



## Overview

**WICSilicone High Voltage Silicone Rubber** delivers outstanding electrical insulation, thermal stability, and dielectric strength for critical applications in power transmission, electronics, and high-voltage equipment. It ensures long-term safety and performance in demanding environments.

ISO 9001

Batch-tested

ASTM / ISO Verified

Fully traceable

RoHS / REACH Compliant

## Technical Specifications

Property	HV-80	HV-80	HV-70	HV-60	HV-60	HV-50	HV-40	Test Method
Hardness (Shore A)	80	80	70	60	60	50	40	DIN 53 505
Tensile Strength (MPa)	5.37	4.57	5.78	3.77	8.28	2.18	3.43	DIN 53 504
Elongation at Break	227%	157%	414%	353%	832%	255%	768%	
Tear Strength (N/mm)	8.48	6.23	35	5.38	36.42	2.53	7.54	DIN 53 504
Test Condition C°/min	130/4	170/2	130/4	170/2	130/4	170/2	170/2	
Selica Based	PPT	PPT	PPT	PPT	Fumed	PPT	PPT	
Curing Agent	DCBP	DCP	DCBP	DCP	DCBP	DCP	DCP	
Dielectric Strength (kV/mm)								
Dielectric Constant (E2 50 HZ)								
Dissipation factor (tan 6/1000 HZ)								
Rebound Resilience (%)	40							DIN 53 512
Specific Gravity (cm <sup>3</sup> )	1/24							
Compression set	2.5%							DIN 53 517
Temperature Range	-50°C to +250°C							
Appearance	White							



## Features & Benefits

### High Voltage & Dielectric Strength

Excellent dielectric performance prevents arcing and current leakage under thermal and electrical stress.

### Temperature Resistance

Reliable from  $-60^{\circ}\text{C}$  to  $+250^{\circ}\text{C}$ , stable under extreme thermal and electrical load.

### UV & Weathering Durability

Resistant to corona discharge, UV, ozone, and outdoor weathering for long-term outdoor performance.

### Safety & Flame Retardancy

Complies with safety standards; custom flame-retardant, low-smoke, and insulation grades available.

### Customizable Performance

Tailored for insulation, flame, or mechanical requirements to suit specific applications.

### Electrical & Mechanical Reliability

Maintains performance under continuous high-voltage stress and mechanical demands.

## Compliance & Certifications

- **ISO 9001:** Quality Management
- Batch-tested for strength & durability
- Fully traceable batch documentation
- ASTM / ISO standards verified
- **RoHS / REACH compliant**



## Typical Applications

This grade has a special formulation that is mainly used as insulation.

### Electrical Insulation

HV cables, terminal boots, dielectric sleeves

### Industrial Equipment

high-voltage gaskets, housings, sealing components

### Power Transmission

high-voltage insulators, bushings, surge arresters

### Electronics

connectors, insulation parts, protective coatings

### EV Systems

Battery seals, HV connectors, cable sheaths

### Aerospace & Telecom

Insulating shields, surge boots, harness cover

## Processing & Handling

- Suitable for molding, extrusion, and coating applications
- Compatible with peroxide or addition-curing systems
- Recommended post-cure at 200 °C for 4 hours for high-voltage stability
- Store material in its original packaging at room temperature to prevent premature crosslinking



## Packaging

- Supplied in **8 × 2.5 kg rods / box** for clean handling and processing
- Shelf life: 12 months in unopened containers
- Store in a cool, dry place away from direct sunlight and heat sources

*The information contained herein is believed to be accurate. Users should verify the suitability of the product for their application. Wire Iran is not responsible for improper use.*