
SILOIL V 50 to V 1000 TECHNICAL DATA SHEET

Description

SILOIL V 50 to V 1000 are straight chained polydimethylsiloxanic fluids.

Examples of applications

SILOIL V 50 to V 1000 are used as:

- Thermostatic fluids (– 50 °C to + 200 °C).
 - Dielectric fluids (impregnation of paper for condensers).
 - Anti-blotting products for photocopying machines.
 - Thinning and plastifying agents for RTV's and silicone sealants.
 - Lubricating and heat protecting agents for textile threads (synthetic sewing threads).
 - Ingredients in maintenance products (polishes, wax polishes, floor and furniturepolishes, etc.).
 - Paint additives (anti-cratering, anti-floating/flooding and anti-scratching effects, etc.).
 - Water repellent treatment :
 - of powders (for paints and plastics),
 - of fibres : glass fibres.
 - Release agents (mould release of plastics and metal castings).
 - Lubricants (lubrication of elastomers or plastics on metals).
 - Surfactants for styrene-butadiene foam.
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Key benefits

SILOIL V 50 to V 1000 have the following properties:

- Very good resistance to high and low temperature.
 - Good combustion resistance.
 - Good dielectric properties.
 - Low surface tension.
 - High compressibility.
 - Absence of ageing upon exposure to atmospheric agents.
 - Good oxidation resistance.
 - Little change in viscosity with temperature.
 - Good resistance to high and prolonged shear stress.
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Typical properties

SILOIL	V50	V100	V300	V350	V500	V1000
Appearance	Colourless, limpid liquid					
Viscosity at 25°C, mm ² /s, approx.	50	100	300	350	500	1000
Specific gravity at 25°C, approx.	0.959	0.965	0.970	0.970	0.970	0.970
Flash point (closed cup), °C, approx.	280	≥ 300	≥ 300	≥ 300	≥ 300	≥ 300
Freezing point, °C, approx..	- 55	- 55	- 50	- 50	- 50	- 50
Refractive index at 25°C, approx.	1.402	1.403	1.403	1.403	1.403	1.403
Surface tension at 25°C, mN/m, approx.	20.7	20.9	21.1	21.1	21.1	21.1
Vapour pressure at 200 °C, Pa, approx.	1.33	1.33	1.33	1.33	1.33	1.33
Volume expansion coeff. between 25 and 100°C, approx.	1.05.10 ⁻³	9.45.10 ⁻⁴	9.45.10 ⁻⁴	9.45.10 ⁻⁴	9.45.10 ⁻⁴	9.45.10 ⁻⁴
Specific heat capacity between 40 and 200°C, J/g, °C	1.46	1.46	1.46	1.46	1.46	1.46
Thermal conductivity, W/m°C, approx.	0.16	0.16	0.16	0.16	0.16	0.16
Viscosity / temperature coeff. (1), approx.	0.59	0.60	0.62	0.62	0.62	0.62
Dielectric strength at 25°C, kV/mm, approx.	15	16	16	16	16	16
Dielectric constant at 25°C between 0.5 and 100 kHz, approx.	2.80	2.80	2.80	2.80	2.80	2.80
Power factor at 25°C, at 100 kHz, approx.	1.10 ⁻⁴	1.10 ⁻⁴	1.10 ⁻⁴	1.10 ⁻⁴	1.10 ⁻⁴	1.10 ⁻⁴
Permittivity at 25°C, W.cm, approx.	1.10 ¹⁴	1.10 ¹⁵	1.10 ¹⁵	1.10 ¹⁵	1.10 ¹⁵	1.10 ¹⁵

(1) Viscosity / temperature coefficient = 1 - (viscosity at / viscosity at)

Please note: The typical properties are not intended for use in preparing specifications. Please contact our local Sales Department for assistance in writing specifications.

**Packaging**

SILOIL V 50 to V 1000

- IBC of 1000 KG
- Drum of 200 KG
- Drum of 25 KG

Storage and shelf life

When stored in its original packaging:

SILOIL V 50 to V 1000 may be stored at a temperature between -20 °C/ -4 °F and 50 °C/ 122 °F for up to 36 months from its date of manufacturing.

Comply with the storage instructions and expiration date marked on the packaging. Beyond this date, Siliconi Italia no longer guarantees that the product meets the sales specifications.

Safety

Please consult the Safety Data Sheet of:

SILOIL V1 000, SILOIL V100, SILOIL V300, SILOIL V350, SILOIL V50 and SILOIL V500

Visit our website www.siliconiitalia.it**Warning to the users**

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