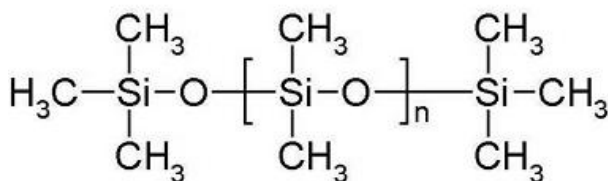


## WACKER® AK 1 000

SILICONE FLUID

**Product description**

Structural formula:



WACKER® AK 1 000 is a linear, non-reactive polydimethylsiloxane with a viscosity of approx. 1 000 mm<sup>2</sup>/s. Due to its chemical structure, WACKER® AK 1 000 has an outstanding property profile, which sets it apart from organic materials such as mineral oils.

**Properties**

WACKER® AK 1 000 is a clear, odorless and colorless liquid.

**Special features**

- 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

**Application**

- 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.

**Processing**

Due to WACKER® AK 1 000 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 1 000 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 1 000 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.

**Storage**

Maximum temperature allowed during storage and transportation:

50 °C

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>.

#### Product data

Typical general characteristics	Inspection Method	Value
Appearance		colorless, clear
Viscosity, kinematic at 25 °C	DIN 53019	approx. 1000 mm <sup>2</sup> /s
Density at 25 °C	DIN 51757	approx. 0,97 g/cm <sup>3</sup>
Refractive index at 25 °C		1,404
Flash point	ISO 2592	> 300 °C
Surface tension at 25 °C		0,021 N/m
Ignition temperature (liquids)	EN 14522	410 °C
Viscosity, dynamic at 25 °C	DIN 53019	1000 mPa.s

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

The data presented in this leaflet 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 leaflet 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 recommendations do 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 products for a particular purpose.

The management system has been certified according to DIN EN ISO 9001 and DIN EN ISO 14001

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