

# WACKER<sup>®</sup> APF 130

# **Functional Silicone Fluids**

WACKER® APF 130 is a clear, colorless, and odorless polydimethylsiloxane with a high proportion of phenyl groups. It has particularly low volatility.

## **Technical data**

#### **General Characteristics**

Property	Condition	Value	Method
Viscosity, kinematic	25 °C	120 - 140 mm²/s	DIN 51562-1
Refractive index	25 °C	1.4930 - 1.5070	DIN 51423
Content HCI	-	0.0 - 2.0 ppm	direct titration
Appearance	-	clear, colorless	-
Color Index <sup>(1)</sup>	-	0 - 30	DIN ISO 6271
Density	25 °C	approx. 1.06 g/cm <sup>3</sup>	
Dielectric constant	100 Hz   25 °C	approx. 2.9	-
Dielectric strength	-	approx. 20 kV/mm	
Dissipation factor tan $\boldsymbol{\delta}$	100 Hz   25 °C	approx. 0,0004	-
Flash point	-	> 280 °C	ISO 2719
Ignition temperature	-	> 400 °C	DIN 51794
Specific heat	25 °C	1.46 J/gK	
Therm. expansion coefficient	0 - 180 °C	0.00082 - 0.00085 mLmL <sup>-1</sup> K <sup>-1</sup>	-
Thermal conductivity	50 °C	0.14 W/m.K	-
Volatility	5 g   4 h   250 °C	0.0 - 0.4 %	-

<sup>1</sup>APHA

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

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# 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® APF 130 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

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® APF 130



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

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