

WACKER® AP 1000

Functional Silicone Fluids

WACKER® AP 1000 is a clear, colorless, and odorless polydimethylsiloxane with a high proportion of phenyl groups.

Technical data

General Characteristics

Property	Condition	Value	Method
Viscosity, kinematic	25 °C	900 - 1100 mm ² /s	DIN 51562-1
Refractive index	25 °C	1.5000 - 1.5150	DIN 51423
Appearance	-	clear, colorless	-
Density	25 °C	approx. 1.09 g/cm ³	DIN 51757
Dielectric constant	100 Hz 25 °C	approx. 2.9	-
Dielectric strength	-	approx. 20 kV/mm	-
Dissipation factor tan δ	100 Hz 25 °C	approx. 0,0004	-
Flash point	-	approx. 280 °C	ISO 2592
Ignition temperature (liquids)	-	> 400 °C	DIN 51794
Specific heat	25 °C	1.46 kJ/kgK	-
Therm. expansion coefficient	0 - 180 °C	0.00082 - 0.00085 mLmL ⁻¹ K ⁻¹	-
Thermal conductivity	50 °C	0.14 W/m.K	-
Volatility	5 g 4 h 250 °C	0.0 - 1.0 %	-

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

- Antifriction Agents & Lubricants

Application details

- heat transfer fluid
- pressure transfer fluid
- dielectric in capacitors and transformers
- base fluid of heat resistant lubricants

For practical purposes, the useful temperature range of WACKER® AP 1000 is between -35 °C and +200 °C. However, this presupposes that heat-stressing of the fluid occurs under "chemically pure" conditions.

Even trace amounts of acids, alkalis, mineral oils, organometallic compounds, metal salts or metal oxides can seriously reduce the service life.

The flash point of the silicone fluid may be changed by heat-stressing. It is therefore particularly important in open systems to check the flash point at least once a year and more often if operating conditions demand.

Packaging and storage

Storage

Further information for storage: Store in a dry and cool place.

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® AP 1000



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

Wacker Chemie AG, Hanns-Seidel-Platz 4, 81737 Munich, Germany
info@wacker.com, www.wacker.com

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