SILBIONE® LSR 50 A/B

Liquid Silicone Rubber

Description

SILBIONE® LSR 50 A/B is a two part, 50 durometer, liquid silicone rubber designed for healthcare applications, producing translucent, high strength molded parts. It is especially effective when bonding silicone rubber to silicone rubber.

Applications

- Molded medical parts for <29 day implantation
- Encapsulated electronic parts
- Bonding silicone to silicone
- Self-adhesive LSR

Features

- Translucent
- High tear strength
- Bonds to silicone substrates without a primer
- Effective as an over-molding product
- No post cure is needed

Typical Properties

<table>
<thead>
<tr>
<th>As Supplied</th>
<th>Test Method, Unit</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Appearance</strong></td>
<td>TP 038,</td>
<td>Clear, translucent paste</td>
</tr>
<tr>
<td><strong>Extrusion Rate</strong></td>
<td>TP 001, g/min.</td>
<td>100</td>
</tr>
<tr>
<td><strong>Specific Gravity</strong></td>
<td>TP 013, g/cm</td>
<td>1.13</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Cured</th>
<th>Test Method, Unit</th>
<th>Press Cured (^{(1)}) 5 min., 177°C</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Hardness</strong></td>
<td>D 2240, Shore A</td>
<td>50</td>
</tr>
<tr>
<td><strong>Tensile Strength</strong></td>
<td>D 412, psi (N/mm²)</td>
<td>1,200 (8.4)</td>
</tr>
<tr>
<td><strong>Elongation</strong></td>
<td>D 412, %</td>
<td>440</td>
</tr>
<tr>
<td><strong>Tear Strength</strong></td>
<td>D 624, Die B, Ppi (N/mm)</td>
<td>190 (33)</td>
</tr>
</tbody>
</table>

- \(^{(1)}\) 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. Please contact our Technical Service Department for assistance in writing specifications.

Bio-compatibility

- Supported by testing meeting European Pharmacopoeia Section 3.1.9 hexane extraction testing and ASTM D4754 testing for extractibles in hexane, saline, ethanol and methyl chloride.
- USP Class VI - supported by Master File on file with FDA CDRH

It is the sole responsibility of the purchaser to determine suitability for an application and comply with all applicable statutory, regulatory and industry requirements

Instructions for use

Parts A and B components of SILBIONE® LSR 50 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.
Curing

Curing is typically achieved in 20 seconds at 160°C. Curing time can be decreased by increasing temperature.

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.

Limitations

Specific SILBIONE® silicone products are used for certain food contact, healthcare, medical and pharmaceutical applications. Bluestar Silicones supports the sales of these SILBIONE® products to customers involved in manufacturing and assembling approved medical devices for less than 29 day implantation. The purchaser has the sole responsibility to select a particular Bluestar Silicones SILBIONE® 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.

Storage and shelf life

SILBIONE® LSR 50 A/B when stored in its original unopened packaging, at a temperature of 24°C (77°F), may be stored for 6 months from the date of manufacture. Beyond this date, Bluestar Silicones no longer guarantees that the product meets the sales specifications.

Safety

Please read the container labels for SILBIONE® LSR 50 A/B or consult the Material Safety Data Sheet (MSDS) before handling for safe use, physical and health hazard information. The MSDS is not included with the product packaging, but can be obtained by contacting Bluestar Silicones at 866-474-6342 or consult your Bluestar Silicones representative.

Packaging

SILBIONE® LSR 50 A/B is available in 36 kg kits.

---

**SILBIONE® is a registered Trademark of BLUESTAR SILICONES**

---

**Warning to users**

The information contained in this document is given in good faith based on our current knowledge. It is only an indication and is in no way binding, particularly as regards to infringement of or prejudice to third party rights through the use of our products. BLUESTAR SILICONES warrants that its products comply with its sales specifications. This information must not be used as a substitute for necessary prior tests, which ensure that a product is suitable for a given use. Determination of the suitability of product for the uses and applications contemplated by user and others shall be the sole responsibility of user. Users are responsible for ensuring compliance with local legislation and for obtaining necessary certifications and authorizations. Users are requested to ensure that they are in possession of the latest version of this document; please contact BLUESTAR SILICONES for the latest version and any additional information.