

## Silopren\* LSR 2740 TP3783

### Silopren\* LSR 2740 TP3783

Liquid Silicone Rubber

#### Description

**Silopren LSR 2740 TP 3783** is a two-component liquid silicone rubber for injection molding, which offers primer-less adhesion to a wide range of substrates including metals and engineering plastics, but without adhesion to the mold. Full bond strength is generally reached after a short post cure (e.g. one hour at 100 degrees Celsius) or by longer storage at room temperature. This makes **Silopren LSR 2740** liquid silicone rubber a good option to consider for cost-efficient manufacturing of high part-quantities in integrated processes, such as multi-component injection molding or insert-molding.

#### Key Features and Benefits

- Primer-less adhesion to many substrates
- No special mold treatment needed (final adhesion builds up with time)
- High temperature stability
- Excellent stability and flexibility at low temperatures
- Favorable aging behavior and weathering resistance
- Good dielectric and mechanical properties
- Easy to pigment with LSR color-pastes

#### Typical Physical Properties

<u>Typical Properties of the Uncured Material</u>				
			<b>A-part</b>	<b>B-part</b>

Appearance			translucent	translucent
Viscosity $\gamma=10s^{-1}$ at 20°C	DIN 53 018	Pa.s	610	670
The pot-life of the mixture of the components (closed vessel) at 20 degrees Celsius is three days. Increased temperatures reduce the pot-life.				
<u>The mechanical properties of Silopren LSR 2740 liquid silicone rubber</u> Mixing Ratio of Components A:B=1:1. Vulcanization: 10min at 175°C.				
Density	DIN 53 479 A	g/cm <sup>3</sup>	1.12	
Hardness	DIN 53 505	Shore A	38	
Tensile strength	DIN 53 504 S2	N/mm <sup>2</sup>	9.3	
Elongation at break	DIN 53 504 S2	%	700	
Tear strength	ASTM D 624 die B	N/mm	20	
Compression set (22 h at 120°C)	DIN ISO 815	%	15	
Compression Set (22h at 150°C)	DIN ISO 815	%	25	

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

### Potential Applications

**Silopren LSR 2740** liquid silicone rubber is an excellent candidate to consider for the manufacturing of parts where engineering plastics and elastomeric materials need to be combined in an over-molding process, such as sealing elements, membranes, vibration-dampening elements, spatula or other hard-soft combinations.

### Processing Considerations

**Silopren LSR 2740** liquid silicone rubber is a kit-matched product. As such, work time (pot-life), cure time, and final cured properties can only be assured if the batch numbers of the A component and B component are identical and the material is mixed at a ratio of 1:1 (by weight). Pumping and meter-mixing systems for **Silopren LSR 2740** liquid silicone rubber and appropriate injection molding machines are available from a number of manufacturers, most of whom will provide a complete integrated systems. When starting up a new mold, the first molding cycles (approximately 1000) should be carried out with a standard Silopren LSR grade, such as Silopren LSR 20xx. It's also possible to use a fluoro-containing release agent. For further information please contact Momentive Performance Materials.

## **Packaging**

**Silopren LSR 2740** liquid silicone rubber is available in 2x20 kg pail kits and 2x200 kg drum kits.

## **Regulatory Compliance:**

- Compositionally compliant with 21 CFR 177.2600 – Rubber articles intended for repeated use(1)

(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.

## **Storage**

Store in the original, unopened containers at room temperature (maximum 27 degrees Celsius).

## **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)

### DISCLAIMER:

**THE MATERIALS, PRODUCTS AND SERVICES OF MOMENTIVE PERFORMANCE MATERIALS INC. AND ITS SUBSIDIARIES AND AFFILIATES (COLLECTIVELY “SUPPLIER”), ARE SOLD SUBJECT TO SUPPLIER’S STANDARD CONDITIONS OF SALE, WHICH ARE INCLUDED IN THE APPLICABLE DISTRIBUTOR OR OTHER SALES AGREEMENT, PRINTED ON THE BACK OF ORDER ACKNOWLEDGMENTS AND INVOICES, AND AVAILABLE UPON REQUEST. ALTHOUGH ANY INFORMATION, RECOMMENDATIONS, OR ADVICE CONTAINED HEREIN IS GIVEN IN GOOD FAITH, SUPPLIER MAKES NO WARRANTY OR GUARANTEE, EXPRESS OR IMPLIED, (i) THAT THE RESULTS DESCRIBED HEREIN WILL BE OBTAINED UNDER END-USE CONDITIONS, OR (ii) AS TO THE EFFECTIVENESS OR SAFETY OF ANY DESIGN INCORPORATING ITS PRODUCTS, MATERIALS, SERVICES, RECOMMENDATIONS OR ADVICE. EXCEPT AS PROVIDED IN SUPPLIER’S STANDARD CONDITIONS OF SALE, SUPPLIER AND ITS REPRESENTATIVES SHALL IN NO EVENT BE RESPONSIBLE FOR ANY LOSS RESULTING FROM ANY USE OF ITS MATERIALS, PRODUCTS OR SERVICES DESCRIBED HEREIN.** Each user bears full responsibility for making its own determination as to the suitability of Supplier’s materials, services, recommendations, or advice for its own particular use. Each user must identify and perform all tests and analyses necessary to assure that its finished parts incorporating Supplier’s products, materials, or services will be safe and suitable for use under end-use conditions. Nothing in this or any other document, nor any oral recommendation or advice, shall be deemed to alter, vary, supersede, or waive any

provision of Supplier's standard Conditions of Sale or this Disclaimer, unless any such modification is specifically agreed to in a writing signed by Supplier. No statement contained herein concerning a possible or suggested use of any material, product, service or design is intended, or should be construed, to grant any license under any patent or other intellectual property right of Supplier covering such use or design, or as a recommendation for the use of such material, product, service or design in the infringement of any patent or other intellectual property right.

\*Silopren is a trademark of Momentive Performance Materials Inc.

**Momentive and the Momentive logo are trademarks of Momentive Performance Materials Inc.**