

#### **Technical Data Sheet**

## SILASTIC™ HV 1551-55P Liquid Silicone Rubber

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

# Features & Benefits

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

### **Applications**

- Hollowcore insulators
- Insulators
- Cable end terminations

## Typical Properties

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

Test	Property	Unit	Result
	As supplied		
	Appearance		Translucent or grey
	Solids content	%	100
	Viscosity (Y= 10.0s <sup>-1</sup> )	mPa.s	60,000
	As cured		
D792 <sup>1</sup>	Specific gravity	g/cm <sup>3</sup>	1.09
D2204 <sup>1</sup>	Hardness	Shore A	42
D412 <sup>1</sup>	Tensile strength	MPa	6.8
D412 <sup>1</sup>	Elongation at break	%	472
D624B <sup>1</sup>	Tear strength	kN/m	31
IEC 60093 <sup>2</sup>	Volume resistivity	Ohm.cm	1.00E+15
IEC 60250 <sup>2</sup>	Dielectric constant		2.8
IEC 60250 <sup>2</sup>	Dissipation factor		0.01
IEC 60587 <sup>2</sup>	Tracking resistance		1A4.5
IEC 60243 <sup>2</sup>	Dielectric strength	kV/mm	30

<sup>1.</sup> ASTM: American Society for Testing and Materials

<sup>2.</sup> 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 degassed 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™ HV 1551-55P Liquid Silicone Rubber cures rapidly at elevated temperatures. A 2 mm cross-section requires 8–14 seconds at 120°C (248°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™ Color Master Batches 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 WWW.CONSUMER.DOW.COM, OR FROM YOUR DOW SALES APPLICATION ENGINEER, OR DISTRIBUTOR, OR BY CALLING DOW CUSTOMER SERVICE.

# Usable Life And Storage

Product should be stored at or below 32°C (90°F) in original, unopened containers.

#### 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, www.consumer.dow.com or consult your local Dow representative.

http://www.silastic.com

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