

Silopren* LSR 3485 50

Silopren* LSR 3485/50

Liquid Silicone Rubber

Description

Silopren LSR 3485/50 is a two-component liquid silicone rubber for injection molding processes. This material is an excellent candidate to consider for the manufacture of elastomeric articles requiring self-lubricating properties. The self-lubricating effect is achieved by a fluid which exudes out of the vulcanizate over an extended period of time. It typically starts between a few hours and one day after vulcanization.

Key Features and Benefits

Vulcanizates consisting of **Silopren LSR 3485/50** liquid silicone rubber are typically distinguished by the following properties:

- self-lubricating properties
- low viscosity
- fast cure
- high thermal stability
- outstanding resistance to aging
- easy to color

Typical Physical Properties

Typical properties of the uncured material:				
			A-Part	B-Part
Appearance			whitish	whitish
Fluid Content		%	4	4
Viscosity $\gamma=10s^{-1}$ at 20°C	DIN 53 018	Pa·s	580	600
The pot-life of the mixture of the two components (closed vessel) at 20 degrees				

Celsius is three days. Increased temperatures reduce the pot-life.

Typical properties of Silopren LSR 3485/50 liquid silicone rubber:

Mixing ratio of components A:B=1:1. Vulcanisation: 10 min. at 175°C + 4h at 200°C post cure

Density		DIN 53 479 A	g/cm ³	1.13
Hardness		DIN 53 505	Shore A	53
Tensile strength		DIN 53 504 S2	N/mm ²	10.2
Elongation at break		DIN 53 504 S2	%	500
Tear strength		ASTM D 624 die B	N/mm	38
Compression set (22h/175°C)		DIN ISO 815	%	25

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

Potential Applications

Because of the outstanding properties, **Silopren LSR 3485/50** liquid silicone rubber is an excellent candidate to consider for use in wire harness applications for the following elastomeric articles:

- cable seals
- grommets
- gaskets
- plug seals

Processing Considerations:

Ready-to-use mixtures (of the components A and B) are typically fed directly to the injection-molding machine from the original drums 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 degrees Celsius, the addition-curable silicone rubber usually cures within a few seconds. The curing process does not generate splitting products. High curing speed and easy demolding can help enable fully automated production of large numbers of articles in short cycle times. **Silopren LSR 3485/50** liquid silicone rubber contains 4 percent of a special silicone fluid, which migrates to the surface of the molded part over time and provides a self-lubricating

effect. This process, however, is affected by several factors, which are specific for each part and depend upon:

- ratio of volume to surface area
- type and concentration of pigment added
- storage time and temperature during storage

Silopren LSR 3485/50 liquid silicone rubber should only be used for the production of technical articles. For further information please contact Momentive Performance Materials Inc.

Packaging:

Silopren LSR 3485/50 liquid silicone rubber is available in 2x20kg pail kits and 2x200kg 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 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

For product prices, availability, or order placement, contact our customer service at [Momentive.com/CustomerService/](https://www.momentive.com/CustomerService/)

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 is a trademark of Momentive Performance Materials Inc.

Momentive and the Momentive logo are trademarks of Momentive Performance Materials Inc.