

Silopren™ LSR 3376 50

Silopren* LSR 3376/50

Liquid Silicone Rubber

Description

Silopren LSR 3376/50 liquid silicone rubber is a two-component liquid silicone rubber for injection molding processes. This material is an excellent candidate to consider for the manufacturing of elastomeric articles that require self-lubricating properties combined with a low compression set. This material is manufactured to have a low content of low molecular weight cyclic siloxanes (i.e. <350 ppm).

Key Features and Benefits

Vulcanizates consisting of **Silopren LSR 3376/50** are typically distinguished by the following properties:

- self-lubricating properties
- low content of low molecular weight cyclic (i.e. D4-D8 of <350 ppm through process controls)
- low compression set without post-cure
- fast cure
- high thermal stability
- high stability and flexibility at low temperatures
- outstanding resistance to aging
- easy to color

Typical Physical Properties

Typical properties of the uncured material:			
		A-part	B-part

Appearance		whitish	whitish
Viscosity in Pa•s gamma = 10s ⁻¹ at 20°C		500	500
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. - <u>Typical properties of Silopren LSR 3376/50 liquid silicone rubber:</u> Mixing ratio of components A:B = 1:1. Vulcanization: 10 min. 170°C			
Density	JIS K 6249	g/cm ³	1.13
Hardness	JIS K 6249	Type A	50
Modulus 100%	JIS K 6249		1.8
Modulus 200%	JIS K 6249		3.3
Tensile strength	JIS K 6249	MPa	9.5
Elongation at break	JIS K 6249	%	600
Tear strength	ASTM D 624 die B	N/mm	43
Tear strength	JIS K 6252 Crescent	N/mm	35
Compression Set (22h/180°C)	JIS K 6249	%	16

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

Potential Applications

Because of its outstanding properties, **Silopren LSR 3376/50** liquid silicone rubber is excellent candidate to consider for use in the following elastomeric articles:

- cable seals
- mat 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 3376/50 liquid silicone rubber contains 3 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 3376/50 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 3376/50 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.

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

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