

WACKER® MQ 803 TF

Silicone Resins

WACKER® MQ 803 TF is a co-hydrolysis product of tetraalkoxy silane (Q unit) and trimethylalkoxy silane (M unit). The chemical structure of WACKER® MQ 803 TF can be seen as a three dimensional network of polysilicic acid units which are endblocked with trimethylsilyl groups. Some residual ethoxy and hydroxy functions are present. The average molecular weight can be exactly controlled by the ratio of M and Q units. This ratio approx. is 0.67 for WACKER® MQ 803 TF.

WACKER® MQ 803 TF is a pure white powder manufactured substantially free of volatile impurities. It therefore only contains traces of aliphatic hydrocarbons. According to its low content of fine dust particles and its uniform spherical particle shape, WACKER® MQ 803 TF exhibits excellent rheological properties (flowability). Therefore, common powder processing techniques like bottling, conveying, and metering are simplified.

WACKER® MQ 803 TF can be compounded with polydimethylsiloxanes or dissolved in appropriate solvents like aromatic and non-aromatic hydrocarbons or lower alcohols. The solubility of WACKER® MQ 803 TF is excellent.

Technical data

General Characteristics

| Property | Condition | Value | Method |
|---|-----------|-------------------------------|--------|
| Appearance | - | white powder | - |
| Kinematic Viscosity (of a 50 % solution in toluene) | - | 3.8 - 4.3 mm ² /s | - |
| Average particle size | - | approx. 10 µm | - |
| Content HCl (of a 50 % solution in toluene) | - | ≤ 10 ppm | - |
| Content OH (of a 50 % solution in toluene) | - | 0.00 - 0.30 % | - |
| Settled apparent density | - | 0.20 - 0.50 g/cm ³ | - |

These figures are only intended as a guide and should not be used in preparing specifications.

All the information provided is in accordance with the present state of our knowledge. Nonetheless, we disclaim any warranty or liability whatsoever and reserve the right, at any time, to effect technical alterations. The information provided, as well as the product's fitness for an intended application, should be checked by the buyer in preliminary trials. Contractual terms and conditions always take precedence. This disclaimer of warranty and liability also applies particularly in foreign countries with respect to third parties' rights.

Applications

- Polyurethane Processing

Application details

In technical applications, WACKER® MQ 803 TF can be used as a basic material for foam stabilizing agents.

For polishes, WACKER® MQ 803 TF is an excellent additive to enhance the water repellent properties of automotive and domestic care systems.

In compositions, WACKER® MQ 803 TF acts as an extremely efficient and most compatible release active for plastics processing. Especially for PUR processing, it can be used to formulate release concentrates, high-solids, and solvent based anti-stick agents which exhibit excellent release characteristics and do not cause build-up on the mould or any disorders on the surface of moulded articles. Bondability and paintability of the moulded articles mainly depend on the release agent composition and the paint or bonding system applied, and have to be tested in any individual case.

Packaging and storage

Storage

The 'Best use before end' date of each batch is shown on the product label.

Storage beyond the date specified on the label does not necessarily mean that the product is no longer usable. In this case however, the properties required for the intended use must be checked for quality assurance reasons.

Safety notes

Comprehensive instructions are given in the corresponding Material Safety Data Sheets. They are available on request from WACKER subsidiaries or may be printed via WACKER web site <http://www.wacker.com>.

QR Code WACKER® MQ 803 TF



For technical, quality or product safety questions, please contact:

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