

Technical Data Sheet

XIAMETER™ RBB-2050-70 Base

70 Durometer, cream-opaque, high green strength, uncatalyzed silicone rubber base

Features & Benefits

- High green strength
- Serviceable over wide temperature range
- Pigmentable

Applications

Automotive/industrial hose wire and cable insulation

Typical Properties

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

Formulation:

XIAMETER™ RBB-2050-70 Base, parts 100 V Catalyst, 40% active, parts 1

ASTM ¹	Property	Unit	Result
	Appearance		Cream, Opaque
D926	Plasticity	mm x 100 (mils)	360 (142)
D792	Specific Gravity at 23°C (73°F)		1.21
D2240	Durometer	Shore A	70
D412	Tensile Strength	MPa (psi)	9.1 (1320)
D412	Elongation	%	355
D412	Modulus at 100% Elongation	MPa (psi)	2.7 (390)
D624 DIE B	Tear Strength	kN/m (ppi)	18 (100)
D395	Compression set after 22 hours at 177°C (351°F)	%	27
D2632	Bashore Resilience	%	45
D2137	Brittle Point	°C (°F)	-73 (-99)

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

Properties obtained on 2 mm (0.08 in) slabs: Press cured 10 minute at 171°C (340°F).

Typical Properties (Cont.)

ASTM	Property	Unit	Result	
	Heat aged, 70hrs at 225°C (437°F)			
D2240	Durometer	Shore A	76	
D412	Tensile Strength	MPa (psi)	9.3 (1350)	
D412	Elongation	%	350	
D412	Modulus at 100% elongation	MPa (psi)	3.0 (435)	
	Oil resistance, 168hrs at 100°C (212°F)		IRM 903	
D2240	Durometer	Shore A	52	
D412	Tensile Strength	MPa (psi)	9.1 (1320)	
D412	Elongation	%	300	
D412	Modulus at 100% Elongation	MPa (psi)	2.4 (350)	
	Volume Swell	%	30	
	Ethylene/Glocol/Water, 55/45, 168 hours at 100°C (212°F)			
D2240	Durometer	Shore A	71	
D412	Tensile Strength	MPa (psi)	9.6 (1390)	
D412	Elongation	%	365	
D412	Modulus at 100% Elongation	MPa (psi)	2.7 (390)	
	Volume Swell	%	0.3	

How To Use

Vulcanization

XIAMETER™ RBB-2050-70 Base requires the addition on a vulcanizing agent. T catalyst (2,4-dichloro-benzoyl peroxide) is recommended for hot air vulcanization.

V catalyst (2,5-bis[tert-butylperoxy] -2,5-dimethylhexane) is recommended for molding.

Pigmentation

This silicone rubber base can be pigmented with standard XIAMETER™ pigment master batches. A comprehensive range of master batches is available from Dow.

Property Modification

The physical properties of this product can be modified using a range of Dow additives.

This silicone rubber base can be blended with other durometer silicone rubber bases and extended fillers to produce materials with modified durometers and properties.

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 50°C in the original unopened containers, this product has a usable life of 36 months from the date of production.

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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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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