

Silopren* LSR 2670

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Description

Silopren LSR 2670 is a two-component liquid silicone rubber for injection molding processes. In comparison to Silopren LSR 2070, Silopren LSR 2670 shows a lower viscosity, improved tear resistance and a higher reactivity. Therefore, it is also possible to reduce the vulcanization temperature while maintaining a standard crosslinking rate. The increased reactivity does not affect the properties of the vulcanizate.

Key Features and Benefits

Vulcanizates of Silopren LSR 2670 are typically distinguished by the following properties:

- High reactivity, lower viscosity, shorter cycle time
- Excellent thermal stability
- Biocompatible
- Sterilizable with ethylene oxide, steam and gamma radiation
- High stability and flexibility at low temperatures
- Good rubber-like properties, high tear resistance
- 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
- Not readily combustible, does not melt or drip
- Easily pigmentable with LSR color pastes
- KTW approved

Typical Physical Properties

Typical Properties of the Rubber:			
		Comp. A	Comp. B
Appearance		Translucent	Translucent
Viscosity in Pa•s & 947;= 10 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 usually three days. Increased temperatures reduce the pot-life.			

<u>Typical Properties of the Vulcanizate:</u> 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/cm ³	1.13
Hardness	DIN 53 505	Shore A	69
Tensile Strength	DIN 53 504 S2	N/mm ²	9.5
Elongation at Break	DIN 53 504 S2	%	350
Tear Strength	ASTM D 624 die B	N/mm	30
Compression Set 22 h at 175°C	ISO 815	%	20

Typical data are average data and actual values may vary.

Typical data shall not be used as product specifications.

Potential Applications

Because of its outstanding properties, Silopren LSR 2670 is an excellent candidate to consider for the following elastomeric articles:

- Sealing elements
- O-rings
- Stoppers
- Keypads
- Vibration dampers
- Pressure cookers parts
- Spark plug boots, catheters, parts of medical technical equipment s.o.

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 140 - 200°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 the fully automated production of a large number of articles in short cycle times.

Regulatory Compliance

- Compositionally compliant with the requirements of 21 CFR 177.2600 – Rubber articles intended for repeated use and have been found, through testing of a representative sample, to meet the extractives limitations in 21 CFR 177.2600(e) and/or (f)⁽¹⁾
- A representative sample of LSR 2670 has passed USP Class VI (United State Pharmacopoeia 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)⁽²⁾
- The ingredients are listed in the BfR recommendation XV “Silicones”⁽³⁾

- KTW approved
- In compliance with the requirements of the DVGW Working sheet W 270
- WRAS approved product (BS 6920)

(1) 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.

(2) Please contact Product Stewardship and Regulatory Group for details

(3) 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

Containers

Silopren LSR 2670 is available in 20 kg pails and 200 kg drums.

Patent Status

Nothing contained herein shall be construed to imply the nonexistence of any relevant patents or to constitute a 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/contact/customer-service

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

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