

Description **SILBIONE LIQUID SILICONE RUBBERS (LSRs)** are two-component platinum-catalyzed silicone elastomers designed for liquid injection molding healthcare and medical devices, including applications of less than 30 day implantation in the human body.

Examples of applications Please consult your local ELKEM SILICONES sales office.

Key benefits

- Flowable and self-levelling.
- Rapid cure at elevated temperatures.
- Can be post-cured, but post cure is not necessary to achieve desired physical properties.

Typical properties **TYPICAL PROPERTIES**

AS SUPPLIED

<i>Typical properties</i>	ASTM	LSR 4125	LSR 4140	LSR 4125 10:1	LSR 4130 10:1	LSR 4140 10:1
Appearance	TP 038	Clear	Clear	Clear	Clear	Clear
Mix Ratio	-	1:1	1:1	10:1	10:1	10:1
Viscosity Part A, cP	TP 001	75,000	85,000	85,000	90,000	100,000
Viscosity Part B, cP	TP 001	70,000	65,000	2,200	550	300
Specific Gravity	TP 013	1.08	1.09	1.08	1.08	1.09

PRESS CURE, 5 minutes, 177°C (350°F)

<i>Typical properties</i>		ASTM	LSR 4125	LSR 4140	LSR 4125 10:1	LSR 4130 10:1	LSR 4140 10:1
Hardness, Shore A		D2240	27	41	28	31	40
Tensile strength,	Psi	D412	800	975	770	650	975
Elongation, %		D412	550	385	480	480	350
Tear strength,	Ppi	D624 Die B	70	145	76	70	140
Work Life	hr	D412	>2	>2	>2	>2	>2

Please note: The typical properties are not intended for use in preparing specifications. Please contact our local Sales Department for assistance in writing specifications.

Instruction of use **SILBIONE LSRs** are supplied as kit-matched products. Parts A and B components are designed to be mixed with standard liquid injection molding or casting processing equipment and techniques. Airless mixing, metering and dispensing equipment are recommended.

Cure:

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Cure is initiated once the two part A and part B components are mixed and can be accelerated by heating the mixed elastomer. Cure is dependent upon molding temperature and part size. Special care must be taken to assure clean molds and a clean work area with no organic rubbers used on the same processing equipment.

Caution: 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.

Note: Kit matching, accurate measuring and complete mixing are essential factors in obtaining consistent results.

Regulation

Bio-compatibility Testing

Designed specifically for healthcare applications, SILBIONE® LSRs meet or exceed testing requirements of United States Pharmacopoeia (USP) Class VI. Biocompatibility testing addresses the categories of evaluation for cytotoxicity, skin sensitization and skin irritation specified in ISO 10993. These products are not suitable for use in devices requiring human implantation for greater than 30 days.

Limitations

Please consult your local ELKEM SILICONES sales office.

Packaging

- SILBIONE LSR 4125 A is available in
 - Drum of 200 KG (441 LB)
 - Pail of 18 KG (39.69 LB)
 - Pail of 4 KG (8.82 LB)
- SILBIONE LSR 4125 A 10:1 is available in
 - Drum of 200 KG (441 LB)
 - Pail of 18 KG (39.69 LB)
- SILBIONE LSR 4125 B is available in
 - Drum of 200 KG (441 LB)
 - Pail of 18 KG (39.69 LB)
 - Pail of 4 KG (8.82 LB)
- SILBIONE LSR 4125 B 10:1 is available in
 - Pail of 20 KG (44.1 LB)
 - Box of 1.8 KG (3.97 LB)
- SILBIONE LSR 4130 A 10:1 is available in
 - Drum of 200 KG (441 LB)
 - Pail of 18 KG (39.69 LB)
- SILBIONE LSR 4130 B 10:1 is available in
 - Pail of 20 KG (44.1 LB)
 - Box of 1.8 KG (3.97 LB)
- SILBIONE LSR 4140 A is available in
 - Drum of 200 KG (441 LB)
 - Pail of 4 KG (8.82 LB)
- SILBIONE LSR 4140 B is available in
 - Drum of 200 KG (441 LB)
 - Pail of 18 KG (39.69 LB)
 - Pail of 4 KG (8.82 LB)

Storage and shelf life

When stored in its original packaging:

SILBIONE LSR 4125 A may be stored for up to 12 months from its date of manufacturing.

SILBIONE LSR 4125 A 10:1 may be stored for up to 12 months from its date of manufacturing.

SILBIONE LSR 4125 B may be stored for up to 12 months from its date of manufacturing.

SILBIONE LSR 4125 B 10:1 may be stored for up to 12 months from its date of manufacturing.

SILBIONE LSR 4130 A 10:1 may be stored for up to 6 months from its date of manufacturing.

SILBIONE LSR 4130 B 10:1 may be stored for up to 12 months from its date of manufacturing.

SILBIONE LSR 4140 A may be stored for up to 12 months from its date of manufacturing.

SILBIONE LSR 4140 A 10:1 may be stored for up to 12 months from its date of manufacturing.

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SILBIONE LSR 4140 B may be stored at temperatures between -20°C / -4°F and 50°C / 122°F for up to 12 months from its date of manufacturing.

SILBIONE LSR 4140 B 10:1 may be stored for up to 12 months from its date of manufacturing.

Comply with the storage instructions and expiration date marked on the packaging. Beyond this date, Elkem Silicones no longer guarantees that the product meets the sales specifications.

Safety

Please consult the Safety Data Sheet of:

SILBIONE LSR 4125 A, SILBIONE LSR 4125 A 10:1, SILBIONE LSR 4125 B, SILBIONE LSR 4125 B 10:1, SILBIONE LSR 4130 A 10:1, SILBIONE LSR 4130 B 10:1, SILBIONE LSR 4140 A, SILBIONE LSR 4140 A 10:1, SILBIONE LSR 4140 B and SILBIONE LSR 4140 B 10:1

Visit our website www.silicones.elkem.com

Warning to the users

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