

Science applied to Silicone  
for superior clinical products



## LONG TERM IMPLANT AND CRITICAL APPLICATION SELECTION GUIDE

- *Liquid Silicone Elastomers*
- *High Consistency Elastomers*
- *RTV Adhesives*
- *Solvent Dispersions*
- *Lubricants*
- *Needle Coating*
- *Gel Systems*
- *Pure Dimethyl Fluids*
- *Calendared Silicone Sheeting*
- *Custom Formulation*
- *IDE, 510K PMA, CE Mark Support*
- *Substitutes for Dow Corning discontinued products*



**Applied Silicone Corporation** was founded in 1987 to serve healthcare, medical, and specialty silicone markets. By 1999, Applied Silicone had become one of the world's largest independent silicone manufacturers and sold the majority of its healthcare, medical, and specialty silicones business to Rhodia, Inc., which continues to serve most applications. From 1999 through 2006, Applied Silicone was bound by contract to sell a limited line of products to customers serving highly regulated and specialized markets not served by Rhodia. During this period, Applied Silicone retained its experienced management team and relocated to a new and expanded California production facility. As of November 2006, Applied Silicone Corporation is no longer bound by contract, and can resume unrestricted supply of substitutes for nearly all Dow Corning Medical Grade Silicones, as well as over 100 Medical and Implant Grade products for long term implantation. Applied's manufacturing processes are supported by an ISO 9001:2000 certified quality system.

### **Production Technology/ Industry Commitment**

When other suppliers of implantable silicones are unable or unwilling to serve your application, Applied Silicone Corporation may be the solution. Applied has the unique ability to formulate silicones from basic ingredients allowing it to serve the most demanding applications. Applied Silicone has never faltered in its commitment to the medical product industry.

### **Product Development Excellence**

Key staff members at Applied have decades of training in the medical products arena and have extensive knowledge on material selection, performance, processing techniques, design validation and testing. While a catalog standard product may not meet your demanding product performance requirements, custom formulations are a specialty of Applied Silicone.

### **Technical and Production Consulting**

Applied Silicone's experienced staff is always available to support customers with state-of-the-art testing and processing techniques. Consulting services include product and process design support, preclinical toxicology testing, forensic analysis and expert defense witness testimony.

### **Quality Control**

Applied Silicone's ISO 9001:2000 Certification and document control system meet the quality control demands of sophisticated medical device manufacturers. All products are 100% quality tested and certified.

### **Product Testing and Regulatory Compliance**

Designed to meet FDA and ISO 10993 biocompatibility guidelines, Applied Silicone has a comprehensive database that contains extensive chemical, physical, and biological testing of Applied products, including lifetime rat bioassay studies which took four years to complete. Supporting data is compiled into a Master File that is available on an access fee basis. In many cases, Applied's customers are not required to perform redundant and expensive physical and preclinical testing because we already have data acceptable to the FDA and foreign Health Ministries. Applied's staff is qualified and ready to assist you with your IDE, 510K, and PMA submissions to the FDA or foreign Health Ministries.

