Advanced Materials

YG6111

Thermally Conductive Silicone Compound

Product Description

YG6111 is a metal oxide-filled, grease-like silicone compound designed to provide thermal conductivity. Its combination of high purity fillers and silicone results in a smooth, homogenous, high-temperature dielectric compound. It has virtually no oil separation nor high temperature weight loss.

YG6111 is an excellent candidate for use in semiconductor devices and thermal joints where it maintains a positive seal to improve heat transfer. This helps contribute to lower operating temperatures of electric and electronic components, and increased efficiency and long-term integrity of components.

Typical Properties

Appearance		White
Specific Gravity (25°C)		2.45
Penetration ¹ (25°C)		310
Bleed ¹ (150°C, 24h)	%	0.4
Evaporation (150°C, 24h)	%	0.1
Thermal Conductivity	W/m·K	0.84
Volume Resistivity ²	MΩ·m	2.0×10^{6}
Dielectric Constant (60 Hz)		5.0
Dielectric Loss (60 Hz)		0.006
Volatile Siloxane (D3-D10)	ppm	100

¹JIS K 2220 ²MIL-S-8660B

Typical property data values should not be used as specifications.

Key Features and Typical Benefits

- High thermal conductivity
- Wide operating temperature range: -50°C to 200°C
- Low Volatility
- Low Bleed

Potential Applications

- Thermal interface to heatsinks, and base & mounting studs of transistors and diodes
- High voltage corona suppressant, non-flammable coating in connections for flyback transformers in TVs and similar applications.

Compatibility with Plastics and Rubber

Substrate	Cracking	Color Change
ABS	No Crack	No Change
PBT	No Crack	No Change
PPS	No Crack	No Change
Polycarbonate	No Crack	No Change
Nylon 66	No Crack	No Change
NBR	No Crack	No Change

Test Method:

Test specimen 80mm x 12mm x 2mm

Procedure:

- 1. Test specimen is bent into a circular arc of 75mm chord length.
- 2. YG6111 is applied on the outside surface of the specimen.
- 3. The specimen is exposed to 70°C for 250 hours.
- 4. Appearance of specimen observed.

Note: A preliminary test should be performed prior to use

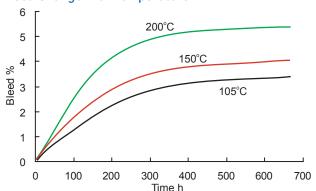
At GE Advanced Materials — Silicones, our versatile materials are the starting point for our creative approach to ideas that help enable new developments across hundreds of industrial and consumer applications. We are helping customers solve

product, process, and performance problems; our silanes, fluids, elastomers, sealants, resins, adhesives, urethane additives, and other specialty products are delivering innovation in everything from car engines to biomedical devices. From

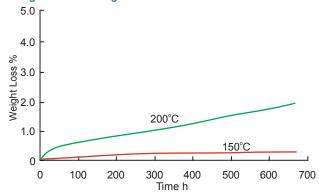
helping to develop safer tires and keeping electronics cooler, to improving the feel of lipstick and ensuring the reliability of adhesives, our technologies and enabling solutions are at the frontline of innovation.



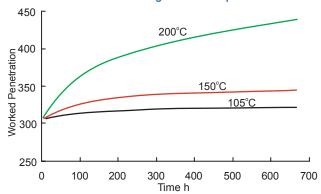
Bleed Change with Temperature



Weight Loss Change with Heat



Worked Penetration Change with Temperature



Handling and Safety

- Wear eye protection and protective gloves when handling the product.
- Use the product in a well-ventilated area.

Storage

- Store in a dark, cool place out of direct sunlight.
- Keep out of reach of children.

Shelf Life

• 18 months from date of manufacture when maintained under recommended storage conditions.

Packaging

- 200g tube available in cases of 20
- 1kg can available in cases of 10
- 20kg pail

Local Contacts

Regional Information	Phone	Fax
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P.02 GE Advanced Materials 01/06 - pdf