

Product Information

Liquid Silicone Rubber

DOW CORNING

SILASTIC® 94-595

FEATURES

- Fast heat cure, low shrinkage, no cure by-products
- Easily pigmentable
- Formulated to meet FDA 21 CFR 177.2600
- Excellent electrical insulating properties

40 Durometer, 2-part, 1-to-1 mix, translucent, injection molding grade Liquid Silicone Rubber

APPLICATIONS

- General molding
- Electrical/electronic boots
- Sleeving

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.

ASTM*	Property	Unit	Value	
As supplied				
	Solids content	%	100	
CTM 0364	Extrusion rate	g/min ¹	192	
D 4287	Viscosity (Y=0.9s ⁻¹)	Pa.s	2800	
D 4287	Viscosity (Y=10s ⁻¹)	Pa.s	260	
D792	Specific gravity		1.12	
			As molded	Post-cured
D2240	Hardness	Shore A	42	44
D412 DIE C	Tensile strength	MPa (psi)	10.0(1460)	9.0(1300)
D412 DIE C	Elongation at break	%	610	460
D412 DIE C	Modulus 100%	MPa (psi)	1.0(150)	1.4(200)
D624 DIE B	Tear strength	kN/m (ppi)	34(190)	34(190)
D 395 method B	Compression set 22h at 177°C (350°F)	%	47	14
D 2632	Bashore resilience		60	58
CTM 0157	Circle shrink	%	2.4	3.24
Heat aged 70h at 225°C (437°F)				
D 2240	Hardness	Shore A	46	
D412 DIE C	Tensile strength	MPa (psi)	5.8(840)	
D412 DIE C	Elongation at break	%	250	
D412 DIE C	Modulus 100%	MPa (psi)	1.9(280)	
D624 DIE B	Tear strength	kN/m (ppi)	19(110)	

TYPICAL PROPERTIES (continued)

ASTM*	Property	Unit	Value	
	Oil aged 70h at 150°C (302°F)		ASTM#1 Oil	IRM#903 Oil
D2240	Hardness	Shore A	37	25
D412 DIE C	Tensile strength	MPa (psi)	8.3(1200)	4.4(630)
D412 DIE C	Elongation at break	%	420	240
D412 DIE C	Modulus 100%	MPa (psi)	1.3(190)	1.4(200)
D624 DIE B	Tear strength	kN/m (ppi)	27(156)	12(67)
D471-79	Volume change	%	5.3	49
	Electrical properties		As molded	70h at 100°C (212°F) in water
D149	Dielectric strength	kV/mm (volts/mil)	19.8(510)	18.6(480)
D150	Dielectric constant	at 100Hz	2.87	2.93
D150	Dielectric constant	at 10,000Hz	2.86	2.92
D257	Volume resistivity	Ohm.cm x 10 ¹⁴	6.1	7.6
D150	Dissipation factor	at 100Hz	0.0016	0.0007
D150	Dissipation factor	at 10,000Hz	0.0011	0.0005

Properties obtained on 1.9mm (0.075in.) thick slabs. Press cured 5 minutes at 150°C (300°F). Post cured 4 hours at 200°C (392°F).

*ASTM: American Society for Testing and Materials.

Materials were tested to Dow Corning Corporate Test Methods (CTM), which in most cases are similar to the ASTM standard listed above. Copies of CTMs are available on request.

¹ 6.2 Bar (90psi), 3.2mm (1/8 inch) orifice.

HOW TO USE

Mixing and de-airing

The A and B components are supplied strained and de-aired to be used as lot matched kits. Mix parts A and B in a 1:1 ratio. Meter mix equipment which pumps, meters and mixes the two components without the incorporation of air is strongly recommended for production. If air bubbles are entrapped during mixing the mixture must be thoroughly de-gassed under vacuum.

Pot life

After the A and B components are mixed, the mixture will remain usable for more than 24 hours at room temperature.

Cleaning

The uncured silicone can readily be removed by most hydrocarbon solvents. Polar solvents, such as ketones and alcohols, are not suitable.

Curing

SILASTIC 94-595 cures rapidly at elevated temperatures. A 2mm cross-section requires 8-14 seconds at 200°C (392°F). The cure time depends on the thickness and the cure temperature used. Cure can be inhibited by contact with certain materials such as amines, sulphur and tin complexes.

Pigmentation

This is normally carried out during mixing and dispensing of the two components. Silastic Liquid Color Master batches are recommended with normal additions of 0.5 to 4% based on total volume. These are available from Dow Corning.

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 32°C (90°F) in the original, unopened containers this product has a usable life of 18 months from the date of production.

PACKAGING

This product is supplied in lot matched kits: in pail kits of 80 lb/36.2kg (40 lbs each of parts A and B) and in drum kits of 900 lb/409kg (450 lbs each of parts A and B).

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:

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

