

## Silopren\* LSR 2725/40

Liquid Silicone Rubber

### Description

Silopren LSR 2725/40 is a two-component liquid silicone rubber for injection molding, which offers robust primer-less adhesion to a wide range of substrates including PBT but without adhesion to the mold. The initial bond strength allows for demolding, however full bond strength is reached after some storage at room temperature. Additionally, Silopren LSR 2725/40 is self-lubricating. 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. This combination of features makes Silopren LSR 2725/40 liquid silicone rubber ideal for cost-efficient injection molding of hard-soft-combinations with integrated and lubricated sealing.

### Key Features and Typical Benefits

- Primer-less adhesion to many thermoplastic
- No adhesion to the mold /no special mold treatment needed
- Self-lubricating for easy assembly
- High temperature stability
- Excellent stability and flexibility at low temperatures
- Favorable aging behavior and weathering resistance
- Good dielectric and mechanical properties
- Easy to be pigmented with LSR color-pastes

### Potential Applications

Because of its outstanding adhesion properties, Silopren LSR 2725/40 liquid silicone rubber is an excellent candidate for manufacturing parts where engineering plastics

need to be combined with integrated sealing or dampening properties in an over-molding or insert molding process.

- Connector-Assemblies
- Housings and Boxes
- Other soft-hard combinations

### Typical Physical Properties

| <u>Typical physical properties of the uncured rubber:</u>     |           | <b>A-Part</b> | <b>B-Part</b> |
|---|-----------|---------------|---------------|
| Appearance  |           | Whitish       | Translucent   |
| Viscosity in Pa•s at 20°C and shear rate = 10 s <sup>-1</sup> | DIN 53018 | 500           | 300           |

| <u>Typical physical properties of the vulcanized rubber:</u>  |                  |                   |      |
|---|------------------|-------------------|------|
| Mix ratio A:B = 1:1; Vulcanization conditions: 10 min. 175 °C |                  |                   |      |
| Density   | DIN 53 479 A     | g/cm <sup>3</sup> | 1.10 |
| Hardness  | DIN 53 505       | Shore A           | 40   |
| Tensile strength  | DIN 53 504 S2    | N/mm <sup>2</sup> | 8    |
| Elongation at break   | DIN 53 504 S2    | %                 | 600  |
| Tear strength   | ASTM D 624 die B | N/mm              | 35   |
| Compression Set, 22h at 120 °C                                | DIN ISO 815      | %                 | 10   |
| Compression Set, 22h at 150 °C                                | DIN ISO 815      | %                 | 20   |

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

### General Considerations for Use

Ready-to-use mixtures (of the components A and B) are typically fed directly to the injection-molding machine from the original kits 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. The fast curing process does not generate by-products. Silopren LSR 2725/40 liquid silicone rubber contains 2% 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 influenced by several factors, which are specific for each part and depend upon:

- ratio of the volume to the surface area
- type and concentration of pigment added

- storage time and temperature

### **Compliance**

Silopren LSR 2725/40 liquid silicone rubber is not compositionally compliant with 21 CFR §177.2600. and should only be used for the production of technical articles. For further information please contact Momentive Performance Materials.

### **Packaging**

Silopren LSR 2725/40 is currently available in 2 x 20 kg Pail-Kits and 2 x 200 kg 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](http://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](https://www.momentive.com)

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