

Technical Data Sheet

SILASTIC™ 590 EU Liquid Silicone Rubber

35 Durometer, two-part, 1 to 1 mix, off-white, fabric coating grade liquid silicone rubber

Features & Benefits

- Good flame resistance
- Easily pigmentable
- Unprimed adhesion to glass fabric

Applications

- Fabric coating
- Electrical-Wire sleeving

Typical Properties

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

ASTM ¹	Property	Unit	Result	
	As supplied			
	Solids content	%	100	
	Mixed viscosity	mPa.s	80,000	
			As molded	Post-cured
D792	Specific gravity		1.23	1.23
D2204	Hardness	Shore	35	40
D53504	Tensile strength	MPa	7	5.5
D412	Elongation at break	%	570	325
D624B	Tear strength	kN/m	11	10
D257	Volume resistivity	Ohm.cm	3.0x10 ¹⁵	

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 standard listed above.
Properties obtained on 2 mm thick slabs: Press cured 10 minutes at 120°C (248°F). Post-cured 4 hours at 200°C (392°F).

Viscosity measured on the Brookfield HAF Viscometer, spindle 6, 10 r.p.m.

How To Use

Mixing and De-Airing

The A and B components of SILASTIC[™] 590 EU Liquid Silicone Rubber 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

When Parts A and B are mixed the mixture will remain usable for 72 hours at 25°C (77°F).

Cleaning

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

Curing

SILASTIC 590 EU Liquid Silicone Rubber cures rapidly at elevated temperatures. A 2 mm 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™ LPX Liquid Color Masterbatches are recommended with normal addition levels of 2 to 4% based on total volume.

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

When stored at or below 32°C (90°F) in the original unopened containers, this product has a usable life of 15 months from the date of production.

Packaging Information

This product is supplied in lot matched kits: in pails (20 kg) and in drums (205 kg).

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 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.silastic.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.

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.

TO THE FULLEST EXTENT PERMITTED BY APPLICABLE LAW, DOW SPECIFICALLY DISCLAIMS ANY OTHER EXPRESS OR IMPLIED WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE OR MERCHANTABILITY.

DOW DISCLAIMS LIABILITY FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES.

