

Medical lubricant coatings you can rely on





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

Products and features

DuPont™ 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



	Benefits	Product description	Typical applications
Liveo™ 360 Medical Fluid*	<ul style="list-style-type: none"> • High water repellency/hydrophobicity • Excellent lubricating characteristics • Manufactured in a dedicated healthcare facility 	Clear, colorless polydimethylsiloxane (PDMS) liquid	<ul style="list-style-type: none"> • Siliconization lubricant • Hydrophobic lubricant for glass, metals, plastics, rubbers • Demolding agent
Liveo™ 366 35% Dimethicone NF Emulsion	<ul style="list-style-type: none"> • Excellent lubricating and release characteristics • Not formulated with OPE surfactant • Not formulated with parabens • Manufactured in a dedicated healthcare facility 	White, liquid emulsion containing 35% National Formulary Dimethicone	<ul style="list-style-type: none"> • Waterborne silicone fluid for lubrication and siliconization of glass, metals, plastics, rubbers • Hydrophobic lubricant for medical materials and parenteral containers
Liveo™ MDX4-4159 50% Medical Grade Dispersion	<ul style="list-style-type: none"> • High adhesion to metal, providing durability • Cures at room temperature between 55 to 60% relative humidity • Manufactured in a dedicated healthcare facility 	Colorless to slightly hazy liquid aminofunctional silicone dispersion with 50% active silicone ingredients	<ul style="list-style-type: none"> • Lubricant for cutting edges and needles
Liveo™ Q7-9180 Silicone Fluid*	<ul style="list-style-type: none"> • High volatility • High spreadability • Non-ozone-depleting 	Clear, colorless, high-purity volatile methylsiloxane fluid	<ul style="list-style-type: none"> • Diluting solvent for Liveo™ 360 Medical Fluid and Liveo™ MDX4-4159 50% Medical Grade Dispersion • Medical materials cleaning solvent • Equipment cleaning solvent

DuPont™ 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% NF Dimethicone

DuPont™ 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

DuPont™ Liveo™ Q7-9180 Silicone Fluid⁽¹⁾

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



Regulatory status

Product viscosity	FDA Drug Master File (DMF)	Conform to NF monograph req. for Dimethicone NF	Conform to Ph. Eur. monograph req. for Dimethicone	Conform to Ph. Eur. monograph req. for Silicone Oil Used as Lubricant	VOC exempted in U.S. by EPA
20 cSt	•	•	•		
100 cSt	•	•	•		
350 cSt	•	•	•		
1,000 cSt	•	•	•		
12,500 cSt	•	•		•	
	•				
	•				
0.65 cSt	•				•
1 cSt	•				•

Physical properties

Viscosity at 25°C (77°F), mm ² .s ⁻¹	Specific gravity at 25°C (77°F)	Drying rate similar to	Color, APHA	Acid No., BPB (Bromophenyl Blue)	Refractive index at 25°C (77°F)	Flash point, closed cup, °C (°F)	pH
20	0.951		<15	<0.02	1.4018	>100 (>212)	
100	0.967		<15	<0.02	1.4032	>100 (>212)	
350	0.971		<15	<0.02	1.4042	>100 (>212)	
1,000	0.972		<15	<0.02	1.4046	>100 (>212)	
12,500	-		<15	<0.02	1.4047	>100 (>212)	
	0.99	Water					5.0
		Mineral spirits			1.4089	13.3 (56)	
	0.65	Acetone				-3 (27)	
	1	Isopropanol				34 (93)	

⁽¹⁾Not intended for human injection.

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



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

About DuPont™ Liveo™ Healthcare Solutions

DuPont™ Liveo™ is a globally recognized leader in technology for a broad range of innovations in medical devices, biopharmaceutical processing and pharmaceutical solutions. DuPont high-performance materials help create safer healthcare environments and protect the health of patients and healthcare providers worldwide. We help enable smarter healthcare and positive patient outcomes.



To learn more about DuPont™ Liveo™ Healthcare Solutions, visit liveo.dupont.com.



Smarter Healthcare.
Positive Patient Outcomes.

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