Technical Data Sheet

BERGQUIST® TGR 5000SF

May 2026

PRODUCT DESCRIPTION

BERGQUIST® TGR 5000SF is a high performance, thermal interface compound.

Technology	silicone free thermal grease
Appearance	Dark gray
Product benefits	• Low thermal impedance and/or thermal resistance • Excellent thermal performance for low pressure application • Excellent reliability • Dispensable in manual or automated process • UV tracer for easy automated inspection
Application	CPUs, GPUs, MCUs, ASICs, Power Conversion, IGBTs and Transistors
Operating temperature range, °C	-40 - 125

FEATURES AND BENEFITS

- Silicone free chemistry
- Solvated for increased dispensing performance, low compression stress and low minimum bondline thickness
- Thermal impedance < 6 mm^2.K/W at 40 psi
- Bondline thickness < 25 µm at 40 psi
- RoHS compliant

BERGQUIST® TGR 5000SF is recommended for high temperature heat transfer in normal applications. It is used between heat generating devices and the surfaces to which they are mounted or other heat dissipating surfaces.

This product delivers extremely low thermal resistance, offers high thermal conductivity over a wide operating temperature range. BERGQUIST® TGR 5000SF is a solvated thermal grease to aid in automated dispensing processing performance and contains a UV tracer for high contrast under UV light in automated inspection processes (AOI). BERGQUIST® TGR 5000SF is not electrically insulative.

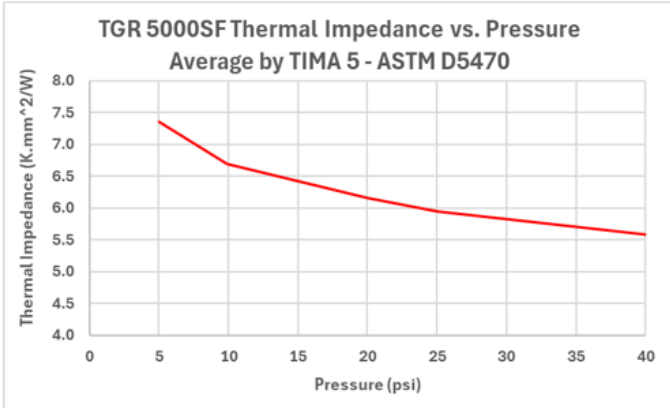
TYPICAL PROPERTIES

Physical properties

Viscosity, Parallel Plate Rheometer, 50°C, $1s^{-1}$, Pa.s	90
Dispense rate, EFD 30cc syringe, 90psi, grams/minute	17
Density by Helium pycnometer, g/cc	2.58
Bondline thickness, ASTM D5470, 40 psi, µm	17
Shelf life @ 23°C, 50% RH, days	365

Thermal properties

Thermal conductivity, ASTM D5470, W/m-K	4.3
Thermal conductivity (Post dry)	5.3
Thermal impedance ASTM D5470, mm^2.K/W	
5 psi	7.4
10 psi	6.7
20 psi	6.2
25 psi	6.0
40 psi	5.6
Thermal Impedance Reliability, ASTM E1461, ASTM E2585	
High Temperature: 125°C	< 15% degradation
Relative Humidity: 85°C / 85% RH	< 15% degradation
Thermal Cycling: -40°C - 125°C	< 15% degradation



GENERAL INFORMATION

Please consult the Safety Data Sheet (SDS) for safe handling information of this product.

DIRECTIONS FOR USE

1. For best results parts to be covered should be clean and free of oil and debris.
2. Apply appropriate material to substrate so that there is enough material to cover 100% of the surface between the component and the heat sink.
3. Place the heat sink on top of the component and secure with clips, screws or other hardware.

Not for product specifications

The technical data contained herein are intended as reference only. Please contact your local quality department for assistance and recommendations on the specifications of this product.

CONFIGURATIONS AVAILABLE
BERGQUIST® TGR 5000SF is supplied in:

Cartridges	30 cc
	55 cc
	6 oz (150 cc fill)

Storage
Store product in an unopened container in a dry location. Storage information may be indicated on the product container labeling.

Optimal Storage: 23°C ± 2°C / 50% + 5%. Relative Humidity for a 365 day shelf life.

Storage deviating from optimal can adversely affect product properties. Material removed from containers may be contaminated during use. Do not return products to the original container. Henkel Corporation cannot assume responsibility for product which has been contaminated or stored under conditions other than those previously indicated. If additional information is required, please contact your local Technical Service Center or Customer Service Representative.

Conversions
(°C x 1.8) + 32 = °F
kV/mm x 25.4 = V/mil
mm / 25.4 = inches
µm / 25.4 = mil
N x 0.225 = lb
N/mm x 5.71 = lb/in
N/mm² x 145 = psi
MPa x 145 = psi
N·m x 8.851 = lb·in
N·m x 0.738 = lb·ft
N·mm x 0.142 = oz·in
mPa·s = cP

Disclaimer
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