

Product Data

Thermally Conductive Silicone Oil Compound YG6111

YG6111 is a metal-oxide-filled silicone compound designed to provide superior thermal conductivity. This combination of high purity fillers and silicone results in a smooth, homogeneous, white, high temperature dielectric compound. It has virtually no oil separation or high temperature weight loss and possesses truly outstanding thermal conduction properties.

YG6111 is suggested for use in semi-conductor devices, and thermal joints where it maintains a positive seal which improves the heat transfer. This means that electrical and electronic components will perform their function at much lower temperatures, thereby increasing their efficiency and prolonging their life.

KEY FEATURES

- ◆ High thermal conductivity
- ◆ Wide operating temperature range: -50°C to 200°C
- ◆ Low volatility

APPLICATIONS

- ◆ For heat-sink of semiconductor devices

TYPICAL PROPERTY DATA

PROPERTIES		
Appearance		White
Specific gravity (25°C)		2.45
Worked 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	Ω·cm	2×10 ¹⁴
Dielectric constant (60Hz)		5.0
Dissipation factor (60Hz)		0.006
Volatile siloxane (D ₃ -D ₁₀)	ppm	100

*1:JIS K 2220

*2:MIL-S-8660B

Typical property data values should not be used as specifications.

COMPATIBILITY WITH PLASTICS AND RUBBER

SUBSTRATE	CRACK	COLOR CHANGE
ABS	No crack	No change
PBT	No crack	No change
PPS	No crack	No change
Polycarbonate	No crack	No change
Nylon 6,6	No crack	No change
NBR	No crack	No change

Test method

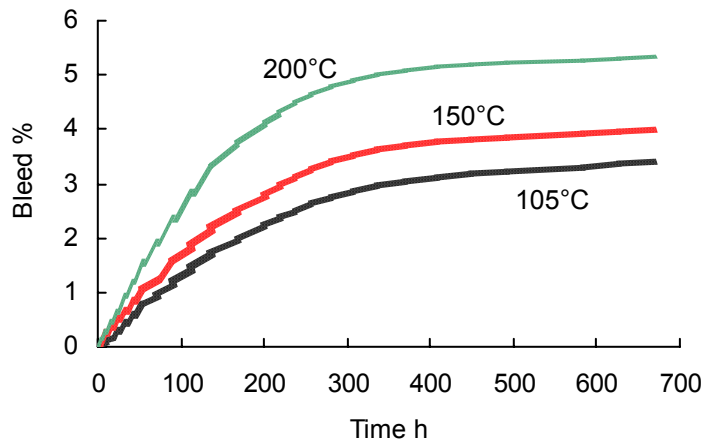
Test specimen: 80mm×12mm×2mm

Procedure:

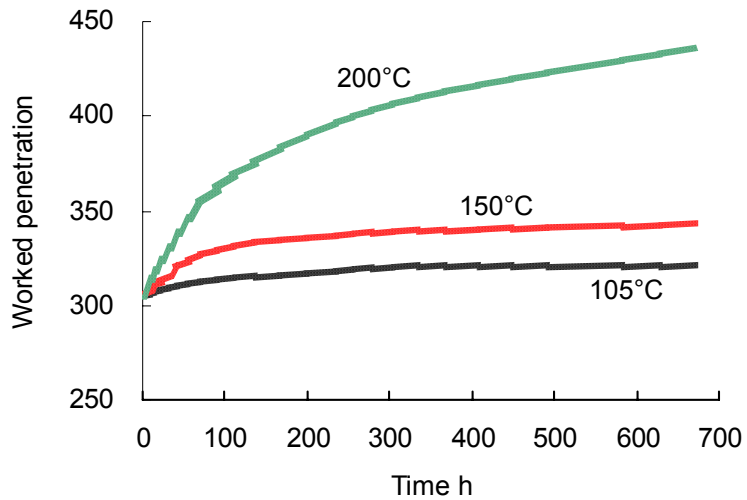
1. The test specimen is bent into a circular arc of 75mm chord length.
2. YG6111 is applied on the outside surface of the specimen.
3. The specimen is left in the 70°C oven for 250 hours.
4. After that, an appearance of the specimen is observed.

Note: A preliminary test should be performed before using.

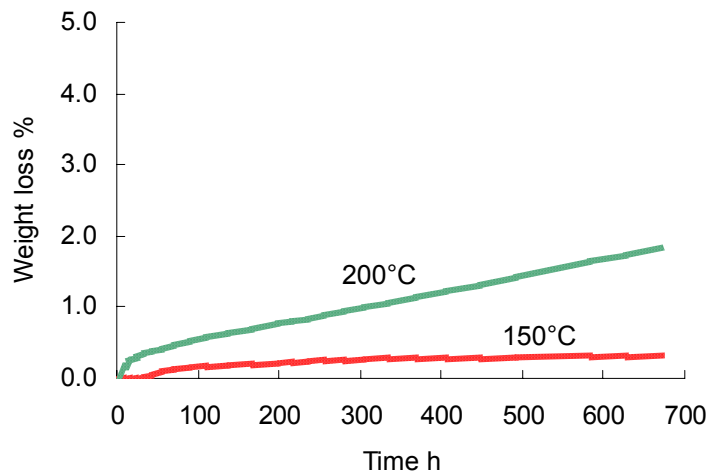
BLEED CHANGE WITH TEMPERATURE



WORKED PENETRATION CHANGE WITH TEMPERATURE



WEIGHT LOSS CHANGE WITH HEATING



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, dry place out of direct sunlight.
- ◆ Keep out of the reach of children.

PACKAGING

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

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