

## Silopren™ LSR 2050 JP

### Description

Silopren LSR 2050 JP is a two-component liquid silicone rubber for injection molding processes. Typically vulcanizing, without any dissociation products, within a few seconds, the high speed curing and easy demolding of this crosslinking silicone rubber can help enable fully automated production of a large number of articles in short cycle times. Due, in part, to its excellent processing properties, it can be considered for use in a wide range of applications.

### Key Features and Typical Benefits

Key features and typical benefits of Silopren LSR 2050 JP include the following:

- High thermal stability
- Excellent stability and flexibility at low temperatures
- Good rubber-like properties
- Long service life at dynamic stress
- High stability to ozone and ultraviolet light
- Outstanding resistance to aging
- Excellent dielectric behavior over a wide range of temperatures
- Low combustibility, does not melt or drip
- Easy pigmentability with LSR Color Pastes

### Typical Physical Properties

Typical properties of the uncured rubber: The pot-life of the mixture of the two components (closed vessel) at 20°C is usually three days. Increased temperatures reduce the pot-life.		
	A-part	B-part

Appearance		Translucent	Translucent
Viscosity in Pa·s $\gamma = 10 \text{ s}^{-1}$ at 20°C	DIN 53019-1	650	650

Typical properties of the vulcanized rubber:

Test results on moulded slabs, (mix ratio A:B = 1:1)

Vulcanization conditions: 10 min. 175 °C post cured: 4h @ 200 °C in hot air

Density	DIN 53 479 A	g/cm <sup>3</sup>	1.12
Hardness	DIN 53 505	Shore A	50
Tensile strength	DIN 53 504 S2	N/mm <sup>2</sup>	10
Elongation at break	DIN 53 504 S2	%	600
Tear strength	ASTM D 624 die B	N/mm <sup>2</sup>	40
Compression set	DIN 53 517 (22h at 175 °C)	%	25

Typical properties are average data and are not to be used as or to develop specifications.

## Potential Applications

Silopren LSR 2050 JP is an excellent candidate to consider for use in the following elastomeric articles:

- Sealing elements
- O-rings
- Diaphragms
- Key pads
- Pacifiers
- Baby bottle teats
- Diving masks
- Nose pads
- Vibration dampers
- Air vents flaps
- Switch covers
- Pressure cooker parts
- Cable connectors
- ... and many more

## General Considerations for Use

For best results, ready-to-use mixtures (of the components A and B) are fed directly to the injection molding machine from the original containers by means of a metering and mixing unit. The mixture, consisting of the two components in the ratio 1:1, is injected into the mold heated to a temperature of 170 - 230°C.

## Regulatory Compliance

- The ingredients of Silopren LSR 2050 JP 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>

<sup>(1)</sup> It is the responsibility of the producer of the final article to test and confirm that the final product meets the extraction limits of BfR XV or corresponding EU legislation.

<sup>(2)</sup> 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 conditions.

## Packaging

Silopren LSR 2050 JP is currently available in 2 x 20 kg pail kits and 2 x 200 kg drum kits.

## 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](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>
<b>Brazil</b>		<b>Europe</b>	<b>China</b>
+1 800 295 2392	+55 11 4534 9650	+390510924300	800 820 0202
Toll free*	Direct Number	Direct number	Toll free
+704 805 6946			+86 21 3860 4892
Direct Number			Direct number
<b>Mexico</b>		<b>India, Middle East &amp; Africa</b>	<b>Japan</b>
+52 55 2169 7670		+ 91 44 71212207	+81 3 5544 3111
Direct Number		Direct number*	Direct number
		<b>*All Middle Eastern countries, Africa, India,</b>	<b>Korea</b>
			+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™ is a trademark of Momentive Performance Materials Inc.

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.