

Silopren™ LSR 4030

Description

Silopren LSR 4030 is a two-component liquid silicone rubber for injection moulding processes. Silopren LSR 4030 can be used to produce medical technical articles with high transparency and excellent rubber like properties.

Key Features and Benefits

Vulcanizates consisting of Silopren LSR 4030 are distinguished by the following properties:

- high stability to ozone and ultraviolet light
- neutral odour and taste
- sterilisable with ethylen oxide, steam and gamma radiation
- good transparency
- high thermal stability
- high recovery after puncture
- easy pigmentable with the LSR Colour Pastes

Typical Physical Properties

Typical properties of the rubber:			
		A-part	B-part
Appearance		translucent	translucent
Viscosity in Pa.s gamma = 10 s-1 at 20°C	DIN 53018	350	350

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 vulcanizate:			
Mixing ratio of components A : B = 1 : 1; Vulcanization : 10 min. 175°C + 4 hrs. 200°C post cure			
Density	DIN 53 479 A	g/cm³	1.10
Hardness	DIN 53 505	Shore A	31
Tensile strength	DIN 53 504 S2	N/mm²	8,0
Elongation at break	DIN 53 504 S2	%	800
Tear strength	ASTM D 624 die B	N/mm	18
Compression set, (22 hrs at 175°C)	DIN 53 517	%	15

Potential Applications

Because of the outstanding properties Silopren LSR 4030 is particularly suitable for the following elastomeric articles:

Because of the outstanding properties Silopren LSR 4030 is particularly suitable for the following elastomeric articles:

- sealing elements,
- O-rings, diaphragms,
- bellows, catheters,
- baby teats,
- respiratory devices,
- vibration dampers,
- mats,
- parts for medical technical equipments.

Processing Recommendations

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 heated mold. At mold temperatures of 170 - 230°C, the addition-crosslinking silicone rubber typically vulcanizes, without any dissociation products, within a few seconds. High curing speed and easy demolding can help enable fully automated production of a large number of articles in short cycle times.

Regulatory Compliance

- A representative sample of an analogous product to Silopren LSR 4030 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"(1)
- Compositionally compliant with 21 CFR 177.2600 – Rubber articles intended for repeated use(2)
- 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

本書のいかなる内容も、関連特許が存在しないことを暗示したものではありません。またいかなる特許についても、その権利者による許可なしに、その特許が対象とする発明を実施するための許可、誘因または推奨を構成することはできません。

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

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

Telephone

Americas	Latin America	EMEA- Europe, Middle East, Africa & India	ASIA PACIFIC
+1 800 295 2392	Brazil	Europe	China
Toll free*	+55 11 4534 9650	+390510924300	800 820 0202
+704 805 6946	Direct Number	Direct number	Toll free
Direct Number			+86 21 3860 4892
			Direct number
*All American countries	Mexico	India, Middle East & Africa	Japan
	+52 55 2169 7670	+ 91 44 71212207	+81 3 5544 3111
	Direct Number	Direct number*	Direct number
		*All Middle Eastern countries, Africa, India,	Korea
			+82 2 6201 4600

For literature and technical assistance, visit our website at: 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™は Momentive Performance Materials Inc. の商標です。

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.