



## Technical Data Sheet

### SILASTIC™ HV 1510-40 Liquid Silicone Rubber

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

#### Features & Benefits

- Injection moldable
- High tear strength
- High elongation
- Fast cure
- Excellent tracking resistance

#### Applications

- Cable accessories
- Terminations
- Cold shrink

#### Typical Properties

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

Test	Property <sup>1</sup>	Unit	Result
<b>As supplied</b>			
	Appearance		Translucent
	Solids content	%	100
	Viscosity <sup>2</sup> (Y = 0.9s <sup>91</sup> )	Pa.s	1,200
	Viscosity <sup>2</sup> (Y = 10.0s <sup>91</sup> )	Pa.s	260
<b>As cured</b>			
ASTM <sup>3</sup> D792	Specific gravity		1.13
ASTM D2204	Hardness	Shore A	42
ASTM D412	Tensile strength	MPa (psi)	9.0 (1305)
ASTM D412	Elongation at break	%	800
ASTM D624B	Tear strength	kN/m (ppi)	35 (200)
ASTM D412	Tension set after 48 hours at 50°C (122°F) at 200% extension	%	2

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 Corporate Test Methods (CTM), which in most cases are similar to the ASTM standards listed above.

## Typical Properties (Cont.)

Test	Property	Unit	Result
IEC <sup>4</sup> 60093	Volume resistivity	Ohm.cm	5E+15
IEC 60250	Dielectric constant at 100 Hz		2.8
IEC 60250	Dissipation factor		0.001
IEC 60587	Tracking resistance		1A3.5
IEC 60243	Dielectric strength	kV/mm (volts/mil)	26 (665)

4. IEC: International Electrotechnical Commission.

## 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.

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 B to A 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 1510-40 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 0.5–4% 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 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.

**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](http://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.

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