

# Product Information

## Silicone Rubber Base

DOW CORNING

## SILASTIC® 55U

### 55 durometer, near transparent, high strength, uncatalyzed Silicone Rubber Base

#### FEATURES

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

#### APPLICATIONS

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

#### PRODUCT RANGE

SILASTIC 55U is one of a series of high strength silicone rubber bases. Other products in the series are SILASTIC® 35U and 75U.

#### 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 55U Silicone Rubber, parts	100
T Catalyst, 50% active, parts	1.3

ASTM*	Property	Unit	Value
	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)
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, 70hrs 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)

Properties obtained on 2mm 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).

\*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 55U 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.

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](http://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 60°C (140°F) 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.

## 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](http://www.dowcorning.com) or consult your local Dow Corning representative.

## CONTACT INFORMATION

For further help or assistance see our website, [www.dowcorning.com](http://www.dowcorning.com) or contact:

Dow Corning Corp  
111 S. Progress Dr. E.  
Kendallville, IN 46755  
Tel.: 260-347-5813  
Fax: 260-347-5819

## 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.

Dow Corning's sole warranty is that the product will meet the Dow Corning sales specifications in effect at the time of shipment.

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.

**DOW CORNING SPECIFICALLY DISCLAIMS ANY OTHER EXPRESS OR IMPLIED WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE OR MERCHANTABILITY.**

**DOW CORNING DISCLAIMS LIABILITY FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES.**

WE HELP YOU INVENT THE FUTURE.™

**[www.dowcorning.com](http://www.dowcorning.com)**