



Technical Data Sheet

SILASTIC™ HV 1551-95P Liquid Silicone Rubber

40 Durometer, two-part, 1 to 1 mix, high voltage grade liquid silicone rubber

Features & Benefits

- Injection moldable
- Sustained hydrophobicity
- High tear strength
- Low temperature cure
- Excellent tracking resistance

Applications

- Hollow-core insulators
- Insulators
- Cable-end terminations

Typical Properties

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

Test	Property ¹	Unit	Result
As supplied			
	Appearance		Clear/grey
	Solid content	%	100
	Viscosity ² ($\gamma = 10.0s^{-1}$)	mPa.s	95,000
As cured			
ASTM ³ D792	Specific gravity		1.10
ASTM D2204	Hardness	Shore A	41
ASTM D412	Tensile strength	MPa	7.0
		psi	1015
ASTM D412	Elongation at break	%	560
ASTM D624 (B)	Tear strength	KN/m	25
		ppi	143
IEC ⁴ 60093	Volume resistivity	Ohm.cm	3E+15
IEC 60250	Dielectric constant at 100 Hz		2.8

1. Properties obtained on test slabs: Press-cured: 10 minutes at 120°C (248°F).
2. Viscosity measured on the Carrimed CSL Viscometer.
3. ASTM: American Society for Testing and Materials. Materials were tested according to Dow Corporation Test Methods (CTM), which in most cases are similar to the ASTM standards listed above.
4. IEC: International Electrotechnical Commission.

Typical Properties (Cont.)

Test	Property	Unit	Result
IEC 60250	Dissipation factor		0.001
IEC 60587	Tracking resistance		1A4.5
IEC 60432	Dielectrics strength	KV/mm volts/mil	28 717

How to Use

Mixing and De-airing

SILASTIC™ HV 1551-95P Liquid Silicone Rubber 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.

Hand or mechanical mixing can be used but do not mix for an extended period of time or allow the temperature to exceed 35°C (95°F). It is very important to control the A to B ratio very precisely.

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™ HV 1551-95P Liquid Silicone Rubber cures rapidly at elevated temperature. 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 amine, sulphur, and tin complexes.

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

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

2*205 kg kit.

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

NOTICE: No freedom from infringement of any patent owned by Dow or others is to be inferred. Because use conditions and applicable laws may differ from one location to another and may change with time, Customer is responsible for determining whether products and the information in this document are appropriate for Customer's use and for ensuring that Customer's workplace and disposal practices are in compliance with applicable laws and other government enactments. The product shown in this literature may not be available for sale and/or available in all geographies where Dow is represented. The claims made may not have been approved for use in all countries. Dow assumes no obligation or liability for the information in this document. References to "Dow" or the "Company" mean the Dow legal entity selling the products to Customer unless otherwise expressly noted. NO WARRANTIES ARE GIVEN; ALL IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE ARE EXPRESSLY EXCLUDED.

