

# CHEMTRONICS<sup>®</sup> Technical Data Sheet

**TDS # CT40**

## CircuitWorks<sup>®</sup> Heat Sink Grease

### PRODUCT DESCRIPTION

CircuitWorks<sup>®</sup> 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

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

### COMPATIBILITY

CircuitWorks<sup>®</sup> 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          |

## ENVIRONMENTAL IMPACT DATA

| ENVIRONMENTAL IMPACT DATA |      |     |      |
|---------------------------|------|-----|------|
| 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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## USAGE INSTRUCTIONS

For industrial use only.

Read MSDS carefully prior to use.

Contact ITW Chemtronics® for complete usage and application instructions. When using CircuitWorks® 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® 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® provides a technical hotline to answer your technical and application related questions. The toll free number is: **1-800-TECH-401.**

### DISTRIBUTED BY:

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