



## Resin MSO-RM

### Functional polymethyl siloxane resin

#### Characteristics

MSO-RM is a solution of polymethylsiloxane with functional reactive groups in an organic solvent.

#### Features

Polymethylsiloxane resin has a very high concentration of silicon dioxide (after complete oxidation ~ 80%, expressed in solid resin units), therefore it is an ideal binder for applications at temperatures above 300 ° C; outperforms phenyl-silicon organic resins, because produces less smoke and provides more binding strength; has excellent thermal stability.

#### Applications

Due to its high silica content, MSO-RM is: a standard binder for the production of rigid silicone resin bonded mica insulators and the pressing of compositions for electrical engineering; an excellent binder for heat-resistant and electrical insulating composite materials; a binder for the production of heat-resistant and dielectric enamels.

#### Application methods

Silicone resin bonded mica electrical insulators can be made by diluting Unisil MSO-RM with toluene or xylene to the required solids content to adjust resin absorption in prepregs (typical resin content in the final product is 8 to 12 % by weight). Then add the required amount of hardener to the silicone resin solution.

After processing the mica sheet soaked by standard methods such as dipping or spraying, the composite material is heat treated to remove the solvent. The temperature of the resin in the impregnated sheet should not exceed 80 - 100°C, otherwise the resin will harden prematurely.

#### Note:

1. The quality of the final product is mainly determined by the concentration of the hardener, drying, compression temperature and working pressure.
2. Before use, it is recommended to carry out preliminary studies to determine the best processing conditions.

#### Storage

Store in original containers in a dry, cool and ventilated place, away from sources of ignition and high temperatures. Protect from direct sunlight. Keep away from alkalis, strong oxidizing agents and organic acids.

The shelf life is 12 months at temperature from 0°C to +30°C. Storage over the date specified on the label does not necessarily mean the product is unusable. In case if store more please check the properties of product before use.

#### Packing

Steel drums with a capacity of up to 200 dm<sup>3</sup>.

#### Safety instructions

Please see detailed instructions in the relevant product safety data sheet, which can be provided upon request.

## Technical characteristics

| Parameter name and measure unit                          | Standard   |
|--|--|
| Appearance   | Colorless or slightly yellowish liquid with slight opalescence |
| Mass content of solids, %, min.                          | 50,0   |
| Density at temperature (+25,0±0,5)°C, g/cm <sup>3</sup>  | 0,950 – 1,050  |
| Kinematic viscosity at temperature (+25±0,5)°C, cSt, min | 5 – 12   |

To obtain more information please contact your nearest representative office of Silkor Ltd.

## LIMITED WARRANTY INFORMATION

### PLEASE READ CAREFULLY

The information contained herein is accurate, but it does not relieve the customer from the control of each batch of products supplied. Since the conditions and methods of use of our products are beyond our control, the recommendations contained in this document should be updated by the client providing preliminary tests. Recommendations for use should not be construed as a guarantee of product suitability for a particular purpose.

Silkor Ltd only guarantees that the product meets its specifications in effect at the time of delivery.