

Product Information

Silicon-Based Compounds

DOW CORNING

Dow Corning® 340 Heat Sink Compound

FEATURES

- High thermal conductivity
- Low bleed
- Stable at high temperatures

COMPOSITION

- Greaselike silicone fluid thickened with metal oxide filler

Compound provides thermal coupling of electrical/electronic devices to heat sinks

USES

Dow Corning® 340 Heat Sink Compound is applied to the base and mounting studs of transistors, diodes and silicon-controlled rectifiers. It can also serve as an effective thermal coupler for many heat sink devices where efficient cooling is required. It is also suitable for aircraft engines where heat sink properties are required.

This product has also been used as a high-voltage corona suppressant, nonflammable coating in connections for flyback transformers and TV sets and similar applications.

TYPICAL PROPERTIES

Specification Writers: Please contact your local Dow Corning sales office or your Global Dow Corning Connection before writing specifications on this product.

Method	Test	Unit	Result
	Color		White
ASTM D 217	Consistency, Penetration unworked		300
	worked 60 strokes		275
	worked 100,000 strokes		245
Fed. Std. 791, Method 321.2	Bleed after 24 hr at 392°F (200°C)	percent	0.05
Fed. Std. 791, Method 321.2	Evaporation after 24 hr at 392°F (200°C)	percent	0.5
ASTM D 2265	Drop Point	°F (°C)	570 (300)
ASTM D 1475	Specific Gravity at 77°F (25°C)		2.1
CTM ¹ 0069	Thermal Conductivity, K Factor	cal/sec-cm-°C	0.0014
ASTM D 149	Dielectric Strength ²	volts/mil	210
ASTM D 495	Arc Resistance	seconds	165
ASTM D 150	Dielectric Constant, at 100 Hz		5
	at 100 kHz		5
ASTM D 150	Dissipation Factor, at 100 Hz		0.01
	at 100 kHz		0.02
ASTM D 1169	Volume Resistivity	ohm-cm	2 x 10 ¹⁵
ASTM D 4049	Water Spray Off	percent	1.3

¹CTMs (Corporate Test Methods) correspond to standard ASTM tests in most instances.

²Measured using a sample thickness of 50 mils.

DESCRIPTION

Dow Corning 340 Heat Sink Compound is a grease-like silicone material, heavily filled with heat conductive metal oxides. This combination promotes high thermal conductivity, low bleed and high-temperature stability.

The compound resists changes in consistency at temperatures up to approximately 350°F (177°C). In doing so, it helps maintain a positive heat sink seal to improve heat transfer from the electrical/electronic device to the heat sink or chassis, thereby increasing overall efficiency of the device.

HANDLING PRECAUTIONS

PRODUCT SAFETY INFORMATION REQUIRED FOR SAFE USE IS NOT INCLUDED IN THIS DOCUMENT. BEFORE HANDLING, READ PRODUCT AND MATERIAL SAFETY DATA SHEETS AND CONTAINER LABELS FOR SAFE USE, PHYSICAL AND HEALTH HAZARD INFORMATION. THE MATERIAL SAFETY DATA SHEET IS AVAILABLE FROM YOUR DOW CORNING REPRESENTATIVE, OR DISTRIBUTOR, OR BY CALLING YOUR GLOBAL DOW CORNING CONNECTION.

USABLE LIFE AND STORAGE

Dow Corning 340 Heat Sink Compound has a shelf life of 60 months from date of manufacture. Refer to product packaging for "Use By" date.

PACKAGING

Dow Corning 340 Heat Sink Compound is available in 5-oz (142-g) tubes, 13.5-oz (383-g) weight/5.75-fl oz (170-mL) volume *Semco*® cartridges, 20-lb (9-kg) pails, and 275-lb (124.7-kg) drums for production lines and large scale operations. All weights, net.

LIMITATIONS

This product is neither tested nor represented as suitable for medical or pharmaceutical uses.

SHIPPING LIMITATIONS

None.

WARRANTY INFORMATION

The information contained herein is offered in good faith and is believed to be accurate. However, because conditions and methods of use of our products are beyond our control, this

information should not be used in substitution for customer's tests to ensure that *Dow Corning*'s products are safe, effective, and fully satisfactory for the intended end use.

Dow Corning's sole warranty is that the product will meet the *Dow Corning* sales specifications in effect at the time of shipment. Your exclusive remedy for breach of such warranty is limited to refund of purchase price or replacement of any product shown to be other than as warranted. *Dow Corning* specifically disclaims any other express or implied warranty of fitness for a particular purpose or merchantability. Unless *Dow Corning* provides you with a specific, duly signed endorsement of fitness for use, *Dow Corning* disclaims liability for any incidental or consequential damages. Suggestions of use shall not be taken as inducements to infringe any patent.