

Technical Data Sheet

SILASTIC™ LTC 9402-50 Liquid Silicone Rubber

50 Shore A hardness, self-lubricating, low temperature curing, 1 to 1 mix Liquid Silicone Rubber (LSR) designed for liquid injection molding

Features & Benefits

- Self-lubricating
- Low temperature curing
- Fast deep-section cure at elevated temperatures
- Low compression set
- Unique rheology
- Improved flowability
- Excellent process performance enables short cycle times

Applications

SILASTIC™ LTC 9402-50 Liquid Silicone Rubber is an opaque, self-lubricating LSR, formulated to give excellent process performance due to low temperature cure and improved rheology

This product can be used in a wide range of applications, including but not limited to:

- Thick-walled connectors and seals
- Electrical connector seals/gaskets
- Weatherpack seals

Typical Properties

Specification Writers: These values are not intended for use in preparing specifications.

Test ¹	Property	Unit	Result
ASTM D2240	Hardness ²	Shore A	50
	Phenyl Oil Content	wt %	2
ASTM D412	Elongation ²	%	450
ASTM D412	Tensile Strength ²	MPa	8.9
ASTM D624 B	Tear Strength ²	kN/m	40
ASTM D792	Specific Gravity ²		1.11

ASTM: American Society for Testing and Materials. Materials were tested according to Dow Corporate Test Methods (CTM), which in most cases are similar to the ASTM standard(s) listed above. Copies for CTMs are available on

ISO: International Standardization Organization

Cure Condition: 10 min at 120°C, no post-cure

Typical Properties (Cont.)

Test	Property	Unit	Result
CTM 1094	Viscosity (10s ⁻¹)		
	Part A	Pa⋅s	200
	Part B	Pa⋅s	185
ASTM D395	Compression set ^{3,4}	%	21

- 3. Cure Condition: 10 min at 175°C, no post-cure
- 4. Tested according to method B, type I (12.5 mm)

Description

SILASTICTM LTC 9402-50 Liquid Silicone Rubber is a self-lubricating, low temperature curing injection-molding elastomer. It belongs to the SILASTICTM LTC 9400 Series, developed to enable low temperature curing in a wide range of typical silicone rubber applications.

How To Use

Mixing And De-Airing

The A and B components are supplied strained and de-aired to be used as lot matched kits. Mix parts A and B in a 1:1 ratio. Meter mix equipment which pumps, meters and mixes the two components without incorporation of air is strongly recommended for production. If air bubbles are entrapped during mixing the mixture must be thoroughly de-gassed under vacuum.

Pot Life

When Parts A and B are mixed the mixture will remain useable for 72 hours at 25°C (77°F).

Cleaning

The uncured silicone can readily be removed by most hydrocarbon solvents. Polar solvents, such as ketones and alcohols are not suitable.

Curing

SILASTIC™ LTC 9402-50 Liquid Silicone Rubber cures readily over a wide range of temperatures. The cure time depends on the thickness and the cure temperature used. Cure can be inhibited by contact with certain materials such as amines, sulfur and organotin complexes.

Curing time can be further enhanced by using SILASTIC™ LTC 9400 Acceleration Additive.

Pigmentation

This is normally carried out during mixing and dispensing of the two components. XIAMETER™ Color Masterbatches are recommended with normal addition levels of 2 to 4% based on total volume.

Handling Precautions PRODUCT SAFETY INFORMATION REQUIRED FOR SAFE USE IS NOT INCLUDED IN THIS DOCUMENT. BEFORE HANDLING, READ PRODUCT AND SAFETY DATA SHEETS AND CONTAINER LABELS FOR SAFE USE, PHYSICAL AND HEALTH HAZARD INFORMATION. THE SAFETY DATA SHEET IS AVAILABLE ON THE DOW WEBSITE AT CONSUMER.DOW.COM, OR FROM YOUR DOW SALES APPLICATION ENGINEER, OR DISTRIBUTOR, OR BY CALLING DOW CUSTOMER SERVICE.

Usable Life and Storage

When stored at or below 35°C (95°F) in the original unopened containers, this product has a usable life of 15 months from the date of production.

Packaging Information This product is supplied in lot matched pail and drum kits.

Limitations

This product is neither tested nor represented as suitable for medical or pharmaceutical uses.

Health And Environmental Information To support customers in their product safety needs, Dow has an extensive Product Stewardship organization and a team of product safety and regulatory compliance specialists available in each area.

For further information, please see our website, consumer.dow.com or consult your local Dow representative.

consumer.dow.com

LIMITED WARRANTY INFORMATION - PLEASE READ CAREFULLY

The information contained herein is offered in good faith and is believed to be accurate. However, because conditions and methods of use of our products are beyond our control, this information should not be used in substitution for customer's tests to ensure that our products are safe, effective, and fully satisfactory for the intended end use. Suggestions of use shall not be taken as inducements to infringe any patent.

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Your exclusive remedy for breach of such warranty is limited to refund of purchase price or replacement of any product shown to be other than as warranted.

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