



# Liveo™ Q7-9120 Silicone Fluid 1000 cSt

## Silicone Topical Excipients

Excipient for pharmaceutical applications

Liveo™ Q7-9120 Silicone Fluid is a clear, colorless polydimethylsiloxane liquid, available in a range of six narrow viscosities: 20 cSt, 100 cSt, 350 cSt, 500 cSt, 1,000 cSt and 12,500 cSt. Liveo™ Q7-9120 Silicone Fluid is used to formulate with other organic and inorganic material for topical applications.

### Composition:

Chemical name: Polydimethylsiloxane, INCI name: Dimethicone, CAS number: 63148-62-9

### Applications, Features & Benefits:

As an excipient (inactive ingredients), Liveo™ Q7-9120 Silicone Fluid in topical pharmaceutical applications, including dermatological treatments, can provide emolliency, ease of spreading, smooth feel, long lasting lubrication and reduced tackiness. Liveo™ Q7-9120 Silicone Fluid is currently used in a range of dermatological treatments and pharmaceutical applications such as creams, gels and sticks. As a skin protectant active ingredient in over-the-counter topical applications, Liveo™ Q7-9120 Silicone Fluid helps prevent and temporarily protects skin and lips against chafing, chapping, cracking and windburn in accordance with FDA guidelines. Clear, emollient, Non-occlusive, skin protectant, Water repellent, Smooth feel, spreadability, Lubricity

### Packaging:

Liveo™ Q7-9120 Silicone Fluid is available in pails and in drums. Samples for Liveo™ Q7-9120 Silicone Fluid are available in bottles.

### Product information

Colour	Transparent -	
Volatiles	0.01 %	EN 1400 / EN 14350-2

### Rheological properties

Viscosity	970 mPa.s
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### Other properties

Density	973 kg/m <sup>3</sup>	ISO 1183
Refractive index	1.405 -	

### Storage and stability

Shelf life	60 months
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### Additional Information

How to use	Liveo™ Q7-9120 Silicone Fluid is soluble in organic solvents such as aliphatic and aromatic hydrocarbons. Liveo™ Q7-9120 Silicone Fluid is compatible with a range of materials that make formulation relatively easy. Liveo™ Q7-9120 Silicone Fluid can be used alone or blended with other silicone to provide a fluid base for a variety of formulations and provide a smooth, long lasting film
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on the skin. The fluid is easily emulsified in water with standard emulsifiers and normal emulsification techniques.

### 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™ Q7-9120 Silicone Fluid permits any desired viscosity between 20 cSt and 12,500 cSt. The blending chart is a guideline for preparing intermediate fluid viscosities. Accuracy is obtained 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 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.

### Sterilization:

Steam Autoclaving: Sterilization of bulk fluid by steam autoclaving is not recommended. Excess water diffuses into the fluid, causing the fluid to become hazy. Dry Heat: Sterilization of bulk fluid is not recommended. Thin layers of fluid may be satisfactorily sterilized by this method. The temperature of the fluid should not exceed 150°C because of the potential for small amounts of formaldehyde to be generated. Gamma Irradiation: The exposure of polydimethylsiloxane fluids, such as Liveo™ Q7-9120 Silicone Fluid, to 25 kGy of cobalt-60 radiation has the effect of introducing small levels of cross-linking



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into the fluid and is observed as an increase in fluid viscosity. As with any exposure of the product to radiation, product performance and stability should be evaluated after exposure to determine if such treatment has detrimental effects.

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