

# Polymer Systems Technology Limited

UK & Ireland Distributor



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An ISO 9001 Certified Company

# LSR-5850

Liquid Injection Molding Silicone Elastomer

## Product Profile

### Description

- Two-part, translucent, silicone system used with injection molding equipment
- 1:1 Mix Ratio (Part A:B)
- Good dielectric properties across a broad temperature range

### Applications

- For applications requiring a medium hardness silicone with exceptionally high tear strength
- For applications requiring an Operating Temperature Range of -85 to 465°F (-65 to 240°C)
- Some typical applications include O-rings, gaskets, seals or precision molded parts
- Excellent for molding high quality parts at rapid rates

Typical Properties	Result	Metric Conv.	ASTM	NT-TM
<b>Uncured:</b>				
Extrusion Rate*, Part A	45 gpm	-	C603	033
Extrusion Rate*, Part B	75 g/min	-	C603	033
Appearance	Translucent	-	D2090	002
Work Time	>72 hours	-	-	008
<b>Cured : 5 min @ 150°C (302°F)</b>				
Specific Gravity	1.15	-	D792	003
Durometer, Type A	50	-	D2240	006
Tensile Strength	1400 psi	9.7 Mpa	D412	007
Elongation	660%	-	D412	007
Tear Strength	235 ppi	40.6 kN/m	D624	009

\* Performed using a SEMCO® 440 nozzle with a 1/8" orifice and 90+/-5 psi air pressure

### Instructions for Use

#### Mixing

Use with mix and dispense equipment in a 1:1 mix ratio. If mixing by hand, take care to minimize air entrapment.

#### Vacuum Deaeration

Remove air entrapped during mixing by common vacuum deaeration procedure, observing all applicable safety precautions. Slowly apply vacuum, up to 28 inches Hg, to a container rated for use and of volume at least four times that of material being deaerated. Hold vacuum until presence of air is no longer evident.

#### Substrate Consideration

Cures in contact with most materials. Exceptions include butyl, latex, chlorinated rubbers, some RTV silicones and unreacted residues of some curing agents.

#### Adjustable Cure Schedule

Product cures at a wide range of cure times and temperatures to accommodate different production needs. Contact NuSil Technology LLC for details.

### Packaging

- 50 ml SxS Kit
- 200 ml SxS Kit
- 400 ml SxS Kit
- 2 Pint Kit (910 g)
- 2 Gallon Kit (7.28 kg)
- 10 Gallon Kit (36.4 kg)
- 2 Drum Kit (360.0 kg)

### Warranty

12 Months

## **Warnings About Product Safety**

NuSil Technology LLC believes that the information and data contained herein are accurate and reliable. However, the user is responsible to determine the material's suitability and safety of use. NuSil Technology LLC cannot know each application's specific requirements and hereby notifies the user that it has not tested or determined this material's suitability or safety for use in any application. The user is responsible to adequately test and determine the safety and suitability for their application and NuSil Technology LLC makes no warranty concerning fitness for any use or purpose. NuSil Technology LLC has completed no testing to establish safety of use in any medical application.

NuSil Technology LLC has tested this material only to determine if the product meets the applicable specifications. (Please contact NuSil Technology LLC for assistance and recommendations when establishing specifications.) When considering the use of NuSil Technology LLC products in a particular application, review the latest Material Safety Data Sheets and contact NuSil Technology LLC with any questions about product safety information.

Do not use any chemical in a food, drug, cosmetic, or medical application or process until having determined the safety and legality of the use. The user is responsible to meet the requirements of the U.S. Food and Drug Administration (FDA) and any other regulatory agencies. Before handling any other materials mentioned in the text, obtain available product safety information and take the necessary steps to ensure safety of use.

## **Specifications**

Do not use the typical properties shown in this technical profile as a basis for preparing specifications. Please contact NuSil Technology LLC for assistance and recommendations in establishing particular specifications.

## **Patent Warning**

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## **Warranty Information**

NuSil Technology LLC's warranty period is 12 months from the date of shipment when stored below 40°C in original unopened containers. Unless NuSil Technology LLC provides a specific written warranty of fitness for a particular use, NuSil Technology LLC's sole warranty is that the product will meet NuSil Technology LLC's then current specification. NuSil Technology LLC specifically disclaims any other expressed or implied warranty, including warranties of merchantability and fitness for use. The exclusive remedy and NuSil Technology LLC's sole liability for breach of warranty is limited to refund of purchase price or replacement of any product shown to be other than as warranted. NuSil Technology LLC expressly disclaims any liability for incidental or consequential damages.