

Silicone Oil

Description

Silicone oil is manufactured to yield essentially linear polymers in a wide range of average kinematic viscosities.

It is highly soluble in organic solvents such as aliphatic and aromatic hydrocarbons, and the halocarbon propellants used in aerosols. The fluid is easily emulsified in water with standard emulsifiers and normal emulsification techniques. But it is insoluble in water and many organic products.

The viscosities generally used in formulating polishes are between 100 and 30,000cst. To obtain optimum results, in terms of ease of application and depth of gloss, it is preferable to use a blend of a low-viscosity fluid and a high-viscosity fluid.(e.g. 3 parts 100cst and 1 part 12,500cst). The low-viscosity silicone fluid acts as a lubricant to make polish application and rubout easier, whereas the high viscosity silicone fluid produces a greater depth of gloss.Since these polymers are inherently water repellent, they will cause water to bead up on a treated surface rather than penetrate the polish film.

Technical Index

Item	201-5	201-10	201-20	201-50	201-100	201-200
Appearance	Colorless transparent liquid					
Viscosity (25°C), cst	5±0.5	10±1	20±2	50±5	100±5	200±10
Density 25°C, g/cm ³	0.920 ~0.930	0.931 ~0.939	0.946 ~0.955	0.956 ~0.964	0.958 ~0.968	0.962 ~0.972
Refractive Index, 25°C	1.3950 ~1.4000	1.3970 ~1.4010	1.3980 ~1.4020	1.4000 ~1.4040	1.4020 ~1.4040	1.4020 ~1.4040
Flash point, °C	≥125	≥165	≥210	≥280	≥310	≥310
Volatile (150°C, 2h), %	≤1.00	≤1.00	≤1.00	≤1.00	≤1.00	≤1.00

Item	201-350	201-500	201-1000	201-5000	201-12500	201-60000
Appearance	Colorless transparent liquid					
Viscosity (25°C), cst	350 ±20	500 ±25	1000 ±50	5000 ±250	12500 ±630	60000 ±3000
Density 25°C, g/cm ³	0.962 ~0.972	0.962 ~0.972	0.965 ~0.975	0.965 ~0.975	0.968 ~0.978	0.970 ~0.980
Refractive Index, 25°C	1.4020 ~1.4040	1.4020 ~1.4040	1.4025 ~1.4045	1.4025 ~1.4045	1.4025 ~1.4045	1.4025 ~1.4045
Flash point, °C	≥315	≥315	≥320	≥320	≥330	≥330
Volatile (150°C, 2h), %	≤1.00	≤1.00	≤1.00	≤1.00	≤1.00	≤1.00

Other viscosity can be provided according to customer's requirements.

Properties and Features

- 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.

Application

- 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 (wax polishes, floor and furniture polishes, etc.).
- Paint additives (anti-cratering, anti-floating/flooding and anti-scratching effects, etc.).
- Water repellent treatment: Of powders (for paints and plastics), Of fibers: glass fibers.
- 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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Packing

200KGS Iron drums or 1000KGS IBC drums

Storage

Transport as non-hazardous chemicals, keeping away from rain and sunlight.

Shelf life

Original characteristics remain intact for 1 years, if kept in recommended storage.

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