# CHEMTRONICS® Technical Data Sheet

**TDS # CT40** 

# CircuitWorks® Heat Sink Grease

### PRODUCT DESCRIPTION

CircuitWorks® Heat Sink Grease silicone compound facilitates heat transfer away from electrical/electronic components. This heavy consistency material is thickened with a heat conductive metal oxide filler to maintain a positive heat sink seal in electrical/electronic equipment.

- Excellent conductivity
- Meets MIL-C-47113
- Noncorrosive
- High dielectric strength
- Low bleed
- Stable from -73°C to 200°C
- Nonflammable

## TYPICAL APPLICATIONS

CircuitWorks<sup>®</sup> Heat Sink Grease may be used for electronics and applications including:

- Effective Thermal Coupler For Any Heat Sink Device
- Nonflammable Coating Protection
- High Voltage Corona Protection
- Excellent for Improving Readings on Contact Type Thermocouples

# TYPICAL PRODUCT DATA AND PHYSICAL PROPERTIES

Color	White
Specific Gravity @ 25°C (77°F)	2.6
Usable Temperature Range	
-73°C (-100°F) to 200	°C (392°F)
Dielectric Strength, v/mil	500
Dielectric Constant @ 100 Hz	4.4
Dissipation Factor @ 100 Hz	0.005
Volume Resistivity, ohm-cm	1 x 10 <sup>14</sup>
Arc Resistance, seconds	120
Thermal Conductivity,	
Cal-cm/sec-cm <sup>2</sup> -°C	$1.5 \times 10^{-3}$
BTU-in/hr-ft <sup>2</sup> -°F	4.35
W/m°K	0.63
Shelflife	5 years

### **COMPATIBILITY**

CircuitWorks® Heat Sink Grease is generally compatible with most materials used in printed circuit board fabrication. As with any silicone compound, compatibility with substrate must be determined on a non-critical area prior to use.

Material	Compatibility
Ceramic	Good
Clean Metals	Good
Glass	Good
Natural Fibers	Good
Silicone Resins	Good
Painted Surfaces	Good
Plastic Surfaces	Good
Synthetic Fibers	Good
Vulcanized Silicone Rubber	Good
Wood	Good

#### **USAGE INSTRUCTIONS**

For industrial use only.

Read MSDS carefully prior to use.

Contact ITW Chemtronics<sup>®</sup> for complete usage and application instructions. When using CircuitWorks<sup>®</sup> Heat Sink Grease, follow these guidelines: Apply to all mounting and threaded surfaces of the device and the chassis. Apply by pushing product ahead of neck.

**Dispensing:** CircuitWorks<sup>®</sup> Heat Sink Grease is a ready-to-use one-component material. Collapsible tubes may be squeezed by hand or with the aid of mechanical wringers.

# **AVAILABILITY CT40-5** 5 oz. Tube

# TECHNICAL & APPLICATION ASSISTANCE

ITW Chemtronics<sup>®</sup> provides a technical hotline to answer your technical and application related questions. The toll free number is: **1-800-TECH-401.** 

## ENVIRONMENTAL IMPACT DATA

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CFC	0.0%	VOC	0.0%		
HCFC	0.0%	HFC	0.0%		
Cl. Solv.	0.0%	ODP	0.00		

CFC, HCFC, CL. SOLV., VOC, and HFC numbers shown are the content by weight. Ozone depletion potential (ODP) is determined in accordance with the Montreal Protocol and U.S. Clean Air Act of 1990.

## **NOTE:**

This information is believed to be accurate. It is intended for professional end users having the skills to evaluate and use the data properly. ITW CHEMTRONICS® does not guarantee the accuracy of the data and assumes no liability in connection with damages incurred while using it.

# **MANUFACTURED BY:**

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