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	PART NUMBER	SILICONES FOR MEDICAL PRODUCTS DESCRIPTION					CERTIFIED	TYPICAL	CERTIFIED	TYPICAL	CERTIFIED	TYPICAL	CERTIFIED	TYPICAL	TYPICAL	TYPICAL	TYPICAL				
																					Minimum
LSR ELASTOMERS	40023	APPLIED LIQUID SILICONE RUBBER 10 DUROMETER (LSR-10), I.G.	Unknown	PLATINUM	100	175/5m	6-15	12	450	700	800	810	70	100	1.11	240 gr/min.	75 @ 200	6	✓	CLEAR HIGH STRENGTH	
	40024	APPLIED LIQUID SILICONE RUBBER 20 DUROMETER (LSR-20), I.G.	Unknown	PLATINUM	100	175/5m	16-25	20	750	800	550	660	100	120	1.10	220 gr/mn.	125 @ 200	6	✓	FOR INJECTION	
	40025	APPLIED LIQUID SILICONE RUBBER 30 DUROMETER (LSR-30), I.G.	Q7-4830	PLATINUM	100	175/5m	26-35	30	800	950	550	650	120	130	1.12	180 gr/min.	185 @ 200	6	✓	MOLDING	
	40026	APPLIED LIQUID SILICONE RUBBER 40 DUROMETER (LSR-40), I.G.	Q7-4840	PLATINUM	100	175/5m	36-45	40	900	980	450	550	140	170	1.12	170 gr/min.	300 @ 200	6	✓		
	40027	APPLIED LIQUID SILICONE RUBBER 50 DUROMETER (LSR-50), I.G.	Q7-4850	PLATINUM	100	175/5m	46-55	50	950	1000	350	440	160	220	1.13	160 gr/min.	515 @ 200	6	✓		
	40028	APPLIED LIQUID SILICONE RUBBER 60 DUROMETER (LSR-60), I.G.	Q7-4860	PLATINUM	100	175/5m	56-65	60	1000	1100	300	400	190	220	1.13	160 gr/min.	630 @ 200	6	✓		
	40071	APPLIED LIQUID SILICONE RUBBER 70 DUROMETER (LSR-70), I.G.	Unknown	PLATINUM	100	175/5m	66-75	70	1000	1150	250	400	190	220	1.14	130 gr/min.	790 @ 200	6	✓		
	40072	APPLIED LIQUID SILICONE RUBBER 25-10:1, IMPLANT GRADE	MDX4-4210	PLATINUM	100	175/5m	150/60m	25-31	25	550	700	350	400	RECORD	80	1.09	100,000 cps	190 @ 200	6	✓	HANDMIX
	40029	APPLIED LIQUID SILICONE RUBBER 30-10:1, IMPLANT GRADE	MDX4-4210	PLATINUM	100	175/3m		27-33	30	500	710	300	350	50	100	1.09	100,000 cps	290 @ 200	6	✓	AND
	40082	APPLIED LIQUID SILICONE RUBBER 40-10:1, IMPLANT GRADE	Unknown	PLATINUM	100	175/3m		36-45	40	600	800	250	350	80	120	1.09	100,000 cps	500 @ 200	6	✓	POURABLE
	Custom	Custom Barium Sulfate (BaSO <sub>4</sub> ) mixed materials available for all durometers listed above		PLATINUM	100	175/3m		Physical properties may vary according to the amount of BaSO <sub>4</sub> added material												6	✓
HCRA	40122	I.G. HIGH CONSISTENCY RUBBER 20, DUROMETER, (HCRA 4720)	Q7-4720	PLATINUM	100	116/10m	165/60	19-27	23	1100	1400	1050	1200	140	180	1.12		75 @ 200	6	✓	CLEAR HIGH STRENGTH
	40117	I.G. HIGH CONSISTENCY RUBBER 35, DUROMETER, (HCRA 4735)	Q7-4735	PLATINUM	100	116/10m	165/60	30-40	37	900	1300	800	1000	175	200	1.12		150 @ 200	6	✓	FOR EXTRUSION
	40115	I.G. HIGH CONSISTENCY RUBBER 50, DUROMETER, (HCRA 4750)	Q7-4750	PLATINUM	100	116/10m	165/60	45-55	52	1200	1340	750	850	200	280	1.15		400 @ 200	6	✓	
	40116	I.G. HIGH CONSISTENCY RUBBER 65, DUROMETER, (HCRA 4765)	Q7-4765	PLATINUM	100	116/10m	165/60	60-70	63	750	1140	800	880	200	300	1.20		520 @ 200	6	✓	
	40123	I.G. HIGH CONSISTENCY RUBBER 80, DUROMETER, (HCRA 4780)	Q7-4780	PLATINUM	100	116/10m	165/60	73-83	78	750	980	450	520	175	260	1.22		700 @ 200	6	✓	
	Custom	Custom Barium Sulfate (BaSO <sub>4</sub> ) mixed materials available for all durometers listed above		PLATINUM	100	116/10m		Physical properties may vary according to the amount of BaSO <sub>4</sub> added material												6	✓
HCRP	40044	I.G. HIGH CONSISTENCY RUBBER 35 DUROMETER PEROXIDE CURE (HCRP 35)	Q7-4535	PEROXIDE	100	116/10m	200/60m	30-40	35	1000	1600	500	700	60	150	1.12		100 @ 200	6	✓	CLEAR HIGH STRENGTH
