Product Information

Silicone Rubber Base

DOW CORNING

SILASTIC® TR-70

FEATURES

- High mechanical properties
- Very high tear strength
- High modulus
- Serviceable over wide temperature range
- Pigmentable
- Formulated to meet FDA 21 CFR 177.2600

APPLICATIONS

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

PRODUCT RANGE

SILASTIC TR-70 is one of a series of very high tear strength and high modulus silicone rubber bases. The other product in this series is SILASTIC® TR-55.

70 durometer, near transparent, high strength, uncatalyzed Silicone Rubber Base

TYPICAL PROPERTIES

Specification writers: These values are not intended for use in preparing specifications. Please contact your local Dow Corning sales representative prior to writing specifications on this product.

Formulation:

SILASTIC TR-70 Silicone Rubber, parts	100
V Catalyst, 45% active, parts	1

ASTM*	Property	Unit	Value
	Appearance		Nearly transparent
D926	Plasticity	mm x 100 (mils)	250 (100)
D792	Specific gravity		1.2
D2240	Durometer	Shore A	73
D412	Tensile strength	MPa (psi)	8.7 (1255)
D412	Elongation	%	540
D412	Modulus at 100% elongation	MPa (psi)	4.0 (575)
D624	Tear strength	kN/m (ppi)	51 (290)
D395	Compression set after 22 hours at 177ºC (351ºF)	%	27
D2632	Bashore resilience	%	47
D2137	Brittle point	ºC (ºF)	-73 (-99)
Heat aged, 70hrs at 200ºC (392ºF)			
D2240	Durometer	Shore A	76
D412	Tensile strength	MPa (psi)	7.5 (1090)
D412	Elongation	%	390
D412	Modulus at 100% elongation	MPa (psi)	4.3 (630)

Properties obtained on 2mm thick (0.08 inch) slabs: Press cured 10 minute at 171ºC (340ºF).
*ASTM: American Society for Testing and Materials.
Materials were tested according to Dow Corning Corporate Test Methods (CTM), which in most cases are similar to the ASTM standards listed above.
Copies of CTMs are available on request.

HOW TO USE

Vulcanization

SILASTIC TR-70 requires 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 Dow Corning pigment master batches.
A comprehensive range of master batches is available from Dow Corning.

Property Modification

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

SILASTIC TR-70 Silicone Rubber must not be used with SILASTIC® FR-1, FR-2 and FR-3 flame retardant additives.

For more detailed information on the use of Dow Corning additives, contact your local Dow Corning 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. Before handling, read product and safety data sheets and container labels for safe use, physical and health hazard information. The material safety data sheet is available on the Dow Corning website at www.dowcorning.com. You can also obtain a copy from your local Dow Corning sales representative or Distributor or by calling your local Dow Corning Global Connection.

USABLE LIFE AND STORAGE

When stored at or below 50ºC (122ºF) in the original unopened containers, this product has a usable life of 36 months from the date of production.

PACKAGING

This product is available in standard logs wrapped in polythene and supplied in 22.7kg, (50 lb) and 454kg, (1000 lb) boxes, net weight.

Samples are available and can be requested from your local Dow Corning Customer service center.

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. This information is available from your local Dow Corning Customer Service Center.

Post cure is recommended to ensure that food contact requirements are met.

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 Corning has an extensive Product Stewardship organization and a team of Product Safety and Regulatory Compliance (PS&RC) specialists available in each area.

For further information, please see our website, www.dowcorning.com or consult your local Dow Corning representative.

CONTACT INFORMATION

For further help or assistance see our website, www.dowcorning.com or contact:

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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 customers' tests to ensure that Dow Corning's 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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