Medical lubricant coatings you can rely on
**Products and features**

**Liveo™ 360 Medical Fluid**
- Silicone lubricant for glass, plastics, rubbers, metals
- Water repellent/hydrophobic
- Can be spray-applied undiluted
- Can be diluted in solvents for bath treatment
- Pyrogen controlled
- Tested to meet all the requirements of the Dimethicone NF monograph — and, depending on the fluid’s viscosity, the “Dimeticone” and the “Silicone Oil Used as a Lubricant” European Pharmacopoeia (Ph. Eur.) monographs
- Certificate of Suitability held for both Ph. Eur. monographs, and a Drug Master File is maintained with the United States FDA

**Liveo™ 366, 35% Dimethicone NF Emulsion**
- Waterborne silicone fluid for lubrication and siliconization of glass, metals, plastics, rubbers
- Not formulated with OPE surfactant
- Not formulated with parabens
- Contains 35% Dimethicone

**Liveo™ MDX4-4159, 50% Medical Grade Dispersion**
- Functional silicone capable of bonding with many substrates
- Especially suited for siliconization of metals (e.g., needles and cutting edges)
- Cures at room temperature on exposure to atmospheric moisture
- Applied by wiping or dip-coating with a diluted solution

**Liveo™ Q7-9180 Silicone Fluid**
- Volatile linear silicone fluid
- Diluent for Liveo™ 360 Medical Fluid and Liveo™ MDX4-4159 50% Medical Grade Dispersion
- Non-volatile depleting
- Cleaning agent for medical materials and equipment

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**Benefits**

<table>
<thead>
<tr>
<th>Product Description</th>
<th>Typical Applications</th>
</tr>
</thead>
<tbody>
<tr>
<td>High water repellency/hydrophobic</td>
<td>Siliconization lubricant</td>
</tr>
<tr>
<td>Excellent lubricating characteristics</td>
<td>Hydrophobic lubricant for glass, metals, plastics, rubbers</td>
</tr>
<tr>
<td>Manufactured in a dedicated healthcare facility</td>
<td>Drying agent</td>
</tr>
</tbody>
</table>

**Liveo™ 360 Medical Fluid**
- Clear, colorless polydimethylsiloxane (PDMS) liquid

**Liveo™ 366, 35% Dimethicone NF Emulsion**
- White, liquid emulsion containing 35% National Formulary Dimethicone

**Liveo™ MDX4-4159, 50% Medical Grade Dispersion**
- Colorless, high-purity volatile methylsilicone fluid

**Liveo™ Q7-9180 Silicone Fluid**
- Clear, colorless, high-purity volatile methylsilicone fluid

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**Regulatory Status**

<table>
<thead>
<tr>
<th>Product</th>
<th>Viscosity</th>
<th>COD</th>
<th>Drying Rate Similar to</th>
<th>Flash Point, closed cup @7°C</th>
<th>Color, APHA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Liveo™ 365, 35% Dimethicone NF Emulsion</td>
<td>20 cSt</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>0.99 Water</td>
</tr>
<tr>
<td>*</td>
<td>100 cSt</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>0.99 Water</td>
</tr>
<tr>
<td>*</td>
<td>300 cSt</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>1.0 cSt</td>
</tr>
<tr>
<td>*</td>
<td>1,000 cSt</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>5.0</td>
</tr>
<tr>
<td>*</td>
<td>5,000 cSt</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>5.0</td>
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<tr>
<td>*</td>
<td>10,000 cSt</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>5.0</td>
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</table>

**Physical Properties**

<table>
<thead>
<tr>
<th>Product</th>
<th>Viscosity at 25°C (77°F), mm²/s</th>
<th>Specific Gravity at 25°C (77°F)</th>
<th>Drying Rate Similar to</th>
<th>Flash Point, closed cup @7°C</th>
<th>Color, APHA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Liveo™ 365, 35% Dimethicone NF Emulsion</td>
<td>2.0</td>
<td>0.974</td>
<td>*</td>
<td>1.4061 &gt;100 (&gt;212)</td>
<td></td>
</tr>
<tr>
<td>*</td>
<td>4.0</td>
<td>0.970</td>
<td>*</td>
<td>1.4036 &gt;100 (&gt;212)</td>
<td></td>
</tr>
<tr>
<td>*</td>
<td>8.0</td>
<td>0.967</td>
<td>*</td>
<td>1.4028 &gt;100 (&gt;212)</td>
<td></td>
</tr>
<tr>
<td>*</td>
<td>20.0</td>
<td>0.951</td>
<td>*</td>
<td>1.4018 &gt;100 (&gt;212)</td>
<td></td>
</tr>
<tr>
<td>*</td>
<td>100</td>
<td>0.947</td>
<td>*</td>
<td>1.4004 &gt;100 (&gt;212)</td>
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</tr>
<tr>
<td>*</td>
<td>500</td>
<td>0.965</td>
<td>*</td>
<td>1.3992 &gt;100 (&gt;212)</td>
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</tr>
<tr>
<td>*</td>
<td>1000</td>
<td>0.962</td>
<td>*</td>
<td>1.3984 &gt;100 (&gt;212)</td>
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</tr>
<tr>
<td>*</td>
<td>2000</td>
<td>0.959</td>
<td>*</td>
<td>1.3977 &gt;100 (&gt;212)</td>
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</tr>
<tr>
<td>*</td>
<td>5000</td>
<td>0.955</td>
<td>*</td>
<td>1.3970 &gt;100 (&gt;212)</td>
<td></td>
</tr>
</tbody>
</table>

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**Product properties are nominal and not to be used for specification writing.**

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**Safety Data Sheet**

DuPont™ Liveo™ can help you meet your functional, regulatory and processing needs with both well-established and next-generation medical materials that offer excellent performance.

**Supporting you and your medical materials**

DuPont™ Liveo™ can help you meet your functional, regulatory and processing needs with both well-established and next-generation medical materials that offer excellent performance.

For many years, DuPont™ Liveo™ has supported the healthcare industry with a comprehensive range of high-quality silicone coating materials. We are also committed to supplying these products, providing technical expertise and supporting the advancement of these applications and innovations in the years to come.

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**Drug Master File**

DuPont has the capability to provide Safety Data Sheets as needed to meet requirements.

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**Viscosity**

- 0.82 Isopropanol 34 (93) 1 0.65 0.76 Acetone -3 (27) 0.1 0.82 Isopropanol 34 (93) 1 0.65 0.76 Acetone -3 (27)
Focusing on what matters most to you

You want a responsive and flexible global supplier with the material and service support you need to succeed. That’s why we provide:

- Consistent quality and safety of materials
- Stability and reliability as a material supplier
- Innovative solutions and collaboration with you
- Supportive regulatory practices
- Unique silicones, with properties that make them suitable for many healthcare applications

Consistent quality

From lot to lot, year after year, you can be sure the products you order from DuPont will live up to their specifications.

Many DuPont materials for healthcare, including those described in this brochure, are manufactured in a dedicated, FDA-registered (CFN 1816403) and inspected facility that uses appropriate current Good Manufacturing Practices (cGMPs) for the intended applications.

Special attention is given to producing products that meet the highest quality standards. This is achieved through:

- An integrated supply chain and full documentation (from raw material testing through production, to final testing and lot sample retention) to ensure complete traceability of our materials
- Meticulous control and documentation of change, as well as a policy of notifying customers of all significant changes
- Rigorous procedures for cleanliness to ensure high product purity

To learn more about DuPont’s healthcare solutions visit: www.dupont.com/healthcare.html

For country-level information, visit: www.dupont.com/corporate-functions/our-company/global-locations.html

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