

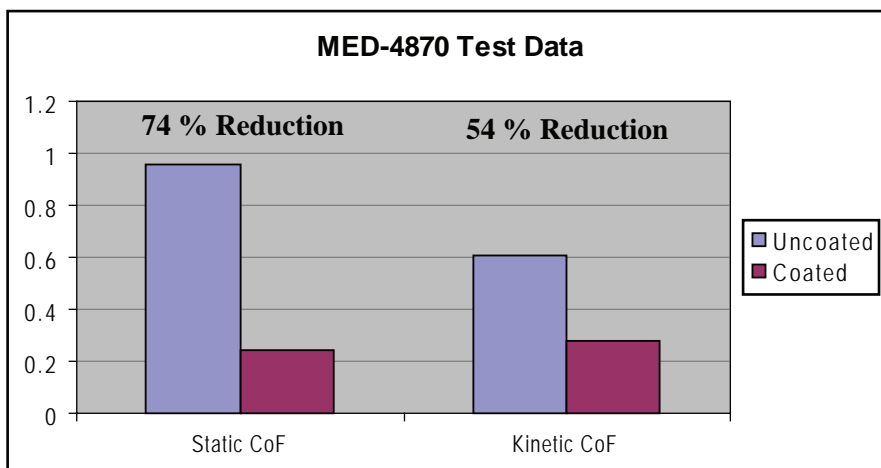
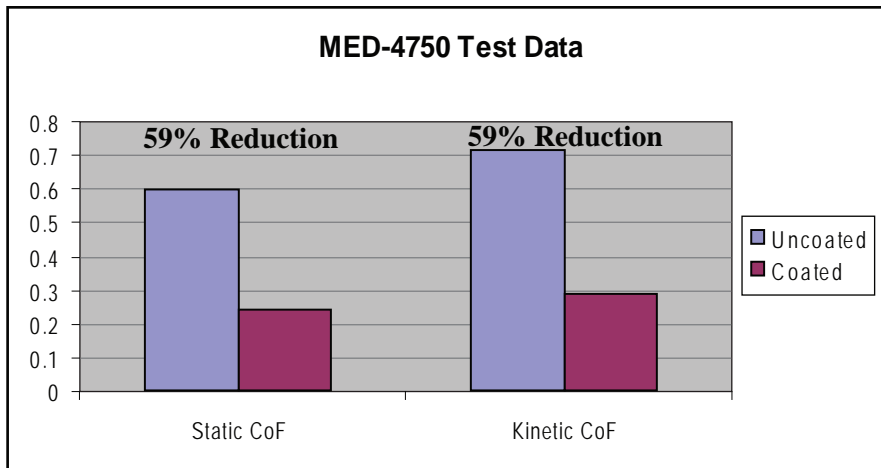


Low Coefficient of Friction Silicone Coating (MED-6670)

The surface of cured silicones is often characterized by a high coefficient of friction, some degree of tackiness and a tendency for blocking (sticking to themselves by virtue of chemical affinity). All of these inherent features may be problematic for applications requiring a molded or extruded silicone part to move or slide with minimal friction.

MED-6670 is a two-part, low coefficient of friction silicone coating dispersed in xylene specifically designed to coat molded or extruded silicone parts and overcome these obstacles. A thin coat of MED-6670 will cure rapidly with elevated temperatures. Once cured, the coating will have chemically bonded to the silicone elastomer substrate and mimic the mechanical properties thereof. The result is a durable yet flexible coating that resists abrasion from moving, sliding and rubbing parts. It achieves this with a smooth finish that also results in at least a 50% decrease in coefficient of friction when coated silicone samples vs. non-coated silicone samples are compared side-by-side.

NuSil Technology is a cutting edge global formulator and manufacturer of silicone compounds for the healthcare industries with 30 years of experience. Developing novel silicone systems, NuSil offers a complete line of customizable adhesives, elastomers, fluids, and gels. We meet the demands of new and innovative technologies by building on our experience and expanding our products and services to offer exclusive silicone solutions specifically designed for drug delivery and combination medical device products.





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By bonding to the substrate and resisting abrasion, the MED-6670 coating eliminates the concern of migration, commonly associated with lubricants such as fluids or greases. Approximately the consistency of water, MED-6670 lends itself to application by dipping but spraying is recommended. The substrate being coated should be free of contamination, not inhibit the cure, and be able to withstand the cure cycle. If utilizing a spraying technique, it is recommended to spray 2-3 inches from the target surface, with the coated substrate evenly wetted but not soaking. Ideal coating thickness for optimal reduction can be achieved with a single spray coat. Devolatilize with air flow or under a fume for approximately 5 minutes, then cure at 150°C (302°F).

Properties	Average Result
Uncured:	
Appearance, Part A*	Translucent
Appearance, Part B*	Opaque
Zahn Cup Viscosity, Cup #2*	15 seconds
Percent Solids, Mixed*	20%
Specific Gravity	0.96
Work Time	>24 hours
Refractive Index	1.41
Cured: 5 minutes minimum @ ambient temp. and humidity, then 5 minutes @150°C (302°F)	
Cytotoxicity*	Pass
*Properties tested on a lot-to-lot basis. Do not use the properties shown in this technical profile as a basis for preparing specifications. Please contact NuSil Technology for assistance and recommendations in establishing particular specifications.	

See Product Profiles for more detailed information regarding test methods

Potential end uses for the MED-6670 Coating:

- Tubing (ID/OD)
- Balloons
- Valves
- Stoppers
- O-Rings
- Anywhere that you have moving or sliding parts



10 X Magnification



200 X Magnification





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