

# SILICONE HEAT TRANSFER COMPOUND PART NO. 49644

## TYPICAL PHYSICAL PROPERTIES

Property	Value	Unit
NLGI Grade	2	
Texture	Smooth	
Color	White	
Penetration, Worked	290	0.1mm
Dropping Point	>500 (260)	<sup>o</sup> F ( <sup>o</sup> C)
Bleed, 24 hrs @200 <sup>0</sup> C	0.1	%
Evaporation, 24 hrs @200°C	0.3	%
Water Washout, 1hr @100°F	0.4	%
Dielectric Strength 0.05" Gap	405	volts/mil
Dielectric Strength 0.01" Gap	600	volts/mil
Dissipation Factor, 50Hz	4.93	
Dissipation Factor, 100Hz	4.90	
Volume Resistivity, RT	2x10 <sup>15</sup>	ohm-cm
Breakage Voltage, 0.05" Gap	20,500	volts
Breakage Voltage, 0.01" Gap	6,100	volts
Arc Resistance, RT	77	sec
Thermal Conductivity, 36°C	1.8x10 <sup>-3</sup>	cal/sec/cm <sup>-1o</sup> K
Low Temp Torque, -65°F	Start 7000	gram/cm
Solidification Point,		0
Starting Torque >10,000	68 gram/cm	
Apparent Viscosity @25 <sup>0</sup> C	1.5x10 <sup>16</sup>	
voc	0.0	% wt.



## DESCRIPTION

**Dynatex**<sup>®</sup> Silicone Heat Transfer Compound is a silicone fluid based, grease-like material specially blended with thermally conductive fine metal oxide powders. This formulation results in very high thermal conductivity, low bleed, and excellent high temperature stability. This highly viscous product will not harden, melt or dry out, and will stubbornly adhere to metal surfaces even when exposed to high temperatures for extended periods of time. Dynatex<sup>®</sup> Silicone Heat Transfer Compound is used as a heat transfer medium in the electrical and electronic industry. *Dynatex*<sup>®</sup> Silicone Heat Transfer Compound is water resistant, chemically inactive and hydrolytically stable.

## FEATURES

- Water resistant
- Very high thermal conductivity
- Excellent high temperature stability
- Low bleed
- Will not harden, melt or dry out
- Chemically inactive

## TYPICAL APPLICATIONS

- Transistors
- Diodes
- Rectifiers
- Transformers
- Thermocouple and thermometer wells
- Mounting semi-conductor devices
- Thermal joints

#### METHOD OF APPLICATION

Various methods including automated pumping systems, by hand, brushing, or wiping. If the container shows excess oil, mix thoroughly until oil is dispersed.

#### STORAGE AND SHELF LIFE

When stored in the original unopened containers at or below 90°F (32°C), **Dynatex**<sup>®</sup> Silicone Heat Transfer Compound has a shelf life of 12 months from date of shipment.

In Countries where high heat and humidity are a factor, special precautions must be taken. Store product in a covered, well-ventilated warehouse and avoid excessive heat conditions. Storage in high heat, high humidity conditions may reduce shelf life by up to 30%. Rotation of stock is an absolute necessity. Cartons should always be stacked upright. DO NOT stack cartons on their side. **NEVER** stack cartons more than 8 high. DO NOT store within 1 meter (4 feet) of roofline of the warehouse or storage building.

#### **USERS PLEASE READ**

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

It is the user's responsibility to thoroughly test any proposed use of our products and independently conclude satisfactory performance in the application.

Likewise, if the application, product specifications or manner in which our products are used require government approval or clearance, it is the sole responsibility of the user to obtain sure authorization.

The supplier warrants only that its products will meet its specifications. There is no use, nor any other express or implied warranty. The users exclusive remedy and the suppliers sole liability is limited to refund of the purchase price or replacement of any product when to be otherwise than as warranted. The supplier will not be liable for incidental or consequential damages of any kind.

Suggestions of uses should not be taken as inducements to infringe any patents.



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