

## Momentive Performance Materials Siloprenâ, ¢ LSR 4640 Liquid Silicone Rubber - Healthcare

Category: Polymer, Thermoset, Rubber or Thermoset Elastomer (TSE), Silicone, Silicone Rubber

## **Material Notes:**

LSR elastomers are a two-component, platinum (addition/heat) curable, and pumpable silicone elastomer that can be molded and cured with very fast cycle times, at elevated temperatures. The molding process allows for complex part geometry and exact dimensions. LSR elastomers are generally suitable for short cycle time injection and full automatic flash-less processing. Color pastes are available to pigmenting addition cure productions of LSR's.All LSR grades are platinum cured materials which are mixed in a 1:1 ratio by weight. The distinctive properties of silicone elastomers - purity, clarity, strength - coupled with ease of processability, have resulted in their use in a broad range of medical device applications. Silicone materials exhibit exceptional stability over a wide range of temperatures, lending themselves to use in applications requiring repeated sterilization performance. Typical applications include, but are not limited to:Dental / surgical devices Diagnostics / imaging Fluid and drug delivery devices Orthopedics / prosthetics Scar management Septa / stoppers / laboratory accessories Medical tubing Wound drains and bulbs Sterilization mats Pharmaceutical closures Instrument grips Dialysis orings Positioning devices Catheters Seals / o-rings / valves Respiratory / anesthesia Medical equipment keypads

## Order this product through the following link:

http://www.lookpolymers.com/polymer\_Momentive-Performance-Materials-Silopren-LSR-4640-Liquid-Silicone-Rubber-Healthcare.php

Physical Properties	Metric	English	Comments
Specific Gravity	1.12 g/cc	1.12 g/cc	
Linear Mold Shrinkage	0.027 cm/cm	0.027 in/in	vulcanized 10 sec at 200°C; Without post-cure
	0.035 cm/cm	0.035 in/in	vulcanized 10 sec at 200°C then post-cured

Mechanical Properties	Metric	English	Comments
Hardness, Shore A	42	42	
Tensile Strength	8.00 MPa	1160 psi	
Elongation at Break	600 %	600 %	
Tear Strength	45.0 kN/m	257 pli	Die B
Compression Set	25 %	25 %	Post cured

Optical Properties	Metric	English	Comments
Transmission, Visible	80 %	80 %	transparent; thickness unknown

Compliance Properties	Metric	English	Comments
FDA	Yes	Yes	FDA Indirect food contact - Rubber articles intended for repeated use -



Compliance Properties	Metric	English	Comments
USP Class VI	Yes	Yes	USP Class VI methods: Intramuscular implantation, intracutaneous injection, & systematic injection

Processing Properties	Metric	English	Comments
Nozzle Temperature	20.0 °C	68.0 °F	cool nozzle and cylinder to prevent premature vulcanization
Mold Temperature	140 - 230 °C	284 - 446 °F	short vulcanization time required (a few seconds)
Injection Pressure	5.00 - 15.0 MPa	725 - 2180 psi	depends on feed channel
Hold Pressure	5.00 MPa	725 psi	

Descriptive Properties	Value	Comments
Appearance	Transparent	
BfR	product is compositionally compliant	Recommendation XV Silicones; post cured (4h/200°C)
ISO10993	yes	7 ISO 10993 tests applicable to "wet" chemicals

## **Contact Songhan Plastic Technology Co.,Ltd.**

Website: www.lookpolymers.com Email: sales@lookpolymers.com

Tel: +86 021-51131842 Mobile: +86 13061808058 Skype: lookpolymers

Address: United North Road 215, Fengxian District, Shanghai City, China