

Silopren* LSR 4640FC

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Description

Silopren LSR 4600 FC liquid silicone rubber is a family of platinum catalyzed fast cure two-component liquid silicone rubber offered in a variety of different durometers. With faster cure at lower temperatures such as 100°C, it is an excellent candidate to consider for injection molding onto lower temperature substrates such as polycarbonate.

Key Features and Benefits

- fast cure at low temperatures
- long pot life
- UV resistance
- ISO 10993/USP Class VI tested(a)
- low viscosity
- chemical resistance
- high tear strength

(a) A representative sample of LSR 4640 FC has passed USP Class VI (United State Pharmacopeia 32, National Formulary 27, 2009, <88> Biological Reactivity Test, In Vivo tests) and ISO 10993 (Part 6, 10, and 11) tests using Good Laboratory Practices (GLP). Please contact Product Stewardship and Regulatory Group for details.

Typical Physical Properties

Uncured Properties		LSR 4630 FC A	LSR 4630 FC B	LSR 4640 FC A	LSR 4640 FC B
Appearance		Translucent	Translucent	Translucent	Translucent
Viscosity in Pa*s (20°C)	DIN 53018	220	220	250	250
Gamma = 10 s-1					

The pot-life of the mixture of the two components (closed vessel) at 20°C is 2 days. Increased temperature

will reduce the pot-life.

Typical Properties of the Cured Rubber

Mixing ratio of the components A : B = 1 : 1. Vulcanization: 10 minutes 175°C

	Test	Units	LSR 4630 FC	LSR 4640 FC
Density	DIN 53 479 A, 20°C	g/cm3	1.10	1.10
Shore A Hardness	DIN 53 505		3	36
Tensile Strength	DIN 53 504 S2	N/mm2	8.5	8.0
Elongation at Break	DIN 53 504 S2	%	730	700
Tear Strength	ASTM D 624 die B	N/mm	20	30

Curing speed (JSR Curelastometer type V)				
			LSR 4630 FC	LSR 4640 FC
T60 (100°C)		min.	1.7	1.6
T60 (110°C)		min.	0.8	0.8
Viscosity Behavior	Initial	Pa·s (20°C)	220	250
	After 12 hrs	Pa·s (20°C)	300	280
	After 24 hrs	Pa·s (20°C)	420	350
	After 48 hrs	Pa·s (20°C)	500	400

Potential Applications

- respiratory/anesthesia masks
- wound drain bulbs
- surgical devices
- diagnostics
- imaging
- fluid and drug delivery
- thermoplastic overmolding

Patent Status

Nothing contained herein shall be construed to imply the nonexistence of any relevant patents or to constitute the permission, inducement or recommendation to practice any invention covered by any patent, without authority from the owner of the patent.

Product Safety, Handling and Storage

Customers should review the latest Safety Data Sheet (SDS) and label for product safety information, safe handling instructions, personal protective equipment if necessary, emergency service contact information,

and any special storage conditions required for safety. Momentive Performance Materials (MPM) maintains an around-the-clock emergency service for its products. SDS are available at www.momentive.com or, upon request, from any MPM representative. For product storage and handling procedures to maintain the product quality within our stated specifications, please review Certificates of Analysis, which are available in the Order Center. Use of other materials in conjunction with MPM products (for example, primers) may require additional precautions. Please review and follow the safety information provided by the manufacturer of such other materials.

Limitations

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Contact Information

For product prices, availability, or order placement, contact our customer service at Momentive.com/CustomerService/

For literature and technical assistance, visit our website at: www.momentive.com

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