SILBIONE LSR 4310

Healthcare Liquid Silicone Rubber
Two-part polyaddition cure

For body contact in human applications for < 30 days.

Key Features

- Formulated for high throughput injection molding and high-volume applications
- Excellent mold release properties
- Good dimensional stability
- Translucent
- 1:1 mix ratio

Applications

- Intended for use in healthcare applications with short term (< 30 days) patient contact
- Viable for applications such as orthotic and prosthetic devices, tubing connectors and valves, among others.

Typical properties

As supplied

Property	Unit	Value
Appearance	-	Liquid, paste-like
Color	-	Translucent
Viscosity (at 10/s)	cPs	98,000
Extrusion rate	$g.min^{-1}$	275

Please Note: The typical properties are not intended for use in preparing specifications.

Press-Cure at 177°C (350°F) for 15 mins, cold mold.

Property	Unit	Value
Specific Gravity	-	1.09
Hardness	ShA	10
Tensile Strength	MPa (psi)	850
Elongation	%	1020
Tear Strength	N.mm (ppi)	115
Modulus at 100%	MPa (psi)	32

Please Note: The typical properties are not intended for use in preparing specifications.

Post-cured at 200°C for 4 hours

Property	Unit	Value
Hardness	ShA	10
Tensile Strength	MPa (psi)	750
Elongation	%	1060
Tear Strength	N.mm (ppi)	125
Modulus at 100%	MPa (psi)	28

Please Note: The typical properties are not intended for use in preparing specifications.

Instructions for Use

SILBIONE LSR's are provided as 1:1 kit-matched products and are designed to be mixed and processed with standard liquid injection molding equipment.

Mixing
Kit matching, accurate measuring and complete mixing are essential factors in obtaining consistent results. Combine part A and B in a mix ratio of 1:1 prior to use. Airless mixing, metering and dispensing equipment are recommended. If mixing by hand, take care to minimize air entrapment.

De-airing
Removing air entrapment prior to vulcanization is highly recommended to producing parts. Follow common vacuum deaeration procedures while observing all safety precautions. Slowly apply full vacuum to a suitable container that is 3-4 times the volume of the material being de-aired to allow headspace. Hold vacuum until bulk de-airing is complete upon visual inspection.

Contaminants & Inhibition Risks
Potential surface contaminants that cause inhibition or issues with the mixed material when applied. The following materials that come in contact can cause these issues: sulfur-cured organic rubbers, latex, chlorinated rubbers and other unreacted residues.

Packaging

SILBIONE LSR 4310 are available in the following packaging

- Drum of 200 KG (441 LBS)
- Pail of 18 KG (40 LBS)

Storage, Shelf Life

SILBIONE LSR 4310 can be stored for up to 12 months when stored in its original unopened packaging between the temperatures of -5°C (23°F) and 30°C (86°F) at 50% humidity upon the manufacturing date. Beyond these conditions and shelf-life date, Elkem Silicones no longer guarantees the product will meet sales specifications.

Regulations

SILBIONE LSR 4310 is intended for the healthcare market and was tested under ISO 10993 for applications less than 30 days body contact to determine biocompatibility.

Product Stewardship may have other documentation available per request (i.e. SVHC, SDS, RoHS, CMR, SiH Status, TSE/BSE, D4/D5/D6, dangerous goods, and more.) Please contact our sales office.

Elkem Silicones maintains certification to the latest version of ISO 9001 and RC 14001.

Safety and handling

Please consult the Safety Data Sheet for SILBIONE LSR 4310. The user is responsible to determine the material's suitability and safety of use in their application by referring to the Elkem Silicones healthcare and biomedical product guidelines.

Visit our website elkem.com