Silicone resin SILIKOPHEN® AC 1000

DESCRIPTION

Reactive methyl silicone resin

KEY BENEFITS

- · low viscous methoxy-functional silicone resin
- curing at ambient temperature by catalysis and entering of humidity via a hydrolysis-/condensation reaction
- low smoke and odor development of the completely cured coating at temperature exposure
- SILIKOPHEN* AC 1000 is perfectly suitable for the formulation of one component hydrophobic agents and of fire protection impregnation for wood.

SUITABILITY

| waterborne | solventborne | |
|--------------|--------------------|--|
| • | ٠ | |
| high solids | | |
| • | | |
| not suitable | uitable 🛡 suitable | |

TYPICAL APPLICATIONS

- heat-stable coatings for industrial facilities
- Protective coatings
- ovens, furnaces, pipelines, incinerators

TECHNICAL DATA

| active matter content | 100 % |
|--------------------------|--|
| appearance | clear to hazy colored liquid (product properties are not affected by haziness) |
| delivery form | liquid |
| viscosity at 25 °C | Approx. 15 mPas |

SOLUBILITY

| Xylene | Dowanol MPA |
|--------------|---------------|
| • | • |
| Butylacetate | Cyclohexanone |
| • | • |

PROCESSING INSTRUCTIONS

- Use with metallic pigments and special formulations to obtain continuous heat-resistance of up to 650 °C.
- Surface pre-treatment: Degreasing and shot-blasting is recommended.
- In combination with alcoxy-functional resins, we do not recommend the use of alcohols or hydroxy-functional glycol ethers as solvents.
- The used raw materials should have a water content < 0.05%.

CURING CONDITIONS

- The binder cures at ambient temperature in the presence of catalysts.
- Recommended addition level for the catalyst(s), e.g. tetra-nbutyltitanate: 1-5% referred on binder (solids). The addition of the catalyst must be carried out just before filling (1-pack system) or just before application (2-pack system).
- Baking is possible after approx. 12 hours of curing at ambient temperature. Forced drying, e.g. in a convection oven, is only possible in presence of air humidity. The cross-linking proceeds via a hydrolysis / condensation reaction.

HANDLING & STORAGE

- When stored in an original unopened packaging, the product has a shelf life of 36 months from the date of manufacture.
- Contact with tin (e.g. with metal containers) will shorten the storage stability. Keep dry. Contact with moisture causes gelation.

This information and all further technical advice are based on our present knowledge and experience. However, it implies no liability or other legal responsibility on our part, including with regard to existing third party intellectual property rights, especially patent rights. In particular, no warranty, whether express or implied, or guarantee of product properties in the legal sense is intended or implied. We reserve the right to make any changes according to technological progress or further developments. The customer is not released from the obligation to conduct careful inspection and testing of incoming goods. Performance of the product described here inshold be verified by testing, which should be carried out only by qualified experts in the sole responsibility of a customer. Reference to trade names used by other companies is neither a recommendation, nor does it imply that similar products could not be used.

Evonik Operations GmbH | Goldschmidtstraße 100, 45127 Essen, Germany | Telefon +49 201 173-2222 Telefax +49 201 173-1939 | www.coating-additives.com

