

## **Product Data**

# **Silicone Grease for Plastic Lubrication TSK5450**

TSK5450 is a silicone fluid based lubricating grease compounded special fillers. This product is suited for light lubrication between plastics

### **KEY PERFORMANCE PROPERTIES**

- ◆ Suited for light lubrication between plastics
- ◆ Operating temperature range: -50 ~ +200°C
- ◆ Low volatility

### **APPLICATIONS**

- ◆ Lubrication for volume sliders, connectors
- ◆ Lubrication for plastic parts of car's electric system
- ◆ Lubrication for plastic gears of office machine and home appliances

### **TYPICAL PROPERTY DATA**

(JIS K 2220)

<b>PROPERTIES</b>		
Appearance		Off white, translucent
Specific gravity (25°C)		1.14
Penetration (worked)		360
Evaporation (150°C) %	3h	0.1
	384h	0.1
Base oil pour point	°C	-55
Volatile siloxane* (D <sub>3</sub> -D <sub>10</sub> )	ppm	150
Volume resistivity (MIL-S-8660B)	Ω·cm	1.0×10 <sup>15</sup>
Dielectric constant* (60Hz)		2.8
Dissipation factor* (60Hz)		0.002
Copper corrosion		No corrosion

\* In-house test method

*Typical property data values should not be used as specifications.*

## COMPATIBILITY WITH PLASTICS

PLASTICS	CRACK	COLOR CHANGE
Polycarbonate	No crack	No change
Polyacetal	No crack	No change
Phenolic resin	No crack	No change
Polystyrene	No crack	No change
Rigid polyvinyl chloride	No crack	No change
ABS	No crack	No change

Test method

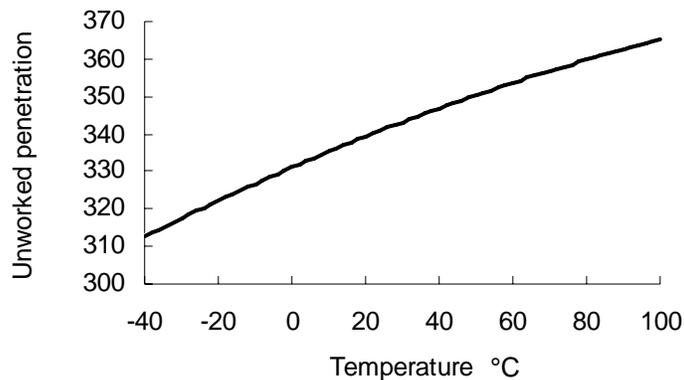
Test specimen: 180mm × 10mm × 2mm

Procedure:

1. The test specimen is bent into a circular arc of 170mm chord length.
2. The grease is applied on the outside surface of the specimen.
3. The specimen is left in the 70°C oven for 250 hours.
4. After that, an appearance of the specimen is observed.

Note: A preliminary test should be performed before using

## UNWORKED PENETRATION VS TEMPERATURE



## WEAR RESISTANCE

Wear volume was measured by Pin-on-disk friction and wear tester.

Test condition

Load: 40N, Speed: 0.8m/s, Disk: S45C steel, Disk pin: POM

Grease	Wear volume mm <sup>3</sup> /(N·km)
TSK5450	0.25
None	0.50

## HANDLING AND SAFETY

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

## STORAGE

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

## PACKAGING

- ◆ 1kg can available in cases of 10
- ◆ 10kg pail available
- ◆ 20kg pail available

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### **FOR INDUSTRIAL USE ONLY**

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