

Silopren™ LSR 4050

Silopren* LSR 4050

Description

Silopren LSR 4050 is a two-component liquid silicone rubber for injection processes. Silopren LSR 4050 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 4050 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: | | | |
| | | A-part | B-part |
| Appearance | | translucent | translucent |

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

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 vulcanisate:

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 ³ | 1.12 |
| Shore A hardness | DIN 53 505 | | 51 |
| Tensile strength | DIN 53 504 S2 | N/mm ² | 10 |
| Elongation at break | DIN 53 504 S2 | % | 600 |
| Tear strength | ASTM D 624 die B | N/mm | 35 |
| Compression set | DIN 53 517 (22 h at 175 ° C) | % | 25 |

Potential Applications

Because of the outstanding properties Silopren LSR 4050 is particularly suitable for the following elastomeric articles: sealing elements, diaphragms, ear plugs, bellows, respiratory devices, vibration dampers, pipette nipples, tube connectors, catheters, parts for medical technical equipment, mats s.o.

Regulatory Compliance

- A representative sample of an analogous product to Silopren LSR 450 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.

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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