



Technical Data Sheet

XIAMETER™ RBB-2200-55 Base

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

Features & Benefits

- High mechanical properties
- High tear strength
- Serviceable over wide temperature range
- Pigmentable

Applications

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

Product Range

XIAMETER™ RBB-2200-55 Base is one of a series of high strength silicone rubber bases. Other products in the series are XIAMETER™ RBB-2200-35 Base and XIAMETER™ RBB-2200-75 Base.

Typical Properties

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

Formulation	
XIAMETER® RBB-2200-55 Base Silicone Rubber parts	100
T Catalyst, 50% active parts	1.3

ASTM ¹	Property	Unit	Result
	Appearance		Nearly transparent
D926	Plasticity	mm x 100 (mils)	230 (89)
D792	Specific Gravity at 23°C (73°F)		1.17
D2240	Durometer	Shore A	49
D412	Tensile Strength	MPa (psi)	8.9 (1295)
D412	Elongation	%	630
D412	Modulus at 100% Elongation	MPa (psi)	1.4 (200)

1. 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 standards listed above. Copies of CTMs are available on request.

Properties obtained on 2 mm thick (0.08 inch) slabs: Press cured 5 minute at 116°C (240°F) and post-cured for 4 hours at 200°C (392°F).

Typical Properties (Cont.)

ASTM	Property	Unit	Result
D624 DIE B	Tear Strength	kN/m (ppi)	32 (180)
D395	Compression set after 22 hours at 177°C (351°F)	%	20
D2632	Bashore Resilience	%	45
D2137	Brittle Point	°C (°F)	-73 (-99)
Heat aged, 70 hrs at 225°C (437°F)			
D2240	Durometer	Shore A	50
D412	Tensile Strength	MPa (psi)	8.9 (1290)
D412	Elongation	%	485
D412	Modulus at 100% Elongation	MPa (psi)	1.9 (280)

How to Use

Vulcanization

XIAMETER™ RBB-2200-55 Base requires the addition of avulcanizing 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 Dow 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.

For more detailed information on the use of Dow additives, contact your local customer service center.

This silicone rubber base can be blended with other durometer silicone rubber bases to produce materials with intermediate 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 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 60°C (140°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, dow.com or consult your local Dow representative.

Disposal Considerations

Dispose in accordance with all local, state (provincial) and federal regulations. Empty containers may contain hazardous residues. This material and its container must be disposed in a safe and legal manner.

It is the user's responsibility to verify that treatment and disposal procedures comply with local, state (provincial) and federal regulations. Contact your Dow Technical Representative for more information.

Product Stewardship

Dow has a fundamental concern for all who make, distribute, and use its products, and for the environment in which we live. This concern is the basis for our product stewardship philosophy by which we assess the safety, health, and environmental information on our products and then take appropriate steps to protect employee and public health and our environment. The success of our product stewardship program rests with each and every individual involved with Dow products - from the initial concept and research, to manufacture, use, sale, disposal, and recycle of each product.

Customer Notice

Dow strongly encourages its customers to review both their manufacturing processes and their applications of Dow products from the standpoint of human health and environmental quality to ensure that Dow products are not used in ways for which they are not intended or tested. Dow personnel are available to answer your questions and to provide reasonable technical support. Dow product literature, including safety data sheets, should be consulted prior to use of Dow products. Current safety data sheets are available from Dow.

dow.com

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