

**Technical Data Sheet** 

# Silopren™ LSR 4040

# Description

Silopren LSR 4040 is a two-component liquid silicone rubber for injection moulding processes. Silopren LSR 4040 can be used to produce medical technical articles with high transparency and excellent rubber elastic properties.

# **Key Features and Benefits**

Vulcanisates consisting of Silopren LSR 4040 are distinguished by the following properties:

- Excellent biocompatibility
- High stability to ozone and ultraviolet light
- Neutral odor and taste
- Sterilisable with ethylene 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:				
Appearance		A-part	B-part	
		translucent	translucent	

Viscosity in Pa.s			
gamma = 10 s-1	DIN 53018	600	600
at 20 ° C			

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 vu Mixing ratio of components	A: B = 1: 1.				
Vulcanisation: 10 min. 175 °C + 4 hrs. 200 °C post cure					
Density	DIN 53 479 A	g/cm <sup>3</sup>	1.12		
Shore A hardness	DIN 53 505		40		
Tensile strength	DIN 53 504 S2	N/mm²	9.0		
Elongation at break	DIN 53 504 S2	%	750		
Tear strength	ASTM D 624 die B	N/mm	25		
Compression set	DIN 53 517	%	25		
	(22 h at 175 ° C)	/0	20		

#### **Potential Applications**

Because of the outstanding properties Silopren LSR 4040 is particularly suitable for the following elastomeric articles: sealing elements, diaphragms, ear plugs, bellows, baby teats, respiratory devices, air vent flaps, tube connectors, catheters, parts for medical technical equipment, mats s.o.

#### **Regulatory Compliance**

• A representative sample of an analogous product to Silopren LSR 4040 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**

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.

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#### 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	EMEAI- 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	Mexico	India, Middle East &	Japan
countries	+52 55 2169 7670	Africa	+81 3 5544 3111
	Direct Number	+ 91 44 71212207	Direct number
		Direct number*	
		*All Middle Eastern	Korea
		countries, Africa, India,	+82 2 6201 4600

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