



STYCAST[®] TC 8 M

Thermally Conductive Silicone Grease

Key Feature:	Benefit:
<ul style="list-style-type: none"> Very high thermal conductivity 	<ul style="list-style-type: none"> Provides a conductive heat path
<ul style="list-style-type: none"> Does not harden 	<ul style="list-style-type: none"> Components may be removed and replaced
<ul style="list-style-type: none"> Good electrical insulation properties 	<ul style="list-style-type: none"> Can be used in high voltage applications

Product Description:

STYCAST TC 8 M is a thermally conductive, silicone thermal grease. It features very high thermal conductivity and good electrical insulation properties. STYCAST TC 8 M will not harden even on long exposure to elevated temperatures so that components can easily be removed and replaced.

Applications:

STYCAST TC 8 M is designed as a thermal grease to conduct heat between heat generating components and heat dissipating structures. It has been used for semiconductor devices to heat sinks, power resistors to a chassis, thermostats to mounting surfaces and thermoelectric devices to radiators.

Instructions For Use:

Thoroughly read the information concerning health and safety contained in this bulletin before using. Observe all precautionary statements that appear on the product label and/or contained in individual Material Safety Data Sheets (MSDS).

Although STYCAST TC 8 M does not normally settle in the container, storage for long periods of time at elevated temperatures may result in slight separation of the fillers from the silicone oil. If this condition is seen to exist, the fillers may be easily redispersed by hand or mechanical mixing.

In order to obtain the optimal thermal conductivity of STYCAST TC 8 M, any entrained air should be removed from the product in a vacuum chamber. When used in thin films, the removal of entrained air may not be necessary.

STYCAST TC 8 M may be dispensed from syringes, cartridges, automatic dispensing equipment or other similar devices. Thin films are conveniently applied with a small stiff brush or squeegee. Excess is squeezed out when surfaces are mated. Keep film thickness to a minimum.

Properties of Material As Supplied:

Property	Method	Unit	Value
Chemical Type			Silicone grease
Appearance Visual			White paste
Density T	P-13	g/cm ³	2.53

Properties of Material After Application:

Property	Method	Unit	Value
Thermal Conductivity	ASTM-D-2214	W/m.K	2.3
		Btu-in/hr-ft ² -°F	16
Temperature Range of Use		°C	-40 to +200
Dielectric Strength	TP-297	kV/mm	19.7
		V/mil	500
Volume Resistivity @ 25°C	TP-183	Ohm-cm	10 ¹³

*T*P's are internal test procedures typically derived from ASTM or other norms. Copies of these procedures can be obtained upon request.

Storage and Handling:

The shelf life of STYCAST TC 8 M is 12 months at 25°C. For best results, store in original, tightly covered containers. Storage in cool, clean and dry areas is recommended.

Health and Safety:

The STYCAST TC 8 M, like most industrial compounds, possesses the ability to cause skin and eye irritation upon contact. Handling this product at elevated temperatures may also generate vapors irritating to the respiratory system.

Good industrial hygiene and safety practices should be followed when handling this product. Proper eye protection and appropriate chemical resistant clothing should be worn to minimize direct contact. Consult the Material Safety Data Sheet (MSDS) for detailed recommendations on the use of engineering controls and personal protective equipment.

This information is only a brief summary of the available safety and health data. Thoroughly review the MSDS for more complete information before using this product.

Attention Specification Writers:

The values contained herein are considered typical properties only and are not intended to be used as specification limits.

Medical Implantable Disclaimer

In the event this product is intended by you for use in implantation in the human body, you are hereby advised that Henkel Corporation has not performed clinical testing of these materials for implantation in the human body nor has Henkel Corporation sought, nor received, approval from the FDA for the use of these material in implantation in the human body. It is YOUR responsibility, as a manufacturer of any such device, to ensure that all materials and processes relating to the manufacture of any medical device fully comply with all applicable federal, state and local laws, rules, regulations and requirements as well as any such laws, rules, regulations, directives or other orders of any foreign country where such product is sold. If you have not undertaken the necessary investigations to ensure compliance you are advised NOT TO USE this product in the manufacture of any device which is to be implanted in the human body. No representative of ours has any authority to change the foregoing provisions."

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Note

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