

Product Information for Dow Corning® 340 Heat Sink Compound. Thermal Coupling of Electrical/ Electronic Devices to Heat Sinks

Physical Form	Grease-like
Type	Silicone material with metal oxides
Colour	White, opaque
Special Properties	High thermal conductivity, low bleed, stable at high temperatures
Application	Thermal coupling of electrical/electronic devices to heat sinks

Description

Dow Corning® 340 Heat Sink Compound is a grease-like silicone material, heavily filled with heat-conductive metal oxides. This combination ensures high thermal conductivity, low bleed and high-temperature stability. The resulting compound will not dry out, harden, or melt, even after long-term exposure to temperatures up to 200 °C. It maintains a positive heat sink seal that improves heat transfer from the electrical/electronic device to the heat sink or chassis, thereby increasing the overall efficiency of the device.

Applications

Dow Corning 340 Heat Sink Compound is applied to the base and mounting studs of transistors and diodes, and silicon controlled rectifiers. It is also an effective thermal coupler for any heat sink device where efficient cooling is required.

Dow Corning 340 Heat Sink Compound has also been used as a high voltage corona-suppressant coating in connections for flyback transformers in TV sets and in similar applications.

Handling Precautions

Dow Corning 340 Heat Sink Compound may cause temporary discomfort if accidentally rubbed into the eyes, which can be relieved by flushing the eye with water.

A Safe Handling Instruction Sheet for this product should be obtained from your nearest Dow Corning sales office.

Usable Life and Storage

When stored at or below 25°C in the original unopened containers, Dow Corning 340 Heat Sink Compound has a usable life of 24 months from date of production.

Dow Corning will guarantee the usable life of this product until the date indicated on the packaging. This date is shown by the letters "EXP" (meaning Expiry) followed by 4 digits, which stand for the month (last day) and year.

Example: "EXP" 03/99, means use by 31 March 1999.

Typical Properties

These values are not intended for use in preparing specifications.

Consistency – Penetration, worked (60) and measured within 1 minute after working ¹	260 nil
Bleed, 24 hours at 200 °C, %	0.5
Evaporation, 24 hours at 200 °C, %	2.45
Specific Gravity at 25 °C/15.6 °C	0.42
Thermal Conductivity, K Factor, W/m.K	21
Electric Strength ² at 50 Hz, kV/mm	120
Arc Resistance, secs ³	
Dielectric Constant	4.9
– at 50 Hz	4.9
– at 1000 Hz	
Dissipation Factor	0.0050
– at 50 Hz	0.0010
– at 1000 Hz	2 x 10 ¹⁵
Volume Resistivity, ohm.cm	

Test Methods

1. ASTM D 217.

2. CTM 0171, Dow Corning Corporate Test Method obtainable from Dow Corning offices.

3. CTM 0114, Dow Corning Corporate Test Method obtainable from Dow Corning offices.

Specification Writers: Please contact Dow Corning Europe, La Hulpe, Belgium, before writing specifications on this product.

Important

Users Please Read

The information and data contained herein are believed to be accurate and reliable; however, it is the user's responsibility to determine suitability of use. Since Dow Corning cannot know all of the uses to which its products may be put or the conditions of use, it makes no warranties concerning the fitness or suitability of its products for a particular use or purpose.

You should thoroughly test any proposed use of our products and independently conclude satisfactory performance in your application. Likewise, if the manner in which our products are used requires governmental approval or clearance, you must obtain it.

PROD: DOW CORNING® 340 HEAT SINK
COMPOUND

Updated: 15/08/89

SUPPLY AND TRANSPORT INFORMATION

EEC SUPPLY LABELLING

SYMBOLS: -

RISK PHRASES: -

HAZARD NAME: -

SAFETY PHRASES: -

TRANSPORT CLASSIFICATION

ADR-RID: -

TRANSPORT NAME: -

SYMBOLS: -

UNNO: -

IMO PROPER SHIPPING NAME: -

IMO CLASS: -

IMO PACKING GROUP: -

IMO PAGE: -

ICAO PROPER SHIPPING NAME: -

ICAO CLASS: - ICAO SUB.: -

ICAO PACK GP.: -

OTHER HAZARD DATA

None known.

All information and instructions provided in these Safe Handling Instructions (SHI) are based on the current state of scientific and technical knowledge at the date indicated on the present SHI. Dow Corning shall not be held responsible for any defect in the product covered by this SHI should the existence of such defect not be detectable considering the current state of scientific and technical knowledge dated 15/08/89

Dow Corning warrants only that its product will meet its specifications. There is no warranty of merchantability or fitness for use, nor any other express or implied warranties. The user's exclusive remedy and Dow Corning's sole liability is limited to refund of the purchase price or replacement of any product shown to be otherwise than warranted. Dow Corning will not be liable to consequential damages of any kind.

Suggestions of use should not be taken as inducements to infringe any patent.

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