Product Information

Thermal Interface - Wet Dispensed

Dow Corning® 340 Heat Sink Compound

White, non-curing and non-flowing thermally conductive compound

FEATURES

- Non-flowing
- Moderate thermal conductivity

BENEFITS

- No need for ovens or curing
- Heat flow away from electronic components can increase reliability

POTENTIAL USES

- Thermal coupling of electrical/electronic devices to heat sinks

APPLICATION METHODS

- Automated or manual dispensing

TYPICAL PROPERTIES

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

Property	Unit	Value
Viscosity	cP	542000
	mPa-sec	542000
	Pa-sec	542
Specific Gravity (Uncured)	-	2.13
NVC (Non Volatile Content)	%	70
Thermal Conductivity	btu/hr ft degF	0.393
	W/mK	0.68
Thermal Resistance @ 40 psi	ºC*cm2/W	0.16
Penetration (worked)	1/10 mm	285
Bleed	%	0.35
Evaporation	%	0.27
Shelf Life @ 38C	months	60

DESCRIPTION

Dow Corning thermally conductive compounds are greaselike silicone materials, heavily filled with heat-conductive metal oxides. This combination promotes high thermal conductivity, low bleed and high-temperature stability. The compounds resist changes in consistency at temperatures up to 177°C (350°F), maintaining a positive heat sink seal to improve heat transfer from the electrical/electronic device to the heat sink or chassis, thereby increasing the overall efficiency of the device. Long-term, reliable protection of sensitive circuits and components is important in many of today's delicate and demanding electronic applications. With the increase in processing power and the trend toward smaller, more compact electronic modules, the need for thermal management is growing. Thermally conductive silicones function as heat transfer media, durable dielectric insulation, barriers against environmental contaminants and as stress-relieving shock and vibration absorbers over a wide temperature and humidity range. In addition to sustaining their physical and electrical properties over a broad range of operating conditions, silicones are resistant to ozone and ultraviolet degradation and have good chemical stability. Good heat transfer is dependent on a good interface between the heat producing device and the heat transfer media. Silicones have a low surface tension that enables them to wet most

surfaces, which can lower the thermal contact resistance between the substrate and the material.

SOLVENT EXPOSURE

Although highly filled silicones such as those discussed in this data sheet are generally more resistant to solvent or fuel exposure, standard silicones are intended only to survive splash or intermittent exposures. Testing should be done to confirm performance of the adhesives in the application and under the specified environmental conditions.

STORAGE AND SHELF LIFE

Shelf life is indicated by the "Use By" date found on the product label. For best results, Dow Corning thermally conductive materials should be stored at or below the maximum specified storage temperature. Special precautions must be taken to prevent moisture from contacting these materials. Containers should be kept tightly closed and head or air space minimized. Partially filled containers should be purged with dry air or other gases, such as nitrogen. Any special storage and handling instructions will be printed on the product containers.

HEALTH AND ENVIRONMENTAL INFORMATION

To support customers in their product safety needs, Dow Corning has an extensive Product Stewardship organization and a team of Product Safety and Regulatory Compliance (PS&RC) specialists available in each area. For further information, please see our website, www.dowcorning.com, or consult your local Dow Corning representative.

LIMITATIONS

These products are neither tested nor represented as suitable for medical or pharmaceutical uses.

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