

# Silbione® LSR 4745, LSR 4755, LSR 4765

October 2017

## Self-Lubricating Liquid Silicone Rubber

**Description** Silbione® LSR 4745, LSR 4755, and LSR 4765 are a self-lubricating healthcare grade liquid silicone rubber designed for producing **high strength** molded parts.

**Applications**

- Molded medical applications for skin contact or <30-day implantation
- General molded parts where high slip is required
- Can help prevent slit-healing
- Needleless valves, check valves, duckbill valves, one-way valves

**Advantages**

- Internal lubricating oil for non-stick surfaces
- High tear strength
- Delayed bleed to prevent mold fouling
- Excellent mold release for shorter cycle times
- Rapid cure at elevated temperatures

### Typical Properties

<u>Typical Properties – As Supplied</u>	<u>Test Method</u>	<u>LSR 4745</u>	<u>LSR 4755</u>	<u>LSR 4765</u>
	<b>CTM</b>			
• Specific Gravity	TP 013	1.10	1.12	1.12
• Appearance	TP 038		Slight haze	
• Extrusion Rate, gpm	TP 001	120	120	120
	<b>ASTM</b>	<sup>1</sup> Press Cured 5 minutes 177°C		
• Durometer, ShA	D 2240	45	55	63
• Tensile, psi (MPa)	D 412	1240 (8.6)	1140 (7.9)	1130 (7.8)
• Elongation, %	D 412	635	450	465
• Tear Strength, ppi (kN/m)	D 624, Die B	255 (44)	250 (44)	230 (40)

(1) ASTM Slab 6" x 6" x 0.07"

Please note: The typical properties listed in this bulletin are not intended for use in preparing specifications for any particular application of Silbione® silicone materials.

### Bio-compatibility

Formulated to meet ISO 10993 Biological Evaluation of Medical Devices – Part 1: Evaluation and testing requirements for healthcare applications. It is the sole responsibility of the purchaser to determine suitability for an application and comply with all applicable statutory, regulatory and industry.

### Regulatory

Elkem Silicones supports the sales of these products to customers involved in manufacturing and assembling approved medical devices for less than 30-day implantation. The purchaser has the sole responsibility to select a particular Elkem Silicones product and determine its application suitability. The purchaser also has the sole responsibility to comply with all applicable statutory, regulatory and industry requirements and standards for compatibility, extractability, testing, safety, efficacy and labeling.

## **Silbione® LSR 4745, LSR 4755, LSR 4765**

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### **Instructions for use**

Parts A and B components of **Silbione® LSR 4745, LSR 4755, or LSR 4765** are designed to be mixed in equal parts using standard liquid injection molding processing equipment and techniques. Airless mixing, metering and dispensing equipment are recommended for production operations. Accurate measuring and complete mixing are essential factors in obtaining consistent results.

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### **Curing**

Curing is typically achieved in 15 seconds at 175°C. Curing time can be decreased by increasing temperature. **Post cure is not recommended with these materials.**

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### **Cleaning**

Special care must be taken to assure clean molds and a clean work area with no organic rubbers used on the same processing equipment. Traces of foreign materials can poison the catalyst and inhibit the cure. All metering and mixing equipment should be thoroughly cleaned. Polymer systems, which contain traces of amines, sulfur, nitrogen oxide, organotin compounds and carbon monoxide can interfere with the cure of this product and should be avoided.

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### **Storage and shelf life**

For shelf life on **Silbione® LSR 4745 A/B, LSR 4755 A/B, & LSR 4765 A/B**, please refer to the expiry date (to be used before « month-year ») marked clearly on the packaging.

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### **Safety**

Please read the container labels for **Silbione® LSR 4745, LSR 4755, or LSR 4765** or consult the Safety Data Sheet (SDS) before handling for safe use, physical and health hazard information.

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### **Packaging**

**Silbione® LSR 4745, LSR 4755, & LSR 4765** are available in multiple packages please, check with our team.

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