

Technical Data Sheet

ACS Material Thermal Conductive Gel

Table of Contents

1 - Features

2- Characterizations

Contact Information:

Manufacturer: ACS Material, LLC. Address: 959 E Walnut St. Suite 100 Pasadena, CA 91106, USA

Phone: (866)-227-0656 Fax: (781)-518-0284

E-Mail: contact@acsmaterial.com

Revision: 062623

The two-component thermal conductive gel sealing material with a thermal conductivity ranging from 2.0 to 8.0 W/m*K is suitable for applications with low assembly stress and can be applied using automated dispensing systems. The material is mixed thoroughly through a helical mixing tube and can cure at room temperature or at high temperatures. The surface tension of the gel is extremely low (almost negligible), allowing it to conform well to the interface of the materials and resulting in low thermal resistance. Once cured, its performance is equivalent to that of thermal conductive pads, providing excellent thermal conductivity, insulation, and shock absorption. Additionally, the thermal conductive gel is made of an organic silicon formulation that is non-toxic, odorless, non-corrosive, and compliant with RoHS directives and environmental requirements.

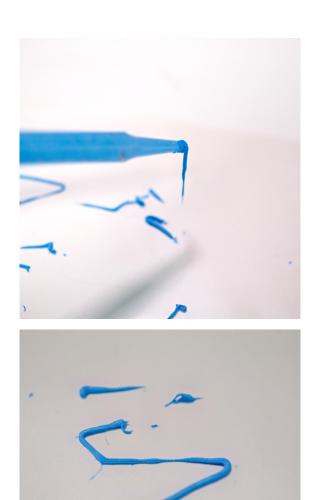


1. Features

- Good insulation and high/low temperature resistance.
- Flame retardant rating of UL94 V0
- Good workability and flexibility

2. Characterizations

Before Curing					
Туре	A		В		Testing Standard
	Tube 1	Tube 2	Tube 1	Tube 2	-
Color	Pink/Optional	White	Yellow/Optional	White	-
Viscosity @25°C 14#rotor	20*10^4 cps	15*10^4 cps	90*10^4 cps	85*10^4 cps	ASTM D445
Density	2.0 g/cc	2.0 g/cc	3.5 g/cc	3.5 g/cc	ASTM D792
After Curing					
Thermal Conductive	2.0 W/m*K		8.0 W/m*K		IS022007-2
Size	50ml		400ml		-
Density	2.0 g/cc		3.5 g/cc		ASTM D792
Hardness	60 Shore00		60 Shore00		ASTM D2240
Flame Retardant Rating	V0		V0		UL94
Surface Dry Time @25°C	90 min		90 min		Manual
Curing Time @ 25°C	24 h		24 h		Hardness Test
Tensile Strength	0.1 MPa		0.1 MPa		ASTM D412
Elongation at Break	30%		30%		ASTM D412
Breakdown Voltage	8 kV/mm		8 kV/mm		ASTM D149
Volume Resistivity	>10 ¹² Ohm*cm		>10 ¹² Ohm*cm		ASTM D257
D ₄ ~D ₁₀ Content	<100 ppm		<100 ppm		GC
Recommended using temperature range	-40 ~ +150 °C		-40 ~ +150 °C		-



Disclaimer: ACS Material, LLC believes that the information in this Technical Data Sheet is accurate and represents the best and most current information available to us. ACS Material makes no representations or warranties either express or implied, regarding the suitability of the material for any purpose or the accuracy of the information contained within this document. Accordingly, ACS Material will not be responsible for damages resulting from use of or reliance upon this information.