



Technical Datasheets of Silicone Rubber Compound NJ-152B-60

A. Product description

NJ-152B-60 is a component, ready to use, peroxide curing compound that cures to an electrically insulating, highly tracking & erosion resistance silicone elastomer.

B. Features

- high tracking & erosion resistance
- suitable dielectric properties
- superior molding processing performance
- good mechanical properties
- good hydrophobicity behavior

C. Application

NJ-152B-60 is the high-performance silicone rubber compound for the manufacture all types of electrical insulating equipment for outdoor use, such as composite insulators, surge arresters, bushings, etc. This type of product is for the application of insulating products of different voltage grades, but mainly recommended for the voltage rating below 400kV.

D. Use Information

Processing: NJ-152B-60 can be processed using injection molding, transfer or compression molding.
Bonding: if the application requires a bonding primer as a substrate, DJ-P9508 or Chemlok608 is recommended.
Parameters setting recommended for injection molding: actual mold temperature between 155°C-170°C, and curing time between 300s-720s (curing time shall be adjusted according to different shed size)

E. Product color

Color of NJ-152B-60 can be optional for dark gray, light gray, iron red, or customized color if required.

F. Storage

The container must be protected against sunlight.
Keep separate from organic rubber and crosslinker chemicals.
The product has a shelf life of around 10 months when stored below 30°C in the originally sealed container; The better use before production date of each batch in 3 months.
Storage beyond the expiry date does not necessarily mean that the product is no longer usable. In this case however, the properties required for the intended use must be checked for quality assurance reasons.

G. Packaging

NJ-152B-60 is commercially available in 25kg and 500kg sea worthy cardboard boxes with plywood pallet support suitable for forklift handling.



H. Safety notes

Comprehensive instructions are given in the Material Safety Data Sheets on www.njsilicone.com.

Product Data		
Property	Typical Value	Test Method
Hardness, Shore A	65±5	GB/T 531 & ISO 868
Density, g/cm ³	1.53±0.02	GB/T 533 & ISO 1183-1A
Tensile strength, MPa	≥5.0	GB/T 528 & ISO 37
Elongation at break, %	≥220	GB/T 528 & ISO 37
Tear strength, kN/m	≥12	GB/T 529 & ASTM 624B
Mooney Viscosity, ML (1+4) 100°C	16-22	GB/T 12828-2006
Rheometry T90, second (10 mins@ 160°C)	110-150	GB/T 16584
Volume resistivity, Ω·cm	≥2.0×10 ¹⁴	GB/T 1692 & IEC 60093
Dielectric strength, kV/mm 1mm specimen	≥20	GB/T 1695 & IEC 60243
Tracking & Erosion resistance, class	TM1A4.5, Depth of Erosion≤2.5mm	GB/T 6553 & IEC 60587
Arc Resistance	>295 s	IEC 61621
Dissipation Factor (50Hz), [tan δ]	2.10 ⁻²	IEC 60250
Flammability, class	FV-0	UL-94
Hydrophobicity, class	HC2	DL/T 376

Remarks: Vulcanization condition for test piece (thickness: 2mm): 170°C×6min;

Curing agent: DMBH, added amount: 1.2% - 1.5%.

These figures are only intended as a guide and should not be used in preparing specifications.