

SILICE

Ultra-light thickening additive





Description

SILICE is an aggregate deriving from pyrolysis of volatile silica compounds with a blowtorch.

It appears like a highly volatile white ash compatible with various types of resin formulations to which it is added as a thickener.

SILICE is available in two different versions depending on the type of product with which it can be used:

- SILICE EPOSSIDICA: recommended for supplementing epoxy compounds;
- SILICE PU (polyurethane): compatible with isocyanates, since it is completely hydrophobic and free of humidity (silanised silica).

Colour

SILICE is a white power that, once dispersed in resin, becomes colourless and slightly opalescent.

Field of application

The product is used as a thickening agent for several liquid systems and is highly suitable for the application of self-levelling systems on vertical surfaces.

Advantages

- When added to resin mixes during preparation, it has a strong thickening effect without making the product heavier (pseudoplastic effect).
- When a small percentage (1%–1.5%) is added to self-levelling mixes, it is able to eliminate tension on the surface which can cause aesthetic defects ("fish eyes") during hardening.

Preparing the product

Application of the product

Consumption

| type of application | minimum consumption | maximum consumption | UoM | dilution |
|--|------------------------|---------------------|-----|----------|
| As a thickening agent, by weight on the total of the resin to be thickened | 1% | 5% | - | - |

Useful application tips

• Il prodotto non è pericoloso, tuttavia è fortemente polverulento. Per evitare eccessivi sviluppi di polvere, maneggiare SILICE con cautela incorporandola nella massa liquida prima di disperderla.

Technical data

| ► PRODUCT IDENTIFICATION DATA | UoM | value |
|---|--------|--------------------|
| Apparent density after adjustment, EN ISO 787-11 | kg/L | $0,040 \pm 0,005$ |
| pH at 4% in solution (potentiometric method) at 23°C, ISO 4316 | - | 4.0 ± 0.5 |
| Silica (SiO2) content, EN ISO 3262-19 | - | > 99,8% |
| Electrical resistivity in layers, EN 61241-2-2 | ohm•cm | > 10 ¹³ |
| Residual humidity EPOXY VERSION (drying for 2 hours at 105°C), EN ISO 787-2 | - | < 1,5% |
| Residual humidity PU VERSION (drying for 2 hours at 105°C), EN ISO 787-2 | - | < 0,2% |





SILICE

Storage of the product

- 24 months in the closed original packaging, in a dry and covered place away from direct sunlight, at a temperature between +5°C and +40°C.
- Protect the product against humidity.

| Packages | | | | |
|----------------|-------------------|-----|------------------------|------------|
| VARIANT | PACKAGE | ADR | PACKAGES PER PALLET | COMPONENTS |
| EPOSSIDICA (1) | fustino da 0,1 kg | NO | - | |
| EPOSSIDICA (1) | fustino da 1 kg | NO | - | |
| PU (2) | fustino da 1 kg | NO | - | |

Legenda ADR:

NO = merce NON PERICOLOSA

Note:

(1): Thickening silica for epoxy systems

(2): Thickening silica for polyurethane systems (NORDPUR).

LEGAL NOTES

Advice on how to use our products corresponds to the current state of our knowledge and does not involve the assumption of any guarantee and / or responsibility for the final result of the work. They do not refore exempt the customer from the responsibility of verifying the suitability of the products for the use and the prefixed purposes through preventive tests. The website www.nordresine.com contains the latest revision of this datasheet.

EDITION

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