#### **Technical Data Sheet**

Chemtools® Pty Ltd | Ph: 1300 738 250 (+61 2 9833 9866) | Unit 2, 14 – 16 Lee Holm Road ST MARYS NSW 2760 Safety Data Sheets, product photos, and other information can be obtained by visiting www.chemtools.com.au



## Thermalle™ CERAMIC

# Silicone-Free Thermally Conductive Grease (Heatsink Compound)

PART NUMBER	AVAILABLE SIZE*
CT-TM000-2ML-BL3	2ml Tube (Pack of 3)
CT-TM000-05PT	5ml Syringe
CT-TM000-10PT	10ml Syringe
CT-TM000-50T	50g Tube
CT-TM000-250G	250g/6oz Semco Cartridge
CT-TM000-1KG	1Kg Tub

<sup>\*</sup>Available colours and/or sizes may change without notice.

#### **DESCRIPTION**

Thermalle™ CERAMIC Silicone-Free Thermally Conductive Grease is a non-flowing ceramic-filled compound specially designed for high powered CPU's, heavy heatsinks, and any other demanding cooling applications. It is a non-reactive paste which offers non-electrical, high thermal conductivity and low thermal resistance in a soft, low creep, low bleed consistency. Heat transfer from semiconductor housings to heatsinks increase by over 50% when applied, offering the economical benefit of a longer service life for components.

CERAMIC has low toxicity, is easy to apply, and is compatible across a wide operating temperature range. It is commonly used on diodes, transistors, heatsinks, semiconductors, thermostats, power resistors, and radiators, and is suitable for use in many other applications requiring a reduction in heat transfer.

#### APPLICATION

Ensure all surfaces and components are dry and free of all contaminants and old grease prior to application. Apply by brush, spatula or pneumatic dispenser with good coverage and an even distribution.

Application is recommended in thin cross-sectional thicknesses down to 1mm.

## **TECHNICAL DATA**

Thermo-conductive Constituent Metal oxide and ceramic powders

Carrier Mineral Oil Appearance Paste

Odour None, odourless
Thermal Conductivity 0.9 W/mK
Thermal Resistance 0.12°C cm²/W
Density 2.1 g/cm³
Temperature Range -50 to +200°C

Weight Loss -0.6% after 200hrs @ 150°C

 $\begin{array}{lll} \text{Bleed} & 0.4\% \\ \text{Dielectric Strength} & 18 \text{kV/mm} \\ \text{Permittivity} & 3.6 @ 1 \text{MHz} \\ \text{Electrical Resistance} & 3 \times 1014 \Omega \end{array}$ 

Shelf Life >3 years when stored under recommended conditions

## **FIRST AID & SAFETY PRECAUTIONS**

Always refer to Safety Data Sheet/s before use. Use proper Personal Protection Equipment. Do not get in eyes, on skin, or on clothing. Use with adequate ventilation. Avoid breathing fumes. Keep away from heat, sparks, open flames, and hot surfaces. This product may produce adverse health conditions, ranging from minor skin irritation to serious systemic effects. It should not be used, stored, or transported until the handling precautions and recommendations as stated in the Safety Data Sheet/s for this product have been fully understood by all persons who will work with the material.

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#### STORAGE & TRANSPORT

**Refer to Safety Data Sheet/s for recommendations.** As a general precaution, keep containers tightly closed, protect from sunlight, and do not expose to temperatures exceeding  $50^{\circ}$ C. Store in a cool, dry place at room temperature ( $5 - 40^{\circ}$ C). Do not return any unused material to its original container. Containers should be secured and stored upright during transit.

## DISCLAIMER

Every effort has been made to ensure the information provided in this document is accurate at the date of publication. Chemtools® Pty Ltd expressly recommends that the user make his/her own assessment to determine the suitability of the product for its intended purpose prior to application. Chemtools® Pty Ltd shall not be responsible for loss, damage, or injury, resulting from the reliance upon, or failure to adhere to, any recommendations or information contained herein; nor from abnormal use of the material; nor from any hazard inherent in the nature of the material.