



# Silicone Oil

## Description

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Silicone oils are polydimethylsiloxanes available in different viscosities.

## Application

- Release agent.  
Used purely or as a part of a compounded formula **Silicone Oil** provides a non-toxic, non-carbonising mould release for rubber, plastics and metal die-castings.
- Anti-foam agent.  
Very small quantities of the fluid are very effective as a foam control agent, especially in non aqueous systems.
- Mechanical fluid.  
The very high viscosity-index, the thermal and chemical stability, shear-breakdown resistance and the rubber compatibility as well as the compressibility make this fluid outstanding for mechanical and hydraulic uses.
- Lubricant.  
The fluid provides excellent lubricating properties for most plastic and elastomeric surfaces. Lubricity with metals depends upon the possible combinations such as P.T.F.E., MoS<sub>2</sub> and other lubricity improvers.
- In polishes and chemical specialties.  
Silicone oil is used in most automobile and furniture polishes for its ease of application, high gloss with a minimum rubbing and durable water repellent film.
- In electrical and electronic equipment. Because of the excellent dielectric properties silicone oil is widely used as an insulating and damping fluid.

## Features

- Little change in physical properties over a wide temperature range.
- The fluids are thermally stable at 150°C for extended time intervals.
- Excellent water repellency.
- Low surface tension. The fluid readily wets clean surfaces to impart water repellency and release characteristics.
- Low toxicity.

## Benefits

- Good foam builder
- Imparts soft silky feel to the hair
- Ensures smooth wet shaving foams
- Nonirritant to skin

## Typical Data

| Viscosity, Cst | Flashpoint, °C COC | Freezing point, °C | Specific gravity, 25 °C | Surface tension, mN/m | Refrac. index at 25 °C |
|----------------|--------------------|--------------------|-------------------------|-----------------------|------------------------|
| 0,65           | -4                 | -67                | 0,760                   | 15,9                  | 1,375                  |
| 1              | 40                 | -85                | 0,816                   | 17,4                  | 1,382                  |
| 2              | 48                 | -90                | 0,830                   | 18,1                  | 1,387                  |
| 3              | 62                 | -100               | 0,900                   | 18,9                  | 1,392                  |
| 5              | 136                | -100               | 0,910                   | 19,7                  | 1,397                  |
| 10             | 162                | -65                | 0,930                   | 20,1                  | 1,399                  |
| 20             | 230                | -60                | 0,950                   | 20,6                  | 1,400                  |
| 50             | 280                | -55                | 0,959                   | 20,7                  | 1,402                  |
| 100            | >300               | -55                | 0,965                   | 20,9                  | 1,403                  |
| 200            | >300               | -50                | 0,970                   | 21,0                  | 1,403                  |
| 300            | >300               | -50                | 0,970                   | 21,1                  | 1,403                  |
| 350            | >300               | -50                | 0,970                   | 21,1                  | 1,403                  |
| 500            | >300               | -50                | 0,970                   | 21,1                  | 1,403                  |
| 1000           | >300               | -50                | 0,970                   | 21,2                  | 1,403                  |
| 5000           | >300               | -50                | 0,975                   | 21,4                  | 1,403                  |
| 10000          | >300               | -50                | 0,975                   | 21,5                  | 1,403                  |
| 12500          | >300               | -50                | 0,975                   | 21,5                  | 1,403                  |
| 30000          | >320               | -50                | 0,975                   | 21,5                  | 1,403                  |
| 60000          | >300               | -50                | 0,975                   | 21,5                  | 1,403                  |
| 100000         | >300               | -50                | 0,976                   | 21,5                  | 1,404                  |
| 300000         | >300               | -45                | 0,976                   | 21,5                  | 1,404                  |
| 500000         | >300               | -40                | 0,976                   | 21,5                  | 1,404                  |
| 1000000        | >300               | -40                | 0,976                   | 21,5                  | 1,404                  |

## Shelf life and storage

*Silicone Oil* has an unlimited useful life when stored at ambient temperatures. The product does not freeze and there are no restrictions on storage.

A Product Safety Data Sheet should be obtained from your office prior to use.

ATTENTION: Before handling, read product information, Product Safety Data Sheets and container labels for safe use, and any physical and/or health hazard information.

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Warranty: The information given in this product data sheet are believed to be fully accurate. However, Metropa Rotterdam BV shall not be liable for its content and make no warranty with respect thereto. For additional information we request you to contact Metropa Rotterdam BV or visit our web-site.