



Liveo™ 360 Medical Fluid 20 cSt

Silicone Coating Fluids

Liveo™ 360 Medical Fluid is a clear, colorless polydimethylsiloxane liquid that is available in five standard viscosities.

Applications :

Silicone fluid for lubrication and siliconization of glass, metals, plastics and rubber.

Available in five standard viscosities, High water repellency/hydrophobicity, Good stability over a broad range of temperatures, Excellent lubricating characteristics, Low surface tension, Low order of toxicity and skin sensitization.

Packaging :

The material is supplied in 0.45, 18, and 200 kg containers, net weight.

Product information

Colour	Transparent
Basis	PDMS

Rheological properties

Viscosity	19 mPa.s
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Other properties

Density	950 kg/m ³	ISO 1183
Refractive index	1.402 -	
APHA colour	15 -	ASTM D 1209

Storage and stability

Shelf life	60 months
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Characteristics

Compatibility	Polyamides, Polyesters, Polyacetals, Polyolefins, Polycarbonate, Styrenics, Polyvinylchloride, Polyurethane, Silicones, Rubber, Glass, Metals
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Additional Information

How to use
Liveo™ 360 Medical Fluid can be applied directly to surfaces by techniques such as dipping, spraying or wiping to provide a lubricious and/or hydrophobic coating.

When a very thin film of fluid is desired, Liveo™ 360 Medical Fluid can be diluted to the desired silicone fluid concentration (such as 0.1 to 2%) in a nonpolar solvent.



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After Liveo™ 360 Medical Fluid has been applied, allow sufficient time to permit the solvent to evaporate.

Although Liveo™ 360 Medical Fluid possesses excellent lubricant characteristics, the fluid may not provide satisfactory lubrication when used in situations such as metal against metal. On temperature resistant materials, such as glass, ceramic and metal, this fluid film can be heated to provide a more durable hydrophobic film.

Liveo™ 360 Medical Fluid can be applied to silicone elastomers for temporary lubricity. Before exposing a silicone elastomer to a silicone fluid, the user should evaluate the effect of the exposure on the performance.

Blending: Although the fluid is available in a number of standard viscosities, occasionally an application calls for a fluid of an intermediate viscosity. Blending of different viscosities of Liveo™ 360 Medical Fluid permits any desired viscosity between 20 and 12,500 cSt.

The blending chart is a guideline for preparing intermediate fluid viscosities. To use the blending chart:

1. Draw a line between two points one on the left-hand scale representing the higher-viscosity fluid available, and one on the right, the lower-viscosity fluid;
2. Draw another line horizontally across the chart at the desired viscosity rating;
3. Draw a third line vertically through the intersection of the first two lines;
4. Read from the top and bottom scales the proportions of the available fluids to blend to obtain the desired viscosity.

Accuracy is increased by blending the two fluids that immediately bracket the desired viscosity. If a very accurate blend is required, it may be necessary to adjust the viscosity of the mixture by a second blending.

The example shown in the blending chart is as follows: 150 cSt fluid is desired. The standard viscosities immediately bracketing 150 cSt are 100 and 350 cSt. Draw line A connecting 350 cSt on the left-hand scale with 100 cSt on the right-hand scale. Draw line B horizontally at the desired viscosity of 150. At the point of intersection, AB, draw vertical line C. The proportion of 100 cSt viscosity fluid (67%) is read on the bottom scale; the proportion of 350 cSt viscosity fluid (33%) is read on the top scale.

COMPATIBILITY

Liveo™ 360 Medical Fluid is soluble in all proportions in non-polar solvents:
Aliphatic hydrocarbon (e.g., hexane, heptane, mineral spirits)
Aromatic hydrocarbon (e.g., toluene, xylene)



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Several ozone-safe, volatile organic compound (VOC)-exempt solvents are compatible with Liveo™ 360 Medical Fluid:
Liveo™ Q7-9180 Silicone Fluids

Chemical Media Resistance

Alcohols

- ✓ Isopropyl alcohol, 23°C
- ✗ Methanol, 23°C
- ✗ Ethanol, 23°C

Hydrocarbons

- ✓ n-Hexane, 23°C
- ✓ Toluene, 23°C
- ✓ iso-Octane, 23°C

Ketones

- ✓ Acetone, 23°C

Ethers

- ✓ Diethyl ether, 23°C

Other

- ✓ Ethyl Acetate, 23°C
- ✗ Water, 23°C

Sterilisation methods

- ✗ Autoclave Steam, 30min at 120°C
- ✗ Gamma Radiation, 50 kGy

Symbols used:

- ✓ possibly resistant
Defined as: Supplier has sufficient indication that contact with chemical can be potentially accepted under the intended use conditions and expected service life. Criteria for assessment have to be indicated (e.g. surface aspect, volume change, property change).
- ✗ not recommended - see explanation
Defined as: Not recommended for general use. However, short-term exposure under certain restricted conditions could be acceptable (e.g. fast cleaning with thorough rinsing, spills, wiping, vapor exposure).

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