

Technical Data Sheet

SILASTIC™ LTC 9400-50 Liquid Silicone Rubber

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

Features & Benefits

- Low temperature curing
- Fast deep-section cure at elevated temperatures
- Unique rheology
- Improved flowability
- Excellent process performance enables short cycle times
- Food contact: Formulated to meet requirements of BfR XV recommendation and of FDA 21 CFR 177.2600

Applications

SILASTIC™ LTC 9400-50 Liquid Silicone Rubber is a translucent LSR, formulated for use in an extended range of molding temperatures and applications. It enables 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:

- Co-molding of low-melting plastics
- Overmolding of sensitive components
- Consumer goods articles
- Grommets, gaskets and 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
ASTM D412	Elongation ²	%	460
ASTM D412	Tensile Strength ²	MPa	8.9
ASTM D624 B	Tear Strength ²	kN/m	40
ASTM D792	Specific Gravity ²		1.11
CTM 1094	Viscosity (10s ⁻¹) Part A Part B	Pa s Pa s	160 160

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 request.

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

ISO: International Standardization Organization

Description

SILASTIC[™] LTC 9400-50 Liquid Silicone Rubber is a low temperature curing injection-molding elastomer. It belongs to the SILASTIC[™] 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 9400-50 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.

Regulatory Compliance

Food Contact

SILASTIC[™] LTC 9400-50 Liquid Silicone Rubber is formulated to meet BfR XV recommendation and FDA 21 CFR 177.2600.

It remains the customer's responsibility to ensure Dow's products are suitable for customer's intended use and comply with all laws and regulations applicable to such use.

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

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

Limitations

Information

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

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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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