

## STOCKWELL ELASTOMERICS, INC.

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Injection Molded LSR Silicone Rubber in large gaskets and custom components

Stockwell Elastomerics has LIM (liquid injection molding) equipment with large 'shot size' capability - and fast changeover techniques to support custom molding requirements.



Molded Gaskets up to 12" x 12" and components up to 12.5 cubic inches can be injection molded using LSR

SR95 07/02

Flexible roller

12" x 12" gasket for telecommunications enclosure

FDA requirement, white silicone

Many LIM systems are designed to produce high quantities of very small components. We have recognized the need to mold relatively low guantities of somewhat larger gaskets, cushioning pads and custom silicone components to support the requirements of the medical diagnostic, analytical instrumentation, communications & navigation, safety and food processing industries.

## Why Use Silicone Rubber?

Silicone Rubber has the combined properties of resilience, high temperature stability and general inertness unavailable in any other elastomer. Silicones are generally unaffected by extended exposure to temperatures from -100°F to 500°F, and are also unaffected by aging and degradation from sunlight and ozone. Now, with ever improving LSR (liquid silicone rubber) technology, fast cures are possible – enabling reductions in unit costs that allow for silicone rubber components costing less than the same design\* in traditional organic neoprene or EPDM compounds. LSR compounds are addition-cure silicones – providing high elongation and generally being FDA approved. Some compounds have moderate flame retardant properties.

## How To Get Started?

We offer design assistance! Feel free to send a preliminary sketch for evaluation and feasibility review. Or send your electronic file (dxf or dwg formats preferred – or IGES or Pro-E). We will review the design to determine compatibility with our LIM system and submit a proposal including any design recommendations that may save tooling cost and reduce unit pricing. If requested, we can include a small sample of the proposed LSR compound with our bid.

	Stockwell LSR Compound SE2010	Durometer Shore A 10	Tensile Strength, psi 400	Elongation at Break, % 500	Tear Strength PPI of Width 30	Compression Set, % (22 hrs @ 158°F) <10	General Characteristics Very soft, for low
<u>Liquid Silicone</u> <u>Rubber (LSR)</u> <u>Compounds</u> <u>Available from</u> <u>Stockwell</u> <u>Elastomerics:</u>							pressure gaskets with minimal closure force.
	SE2020	20	725	900	55	<5	Soft, for seals with minimal closure force.
	SE2030	30	1085	800	85	<5	Mechanical Grade
	SE2040	40	1230	850	140	<5	Mechanical Grade, meets UL94HB
	SE2050	50	1230	700	170	<5	Mechanical Grade, meets UL94HB
	SE2060	60	1300	500	170	<5	Mechanical Grade, meets UL94HB
	SE2070	70	1230	400	170	<5	Mechanical Grade

\*Although silicone rubber costs more than traditional organic rubber compounds, the faster cure cycles reduce press time. Savings are more typical with small gaskets and seals requiring less material.

Call us to find out more or e-mail us at service@stockwell.com for assistance.