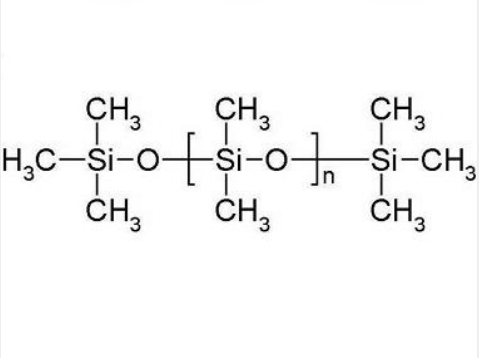
WACKER® AK 1000

Linear Silicone Fluids

WACKER® AK 1000 is a linear, non-reactive polydimethylsiloxane with a viscosity of approx. 1000 mm^2/s.
Due to its chemical structure, WACKER® AK 1000 has an outstanding property profile, which sets it apart from organic materials such as mineral oils.



Properties

WACKER® AK 1000 is a clear, odorless and colorless liquid.

- minimal change in physical properties over a broad temperature range
- excellent water-repellent properties
- good dielectric properties
- low surface tension and thus high surface activity
- chemically highly unreactive
- low solidifying point
- high flash point
- high heat resistance
- good solubility in a wide range of solvents

Specific features

- Silicone Fluid

Technical data

General Characteristics

Property	Condition	Value	Method
Appearance	-	colorless, clear	-
Refractive index	25 °C	1.404	-
Density	25 °C	approx. 0.97 g/cm^3	DIN 51757
Flash point	-	257 °C	ISO 2719
Ignition temperature	-	410 °C	EN 14522
Surface tension	25 °C	approx. 0.021 N/m	-
Viscosity, kinematic	25 °C	approx. 1000 mm^2/s	DIN 53019

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

- Agricultural Solutions
- Agrochemical Solutions
- Antifoams
- Antifoams for Agrochemicals
- Metal Care
- Paint polishes & paint conditioners
- Plastic-Care Products
- Tire and rubber care

Application details

Due to WACKER® AK 1000 many diverse applications, no general processing information can be provided.

Parameters will vary from application to application.

Available in a range of viscosities, WACKER® SILICONE FLUIDS AK are miscible with each other in any ratio.

The standard product's viscosity can thus be altered to suit your individual needs.

WACKER® AK 1000 is a non-polar liquid and is immiscible with polar solvents such as water or short-chain alcohols.

In aliphatic and aromatic hydrocarbons, chlorohydrocarbons, ethers, esters, ketones and higher alcohols, WACKER® AK 1000 is soluble in any proportion.

Before the product is used with solvents for the first time, it is advisable to perform a lab-scale test.

When solvents are used, please remember to read the appropriate hazard information.

- release agent
- lubricant
- hydraulic fluid
- antifoam agent
- water-repellent agent
- liquid dielectric for electrical and electronic equipment
- heat-transfer oil
- polish additive
- plastics additive
- additive for textile and fiber auxiliaries

For pharmaceutical applications, we recommend specialty silicone fluids from our SILFAR® line.

Silicone fluids from our BELSIL® line are available for the cosmetic sector.

Whenever particularly high heat and shear resistance is required, we recommend silicone fluids from our AK stab, AK visc and AKC product lines.

Specialty grades of the product (available as WACKER® PLASTICIZER) will be needed for use as a silicone plasticizer in RTV-1 sealants.

Packaging and storage

Storage

Maximum temperature allowed during storage and transportation: 50 °C
A temporary increase in temperature during transport does not impair quality. Actively cooled transport guide can be dispensed with.

The "Best use before end date" of each batch is shown on the Certificate of Analysis.

Storage beyond the date specified on the Certificate of Analysis 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

For specific information regarding safe handling of this material, please refer to the Safety Data Sheet.

QR Code WACKER® AK 1000

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

Wacker Chemie AG, Gisela-Stein-Strasse 1, 81671 Munich, Germany
productinformation@wacker.com, www.wacker.com

The data presented in this medium are in accordance with the present state of our knowledge but do not absolve the user from carefully checking all supplies immediately on receipt. We reserve the right to alter product constants within the scope of technical progress or new developments. The recommendations made in this medium should be checked by preliminary trials because of conditions during processing over which we have no control, especially where other companies' raw materials are also being used. The information provided by us does not absolve the user from the obligation of investigating the possibility of infringement of third parties' rights and, if necessary, clarifying the position. Recommendations for use do not constitute a warranty, either express or implied, of the fitness or suitability of the product for a particular purpose.