

ITW CHEMTRONICS®

Technical Data Sheet

CW7250

CircuitWorks® Boron Nitride Heat Sink Grease

PRODUCT DESCRIPTION

CircuitWorks® Boron Nitride Heat Sink Grease facilitates heat transfer away from electrical/electronic components and into heat sinks. The material exhibits exceptionally high thermal conductivity with outstanding dielectric properties (nonconductive). CircuitWorks® Boron Nitride Heat Sink Grease shows no creep or migration over a wide temperature range. The grease contains an efficient heat conducting filler that enhances the effectiveness of heat sinks on electrical/electronic equipment.

- Exceeds MIL-C-47113 for thermal conductivity
- Noncorrosive
- High dielectric strength
- Stable from -73°C to 200°C
- Nonflammable

TYPICAL APPLICATIONS

CircuitWorks® Boron Nitride 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)	1.5
Usable Temperature Range	5°F (-15°C) to 572°F (300°C)
Dielectric Strength, volts/mil	400
Dielectric Constant @ 100 Hz	2.2
Dissipation Factor @ 100 Hz	0.002
Volume Resistivity, ohm-cm	1×10^{12}
Arc Resistance, seconds	120
Thermal Conductivity, Cal-cm/sec-cm² -°C	4.4×10^{-3}
BTU-in/hr-ft² -°F	12.35
W/m²K	1.85
Shelflife	5 years

RoHS Compliant



COMPATIBILITY

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

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

AVAILABILITY

CW7250

3.4 gm / 0.12 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.

USAGE INSTRUCTIONS

For industrial use only.

Read MSDS carefully prior to use.

Application:

Apply CircuitWorks[®] Boron Nitride 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[®] ControlWipes[™] and thoroughly clean the surface using Chemtronics[®] Electro-Wash[®] PX.

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.

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