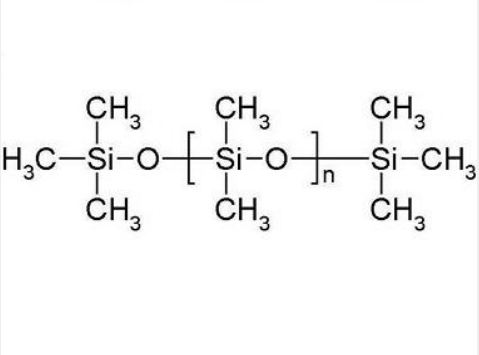
HELISOL® 10A

Linear Silicone Fluids

HELISOL® 10A is a linear, non-reactive poly-dimethylsiloxane with a viscosity of approx. 10 mm^2/s. Due to its chemical structure, HELISOL® 10A has an outstanding property profile, which sets it apart from organic materials such as mineral oils.



Properties

HELISOL® 10A is a clear, odorless and colorless liquid.

- high heat resistance
- low pourpoint
- lower density than water
- low viscosity
- long life
- low fouling potential
- noncorrosive
- no hazard classification

Technical data

General Characteristics

Property	Condition	Value	Method
Appearance	-	colorless, clear	-
Flash point	-	175 °C	Pensky-Marten
Ignition temperature	-	379 °C	EN 14522
Odor	-	odorless	-
Solubility in water	-	virtually insoluble	-
Viscosity, kinematic	25 °C	9 - 11 mm^2/s	DIN 51562
density	25 °C	0.93 g/cm^3	DIN 51757
pH	-	~ 7	specific method

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

After Extendet Use

Property	Value	Method
Appearance	colorless to dark-brown, clear	-
Flash point	56 °C	ISO 13736
Ignition temperature	380 °C	EN 14522
Odor	musty	-
Solubility in water	virtually insoluble	-
Viscosity, kinematic	4 - 7 mm^2/s	DIN 51562
density	0.93 g/cm^3	DIN 51757
pH	~ 7	specific method

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.

Comprehensive instructions are given in the corresponding Material Safety Data Sheets. They are available on request from WACKER subsidiaries or may be downloaded via WACKER web site http://www.wacker.com.

Applications

- Solar Thermal Energy
- Chemical Industry
- Industrial

Application details

- heat transfer fluid in closed systems under inert conditions from -40 °C up to 425 °C.
- recommended use in liquid phase
- maximum permitted working temperature: 425 °C

maximum permitted film temperature: 450 °C

Packaging and storage

Packaging

0.5 kg bottle
5 kg can
25 kg drum
190 kg drum

- 950 kg IBC

Storage

Maximum temperature allowed during storage and transportation: 40 °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

Reactivity; Chemical stability; Possibility of hazardous reactions
No hazardous reactions known if properly stored.
When it is used as intended (up to 425 °C), amounts (< 25%) of a mixture of D-cyclic siloxanes (including octamethylcyclotetrasiloxane (D4, CAS 556-67-2) and decamethylcyclopentasiloxane (D5, CAS 541-02-6)) are formed. This depresses the flash point and increases the vapor pressure.

Conditions to avoid
Permeation of oxygen and water or any contamination at operating temperature.

Incompatible materials
None known.

Hazardous decomposition products
When it is used as intended (up to 425 °C), it has been found that in the absence of oxygen and after relatively long operating times, extremely small quantities of methane, hydrogen and volatile silanes (tetramethylsilane, CAS 75-76-3 and trimethylsilane, CAS 993-07-7) may be produced, which further depress the flash point.
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 HELISOL® 10A

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

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.