

# Silopren™ LSR 4670

## Silopren\* LSR 4670

### Description

LSR 4670 is a two-component liquid silicone rubber for injection moulding processes. The material performance is particularly characterised by high reactivity, low viscosity and high tear strength. The LSR 4670 enables particularly the production of parts for healthcare devices covering by USP Class VI such as sealing elements, O-rings, diaphragms, ear plugs, bellows, baby teats, respiratory devices, air vent flaps, tube connectors, catheters and mats.

### Key Features and Benefits

Vulcanisates consisting of LSR 4670 are distinguished by the following properties:

- Low viscosity
- Fast cure
- High tear strength
- Sterilisable with ethylene oxide, steam and gamma radiation
- Long service life at dynamic stress
- Neutral odour and taste
- High recovery after puncture
- High temperature stability

### Typical Physical Properties

Typical properties of the rubber:			
		comp. A	comp. B
Appearance		translucent	translucent
Viscosity, $\eta = 10 \text{ s}^{-1}$ at 20°C	DIN 53018	550	550

The pot-life of the mixture of the two components (closed vessel) at 20°C is three **days. Increased temperatures reduce the pot-life.**

Typical properties of the vulcanisate:  
 Mixing ratio of components A: B = 1: 1.  
 Vulcanisation: 10 min. 175 °C + 4 hrs. 200°C post cure

Density	DIN 53 479 A	g/cm <sup>3</sup>	1.13
Hardness	DIN 53 505	Shore A	69
Tensile strength	DIN 53 504 S2	N/mm <sup>2</sup>	9.5
Elongation at break	DIN 53 504 S2	%	350
Tear strength	ASTM D 624 die B	N/mm	30
Comp. Set 22h at 175 °C	ISO 815	%	20

### Regulatory Compliance

- A representative sample of an analogous product to Silopren LSR 4670 met the requirements of USP Class VI (maximum contact time with human tissue 28 days) and ISO 10993 under Good Laboratory Practices (GLP).
- The ingredients are listed in the BfR recommendation XV “Silicones” <sup>(1)</sup>
- Compositionally compliant with 21 CFR 177.2600 – Rubber articles intended for repeated use<sup>(2)</sup>
- Tested according Eur. Pharmacopia VI 3.1.9

(1) Producer of the final article needs to test and confirm that the final product meets the extraction limits of BfR XV or corresponding EU legislation.

(2) It is the responsibility of the user to determine that the final product complies with the extractive limitations and other requirements of 21 CFR 177.2600, under their specific manufacturing procedures.

### Patent Status

여기에 포함된 어떠한 내용도 관련 특허가 없음을 의미하거나 특허 소유자의 허가 없이 특허에서 다루는 발명을 실행하기 위한 허가, 유도 또는 권고를 구성하는 것으로 해석되어서는 안됩니다.

### 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](http://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

Customers must evaluate Momentive Performance Materials products and make their own determination as to fitness of use in their particular applications.

### Contact Information

Email

[commercial.services@momentive.com](mailto:commercial.services@momentive.com)

### Telephone

<b>Americas</b>	<b>Latin America</b>	<b>EMEAI- Europe, Middle East, Africa &amp; India</b>	<b>ASIA PACIFIC</b>
+1 800 295 2392 Toll free*	<b>Brazil</b> +55 11 4534 9650 Direct Number	<b>Europe</b> +390510924300 Direct number	<b>China</b> 800 820 0202 Toll free +86 21 3860 4892 Direct number
+704 805 6946 Direct Number	<b>Mexico</b> +52 55 2169 7670 Direct Number	<b>India, Middle East &amp; Africa</b> + 91 44 71212207 Direct number*	<b>Japan</b> +81 3 5544 3111 Direct number

**\*All Middle Eastern                      Korea**  
**countries, Africa, India,                +82 2 6201 4600**

For literature and technical assistance, visit our website at: [www.momentive.com](http://www.momentive.com)

**DISCLAIMER:**

**THE MATERIALS, PRODUCTS AND SERVICES OF MOMENTIVE PERFORMANCE MATERIALS INC. AND ITS SUBSIDIARIES AND AFFILIATES (COLLECTIVELY “SUPPLIER”), ARE SOLD SUBJECT TO SUPPLIER’S STANDARD CONDITIONS OF SALE, WHICH ARE INCLUDED IN THE APPLICABLE DISTRIBUTOR OR OTHER SALES AGREEMENT, PRINTED ON THE BACK OF ORDER ACKNOWLEDGMENTS AND INVOICES, AND AVAILABLE UPON REQUEST. ALTHOUGH ANY INFORMATION, RECOMMENDATIONS, OR ADVICE CONTAINED HEREIN IS GIVEN IN GOOD FAITH, SUPPLIER MAKES NO WARRANTY OR GUARANTEE, EXPRESS OR IMPLIED, (i) THAT THE RESULTS DESCRIBED HEREIN WILL BE OBTAINED UNDER END-USE CONDITIONS, OR (ii) AS TO THE EFFECTIVENESS OR SAFETY OF ANY DESIGN INCORPORATING ITS PRODUCTS, MATERIALS, SERVICES, RECOMMENDATIONS OR ADVICE. EXCEPT AS PROVIDED IN SUPPLIER’S STANDARD CONDITIONS OF SALE, SUPPLIER AND ITS REPRESENTATIVES SHALL IN NO EVENT BE RESPONSIBLE FOR ANY LOSS RESULTING FROM ANY USE OF ITS MATERIALS, PRODUCTS OR SERVICES DESCRIBED HEREIN.** Each user bears full responsibility for making its own determination as to the suitability of Supplier’s materials, services, recommendations, or advice for its own particular use. Each user must identify and perform all tests and analyses necessary to assure that its finished parts incorporating Supplier’s products, materials, or services will be safe and suitable for use under end-use conditions. Nothing in this or any other document, nor any oral recommendation or advice, shall be deemed to alter, vary, supersede, or waive any provision of Supplier’s standard Conditions of Sale or this Disclaimer, unless any such modification is specifically agreed to in a writing signed by Supplier. No statement contained herein concerning a possible or suggested use of any material, product, service or design is intended, or should be construed, to grant any license under any patent or other intellectual property right of Supplier covering such use or design, or as a recommendation for the use of such material, product, service or design in the infringement of any patent or other intellectual property right.

\*Silopren™는 Momentive Performance Materials Inc.의 상표입니다.

The use of the "™" symbol designates registered or unregistered trademarks of Momentive Performance Materials Inc. or its affiliated companies. Momentive and the Momentive logo are trademarks of Momentive Performance Materials Inc.