document on Elkem website: elkem.com

8. Additional information

See additional Elkem data sheets and technical papers on our website: elkem.com

All data listed are reference values subject to production related tolerances. Although reasonable care has been taken in the preparation of the information contained herein, it still remains the duty of the user to prove the suitability of this material for their application.

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