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# **Product Data**

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## **Silicone Insulation-Protection Compound**

# **TSK551**

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TSK551 is a grease-like silicone compound and designed for application mainly to outdoor electrical insulators. The compound serves to protect the insulators against insulation deterioration due to deposits of dust, salt particles or other types of contaminant carried in the air. Surfaces coated with silicone compound repel water and resist corona.

Depending on the location and cleanliness of the air, electrical insulators, particularly that exposed to weather, is liable to become more or less dirty with dust, smoke or salt particles and unless this surfaces is cleaned periodically, this insulating ability decreases progressively to result ultimately in insulation breakdown. Salt or dust particles deposited on the insulator surfaces coated with the compound become embedded in and enveloped by the silicone coating, so that the surface is always clean and remain water-repellent. The effectiveness of the silicone coating persists for a long period of time ranging from half a year to three years. No attention is required for the coating once made until its service life nears the end.

### **KEY FEATURES**

- ◆ Excellent dielectric properties, especially in arc resistance
- ◆ Wide operating temperature range: -50 to 200°C
- ◆ Excellent water repellency

### **APPLICATIONS**

- ◆ Prevention of salt and dust contamination of insulator
- ◆ Electrical insulation of connectors
- ◆ Prevents corona discharge
- ◆ Moisture proof sealing of electrical contact

## TYPICAL PROPERTY DATA

PROPERTIES		
Appearance		Green
Specific gravity (25°C)		1.03
Penetration (Worked) <sup>*1</sup>		220
Bleed <sup>*1</sup> (150°C, 24h)	%	1.0
Evaporation (150°C, 24h)	%	0.3
Base oil pour point	°C	-60
Volume resistivity <sup>*2</sup>	Ω·cm	2.0×10 <sup>15</sup>
Dielectric strength <sup>*3</sup>	kV/0.25mm	8.0
Dielectric constant (60Hz)		2.80
Dissipation factor (60Hz)		0.0002
Arc resistance <sup>*4</sup>	s	120<

\*1: JIS K 2220

\*2: MIL-S-8660B

\*3: JIS C 2380

\*4: ASTM D-495

## INSTRUCTION FOR USE FOR INSULATOR

1. Insulator surfaces to be coated with the compound must be cleaned and made perfectly dry.
2. The compound may be applied with the bare hand or with a brush or cloth.
3. The coating should be 0.5 to 2 mm in thickness. The dirtier the air, the thicker the coating should be. The coating job should be done on dry sunny days.

## LIFE AND JUDGEMENT

When the surface of insulator is stained with foreign matter such as salt and dust, and the amoeba action of silicone compound has its own limit, it will lose water repellency and the effectiveness of application of silicone compound will be lost. Although the life depends on the thickness of a silicone compound and amount of contamination, generally it will last 0.5 to two years without maintenance. Reapplication time can be judged by investigating surface water repellency every three to six months. When remarkable deterioration is observed, it can be judged that the effectiveness of silicone compound is losing.

## HANDLING AND SAFETY

- ◆ Wear eye protection and protective gloves as required while handling the product.
- ◆ Use the product in a well ventilated area.

## STORAGE

- ◆ Store in a cool and dry place out of direct sunlight.
- ◆ Keep out of the reach of children.

## PACKAGING

- ◆ 180g tube available in cases of 20
- ◆ 1kg can available in cases of 10
- ◆ 4kg can available in cases of 4

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