

#### **Technical Data Sheet**

# XIAMETER™ RBL-9481-50E Liquid Silicone Rubber

50 Durometer, transparent, two-part, 1 to 1 mix, injection molding grade liquid silicone rubber

# Features & Benefits

- High tear strength
- Good clarity
- Formulated to meet BgVV, XV and FDA 21 CFR 177.2600

## **Applications**

- Baby care-nipples/pacifiers
- Suitable for food contact

## Typical Properties

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

Test <sup>1</sup>	Property	Unit	Result	
	As supplied			
	Solids content	%	100	
	Extrusion rate	g/minute	55	
	Viscosity (Y=0.9s <sup>-1</sup> )	Pa.s	1,600	
	Viscosity (Y=10.0s <sup>-1</sup> )	Pa.s	400	
			As molded	Post-cured
D792	Specific gravity		1.14	1.14
D2240	Hardness	Shore A	49	51
D412 DIE C	Tensile strength	Мра	11.0	11.0
D412 DIE C	Elongation at break	%	650	500
D624 DIE B	Tear strength	kN/m	44	50

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 listed above. Copies of CTMs are available on request. Properties obtained on 2 mm thick slabs: Press cured 10 minutes at 120°C (248°F) Post-cured 4 hours at 200°C (392°F).

Extrusion rate using a cartridge with an orifice of 3.2 mm and a pressure of 6.2 bar. Viscosity measured on the Carrimed CSL Viscometer

#### 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

When Parts A and B are mixed the mixture will remain usable 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

XIAMETER™ RBL-9481-50E 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

# 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, OR FROM YOUR DOW SALES APPLICATION ENGINEER, OR DISTRIBUTOR, OR BY CALLING DOW CUSTOMER SERVICE.

# Usable Life And Storage

When stored at or below 32°C (90°F) in the original unopened containers, this product has a usable life of 15 months from the date of production.

## **Food Contact**

This product has been formulated to meet applicable food contact regulations and recommendations (for example: FDA 21.CFR 177.2600 and BgVV, XV).

For further details on the suitability of this product for food contact applications, please refer to the Food Regulatory Profile.

Note: It remains the manufacturers' responsibility to test the final product

#### 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, www.consumer.dow.com or consult your local Dow representative.

http://www.xiameter.com

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