

## WACKER® AP 200

## SILICONE FLUID

**Product description**

WACKER® AP 200 Silicone fluid is a clear, colorless, and odorless polydimethylsiloxane with a high proportion of phenyl groups.

**Application**

- 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 200 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.

**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>.

**Product data**

Typical general characteristics	Inspection Method	Value
Appearance		clear, colorless
Viscosity, kinematic at 25 °C	DIN 51562	approx. 200 mm <sup>2</sup> /s
Refractive index (25°C)	DIN 51423	approx. 1,50
Density at 25 °C	DIN 51757	approx. 1,07 g/cm <sup>3</sup>
Volatility	5g/2h/250°C	< 1,5 %
Thermal conductivity at 50 °C		approx. 0,14 Wm <sup>-1</sup> K <sup>-1</sup>
Specific heat at 25 °C		approx. 1,46 Jg <sup>-1</sup> K <sup>-1</sup>
Coefficient of thermal expansion at 0 - 180 °C		85 - 82 x 10 <sup>-5</sup> mLmL <sup>-1</sup> K <sup>-1</sup>
Dielectric constant at 25°C and 100 Hz		approx. 2,9
Dielectric strength		approx. 20 kVmm <sup>-1</sup>
Dissipation factor tan δ at 25 °C and 100 Hz		approx. 0,0004
Flash point	ISO 2719	approx. 260 °C
Ignition temperature (liquids)	DIN 51794	> 400 °C

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