

TECHNICAL DATA SHEET

SILICONE HEAT TRANSFER COMPOUND PART NO. 49643

TYPICAL PHYSICAL PROPERTIES

Property	Value	Unit
NLGI Grade	2	
Texture	Smooth	
Color	White	
Penetration, Worked	290	0.1mm
Dropping Point	>500 (260)	°F (°C)
Bleed, 24 hrs @200°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 ¹⁵	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 ⁻³	cal/sec/cm ⁻¹ °K
Low Temp Torque, -65°F	Start 7000	gram/cm
Solidification Point,		
Starting Torque >10,000	68 gram/cm	
Apparent Viscosity @25°C	1.5x10 ¹⁶	
VOC	0.0	% wt.



DESCRIPTION

Dynatex® 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® Silicone Heat Transfer Compound* is used as a heat transfer medium in the electrical and electronic industry. *Dynatex® 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® 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 is the user's responsibility to determine suitability of use. Since the supplier cannot know all the uses, or the conditions of use to which these 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 requires government approval or clearance, it is the sole responsibility of the user to obtain sure authorization.

Non-warranty: Because the storage, handling and application of the material is beyond Dynatex control, we can accept no liability for the results obtained. Dynatex sole limited warranty is the product meets the manufacturing specifications in effect at time of shipment. There is no warranty of merchantability or fitness for use, nor any other express or implied warranty. Dynatex will not be liable for incidental or consequential damages of any kind. The exclusive remedy for breach of such limited warranty is a refund of purchase price or replacement of any product shown to be other than as warranted.

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



Dynatex
350 Ring Road
Elizabethtown
Kentucky 42701 USA
(800) 999-2937
TEL (270) 769-5557
FAX (270) 769-6418
Outside U.S.
TEL +1(270) 769-5557
FAX +1(270) 769-6418

Accumetric Asia Pacific, LTD
18 Kitpanit Bldg. 5th Floor
#502 Patpong Road
Suriyawong, Bangrak
Bangkok, 10500 Thailand
TEL (662) 634-3060
FAX (662) 634-3066

Email: sales@dynatexinc.com
Website: www.dynatexinc.com