



Technical Data Sheet

XIAMETER™ RBB-2220-55 Silicone Rubber

55 durometer, near transparent, high strength, uncatalyzed silicone rubber base

Features & Benefits

- High mechanical properties
- High tear strength
- Serviceable over wide temperature range
- Pigmentable
- Formulated to meet BgVV,XV and FDA 21 CFR 177.2600

Applications

- Extrusion, tubing and profiles
- Molding
- Calendering and sheeting

Typical Properties

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

Formulation			
XIAMETER™ RBB-2220-55 Silicone Rubber, parts			100
V Catalyst, 45% active, parts			1.0
ASTM ¹	Property	Unit	Result
	Appearance		Nearly Transparent
D926	Plasticity	mm x 100 (mils)	210 (81)
D792	Specific Gravity		1.15
D2240	Durometer	Shore A	57
D412	Tensile Strength	MPa (psi)	10.6 (1530)
D412	Elongation	%	785
D412	Modulus at 100% elongation	MPa (psi)	2.1 (300)
D624 DIE B	Tear Strength	kN/m (ppi)	51 (290)
D395	Compression set after 22 hours at 177°C (351°F)	%	34
D2632	Bashore Resilience	%	52
D2137	Brittle Point	°C (°F)	-73 (-99)

1. ASTM: American Society for Testing and Materials. Materials were tested according to Corporate 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 thick (0.08 inches) slabs: press cured 10 minutes at 171°C (340°F).

XIAMETER™ RBM-9002 Rubber Additive is NOT an FDA or Bg VV permitted ingredient for food contact applications.

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Typical Properties (Cont.)

ASTM	Property	Unit	Result
	Heat aged, 70hrs at 200°C (392°F)		
D2240	Durometer	Shore A	62
D412	Tensile Strength	MPa (psi)	8.6 (1240)
D412	Elongation	%	545
D412	Modulus at 100% elongation	MPa (psi)	2.4 (350)

How To Use

Vulcanization

XIAMETER™ RBB-2220-55 Base required the addition of 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) or D catalyst (dicumylperoxide) is recommended for molding.

Pigmentation

This silicone rubber base can be pigmented with standard XIAMETER™ Color Master Batches.

Property Modification

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

XIAMETER RBB-2220-55 Base must not be used with XIAMETER™ RBM-9000 Rubber Additive, XIAMETER™ RBM-9005 Modifier and XIAMETER™ RBM-9006 Modifier.

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

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).

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

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

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

Product should be stored at or below 50°C in original, unopened containers.

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Limitations

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

Not intended for human injection.

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>

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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