

A-225-50

Liquid Silicone Rubber

SILBIONE[®] LSR 4350

January 2005

TECHNICAL DATA SHEET

SILBIONE[®] LSR 4350 is a 50 durometer, liquid silicone rubber designed for **health care applications**, producing high clarity, high strength molded parts.

FEATURES

- Superior clarity
- High tear strength
- Excellent mold release for shorter cycle times
- Rapid cure at elevated temperature
- No post cure is needed

TYPICAL APPLICATIONS

- Molded medical parts for <29 day implantation
- Health care/skin contact applications
- Infant care: baby bottle nipples, pacifiers, sippy cup valves
- Dive masks, goggles
- Food contact applications
- Health care applications: stoppers, needle entry ports

REGULATION

- Formulated to meet US Pharmacopoeia (USP) Class VI requirements for health care applications
- Meets applicable food contact regulations: FDA 21 CFR 177.2600 and FDA 7117.11 Nitrosamines
- Conforms with the positive lists for: Journal Officiel – brochure 1227 (France); BGW/BGA Ch. XV Silicone (Germany); Gazzeta Ufficiale, 1973 + Add. (Italy)

It is the sole responsibility of the purchaser to determine suitability for an application and comply with all applicable statutory, regulatory and industry requirements.

TYPICAL PROPERTIES

Property	Test Method	Unit	Value	
	CTM			
Appearance	TP 038		Clear, paste-like liquid	
Specific Gravity	TP 013		1.12	
Pot Life, 23°C	NM 128	hours	≥ 72	
Extrusion Rate	TP 001	g/min.	80	
Viscosity, shear rate 1/ sec		Pa.s	2000	
shear rate 10/ sec		Pa.s	700	
	ASTM		Press Cured¹ 5 minutes, 177°C	Post Cured¹ 4 hours, 200°C
Hardness	D 2240	Shore A	50	52
Tensile Strength	D 412	psi (N/mm ²)	1225 (8.4)	1275 (8.8)
Elongation	D 412	%	570	530
Tear Strength	D 624, Die B	ppi (N/mm)	265 (46.5)	290 (50.9)
Modulus 100%	D 412	psi (N/mm ²)	295 (2.0)	340 (2.3)
Modulus 200%	D 412	psi (N/mm ²)	510 (3.5)	590 (4.0)
Modulus 300%	D 412	psi (N/mm ²)	670 (4.6)	770 (5.3)
Resiliency	D 2632	%	60	57
Compression Set	D 395B	%	35	12

¹ASTM Slab 6"x6"x0.07"

Please note: The typical properties listed in this bulletin are not intended for use in preparing specifications for any particular application of Silbione[®] silicone materials. Please contact our Technical Service Department for assistance in writing specifications.



Silicones