



## Technical Data Sheet

# XIAMETER™ RBL-9591-50 Liquid Silicone Rubber

50 Durometer, 2-part, 1-to-1 mix, off-white, general purpose liquid silicone rubber

### Features & Benefits

- Fast heat cure, low shrinkage, no cure by-products
- Easily pigmentable
- Low compression set
- Complies with UL 94 V-O

### Applications

- Sleeving
- Fabric coating

### Typical Properties

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

CTM <sup>1</sup>	ASTM <sup>2</sup>	Property	Unit	Result
<b>As supplied</b>				
1094		Viscosity Part A, 10.0 1/s	Pa.s	46
1094		Viscosity Part B, 10.0 1/s	Pa.s	57
	D792	Specific gravity		1.52
<b>As molded</b>				
	D2240	Hardness	Shore A	49
	D412 DIE C	Tensile strength	Psi Mpa	532 3.7
	D412 DIE C	Elongation at break	%	408
	D624 DIE B	Tear strength	Ppi kN/m	58 10
	D395 Method B	Compression set 22 h at 177°C (350°F) <sup>3</sup>	%	9

1. CTM: Corporate Test Method, copies are available upon request.
2. ASTM: American Society for Testing and Materials.  
Materials were tested to Dow Corporate Test Methods (CTM), which in most cases are similar to the ASTM standard listed above. Copies of CTMs are available on request.  
6.2 Bar (90 psi), 3.2 mm (118 inch) orifice.  
Properties obtained on 1.9 mm (0.075 in.) thick slabs. Press cured 5 minutes at 171°C (340°F).
3. Sample was conditioned 4 hrs at 200°C prior to compression set testing.

## 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 the 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

After the A and B components are mixed, the mixture will remain usable for more than 24 hours at room temperature.

### Cleaning

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

### Curing

XIAMETER™ RBL-9591-50 Liquid Silicone Rubber cures rapidly at elevated temperatures. A 2 mm cross-section requires 8–14 seconds at 200°C (392°F). The cure time depends on the thickness and the cure temperature used. Cure can be inhibited by contact with certain materials such as amines, sulphur and tin complexes.

### Pigmentation

This is normally carried out during mixing and dispensing of the two components. XIAMETER™ Liquid Color Masterbatches are recommended with normal additions of 0.5 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 [WWW.CONSUMER.DOW.COM](http://WWW.CONSUMER.DOW.COM), OR FROM YOUR DOW SALES APPLICATION ENGINEER, OR DISTRIBUTOR, OR BY CALLING DOW CUSTOMER SERVICE.

## Usable Life And Storage

Product should be stored at or below 32°C (90°F) in original, unopened containers.

## Limitations

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

Not intended for human injection. Not intended for food use.

## 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, [www.consumer.dow.com](http://www.consumer.dow.com) or consult your local Dow representative.

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<http://www.xiameter.com>

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