# ITW CHEMTRONICS® Technical Data Sheet

CW7270

### CircuitWorks® Silicone Free Heat Sink Grease

#### PRODUCT DESCRIPTION

CircuitWorks<sup>®</sup> Silicone Free Heat Sink Grease facilitates heat transfer away from electrical/electronic components and into heat sinks. This silicone-free compound shows no creep or migration over a wide temperature range. Thickened with a proprietary thermally conductive zinc oxide ceramic, the CircuitWorks<sup>®</sup> Silicone Free Heat Sink Grease creates an effective heat sink interface in electrical/electronic equipment.

- Exceeds MIL-C-47113 for thermal conductivity
- Noncorrosive
- High dielectric strength
- Low migration
- Stable from -15°C to 200°C
- Nonflammable

#### TYPICAL APPLICATIONS

CircuitWorks® Silicone Free Heat Sink Grease may be used for electronics applications including:

- Effective Thermal Coupler for any Heat Sink Device
- Nonflammable Protective Coating
- High Voltage Corona Protection
- Excellent for Improving Readings on Contact Type Thermocouples
- Ideal for Silicone Sensitive Environments

## TYPICAL PRODUCT DATA AND PHYSICAL PROPERTIES

Color	White
Specific Gravity @ 25°C (77°F)	2.4
Usable Temperature	5°F (-15°C) to
Range	392°F (200°C)
Dielectric Strength, volts/mil	500
Dielectric Constant @ 100 Hz	4.4
Dissipation Factor @ 100 Hz	0.005
Volume Resistivity, ohm-cm	$1 \times 10^{14}$
Arc Resistance, seconds	120
Thermal Conductivity,	
Cal-cm/sec-cm <sup>2</sup> -°C	$1.7 \times 10^{-3}$
BTU-in/hr-ft <sup>2</sup> -°F	4.92
W/m°K	0.71
Shelflife	5 years
RoHS Compliant	ROHS WEEE
	Compliant

#### **COMPATIBILITY**

CircuitWorks® Silicone Free Heat Sink Grease is generally compatible with most materials used in printed circuit board fabrication.

Material Compatibilit	
Ceramic	Good
Clean Metals	Good
Glass	Good
Silicone Resins	Good
Painted Surfaces	Good
Plastic Surfaces	Good
Vulcanized Silicone Rubber	Good

#### **USAGE INSTRUCTIONS**

For industrial use only. Read MSDS carefully prior to use.

#### **Application:**

Apply CircuitWorks<sup>®</sup> Silicone Free Heat Sink Grease directly to surface or use the application tip. Remove cap from syringe and gently depress the plunger. Spread the material in a thin layer on all mounting and threaded surfaces of the device and the chassis.

**Clean-Up:** Wipe away excess material using a Chemtronics<sup>®</sup> ControlWipes<sup>TM</sup> and thoroughly clean the surface using Chemtronics<sup>®</sup> Electro-Wash<sup>®</sup> PX.

#### AVAILABILITY CW7270

7 gm / 0.24 oz syringe

ENVIRONMENTAL IMPACT DATA				
ODP	None	VOC	None	
HCFC	None	HFC	None	

Ozone depletion potential (ODP) is determined in accordance with the Montreal Protocol and U.S. Clean Air Act of 1990. Hydrochlorofluorocarbons (HCFCs) are regulated under the Montreal Protocol as Class II ozone depleting substances. Volatile Organic Compound (VOC) information is calculated on a weight basis using the VOC definition of California Air Resources Board (CARB) Consumer Product Regulations, South Coast Air Quality Management District (SCAQMD) Rule 102 and the Federal definition published in 40 CFR 51.100(s). Hydrofluorocarbons (HFCs) are not currently regulated.

#### **DISTRIBUTED BY:**

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