	40045	I.G. HIGH CONSISTENCY RUBBER 50 DUROMETER PEROXIDE CURE (HCRP 50)	Q7-4550	PEROXIDE	100	116/10m	200/60m	45-55	50	1000	1400	360	600	45	190	1.15		300 @ 200	6	✓	FOR CALENDARING
	40046	I.G. HIGH CONSISTENCY RUBBER 65 DUROMETER PEROXIDE CURE (HCRP 65)	Q7-4565	PEROXIDE	100	116/10m	200/60m	60-70	65	900	1400	280	500	45	270	1.22		720 @ 200	6	✓	
DISPERSIONS	40000	DIMETHYL SILICONE ELASTOMER DISPERSION IN XYLENE, IMPLANT GRADE	Q7-2213	PLATINUM	35	150/60m		31-45	35	1200	1800	650	800	100	185	1.10	2000 cps	170 @ 200	6	✓	SOLVENT BASED ELASTOMER
	40021	HIGH STRENGTH RTV SILICONE ELASTOMER DISPERSION IN XYLENE, IMPLANT GRADE	MED A	ACETOXY	40	RT/24hrs	RT/24hrs	17-33	24	1000	1000	800	1000	90	160	1.08	800 cps	90 @ 200	6	✓	RT CURE ACETOXY
	40130	FLUOROSILICONE BARRIER DISPERSION, IMPLANT GRADE	Unknown	PLATINUM	18	150/60m		29-42	40	800	1000	500	800	80	120	1.19	400 cps	185 @ 200	6	✓	HEAT CURE PLATINUM
FLUIDS	40047	MEDICAL GRADE MDM SILICONE FLUID, 1000 cP	360 Fluid	NONREACTIVE	100										0.98	1000 cps		12	✓	NON-REACTIVE SILICONE	
	40073	MEDICAL GRADE MDM SILICONE FLUID, 350 cP	360 Fluid	NONREACTIVE	100										0.98	350 cps		12	✓	FLUIDS FOR LUBRICANTS	
	40074	MEDICAL GRADE MDM SILICONE FLUID, 20 cP	360 Fluid	NONREACTIVE	100										0.95	20 cps		12	✓		
	40104	MEDICAL GRADE MDM SILICONE FLUID, 100 cP	360 Fluid	NONREACTIVE	100										0.98	100 cps		12	✓		
	40098	MEDICAL GRADE MDM SILICONE FLUID, 12500 cP	360 Fluid	NONREACTIVE	100										0.98	12500 cps		12	✓		
ADHESIVE PRIMER	40064	IMPLANT GRADE RTV ADHESIVE, ACETOXY CURE	MED A	ACETOXY	100	RT/24 hrs		20-32	24	450	780	350	650	40	70	1.08	150 cps	90 @ 200	12	✓	ACETOXY
	40076	IMPLANT GRADE HIGH STRENGTH RTV ADHESIVE, ACETOXY CURE	REHAU 1511	ACETOXY	100	RT/24 hrs		20-32	24	550	780	450	650	45	70	1.08	150 cps	130 @ 200	12	✓	ACETOXY
	40086	PRESSURE SENSITIVE ADHESIVE IN CHLORO FLUORO CARBON SOLVENT	355	NONREACTIVE	18	RT/10m									1.4	75 cps		6	✓	SKIN BONDING	
	40096	MEDICAL GRADE PRIMER FOR METALS AND PLASTICS	S-2260	ACETOXY	2	RT/10m									0.86	5 cps		12	✓	PRIMER	
	40097	MEDICAL GRADE RTV SILICONE LUBRICANT DISPERSION	MDX4-4159	ACETOXY	30	RT/24 hrs									0.86	150 cps		6	✓	METAL COATING / LUBRICANT	
GELS	40008	HIGH STRENGTH SILICONE GEL SYSTEM, IMPLANT GRADE	Q7-2146-2150	PLATINUM	100	100/20m									0.98	1000 cps		6	✓		
	40022	HIGH STRENGTH FIRM SILICONE GEL SYSTEM, IMPLANT GRADE	Q7-2146-2150	PLATINUM	100	RT/24 hrs									0.98	15000 cps		6	✓		
	40077	HIGH STRENGTH FIRM SILICONE GEL SYSTEM, LOW VISCOSITY, IMPLANT GRADE	Q7-2146-2150	PLATINUM	100	RT/24 hrs									0.98	8000 cps		6	✓		
SHEETING	40048	IMPLANT GRADE NON-REINFORCED UNVULCANIZED SILICONE SHEETING, 10-60 MIL	Unknown	PEROXIDE	100	160/3m		45-55	50	N/A	1600	N/A	700	N/A	190	1.16	N/A	320 @ 200	6	✓	MADE FROM HCRP-50
	40052				100															✓	
	40053	IMPLANT GRADE NON-REINFORCED VULCANIZED SILICONE SHEETING, 10-60 MIL	Unknown	PLATINUM	100	N/A		45-55	50	N/A	1500	N/A	900	N/A	220	1.15	N/A	320 @ 200	6	✓	MADE FROM HCRA-4750
	40057				100															✓	
	40058	IMPLANT GRADE REINFORCED UNVULCANIZED SILICONE SHEETING, 10-60 MIL	Unknown	PEROXIDE	100	160/3m		45-55	50	N/A	N/A	N/A	N/A	N/A	N/A	1.16	N/A		6	✓	MADE FROM HCRP-50
	40062				100															✓	
	40065	IMPLANT GRADE REINFORCED VULCANIZED SILICONE SHEETING, 10-60 MIL	Unknown	PLATINUM	100	N/A		45-55	50	N/A	N/A	N/A	N/A	N/A	N/A	1.16	N/A		6	✓	MADE FROM HCRA-4750
40069				100															✓		

The user must independently determine the suitability of product use and ensure that the application is compliant with industry and government standards.