

## Blue Ice 425

### Water Cleanable Non-Silicone Thermal Compound

#### Product Description

*Blue Ice 425 Heat Sink Compound is soft grease-like NON-SILICONE, non-migrating material heavily impregnated with heat-conductive metal oxides.*

*Blue Ice 425 has been engineered to clean easily with Water or aqueous detergent cleaning solutions.* This eliminates the need to use flammable or CFCs that carry a federal tax burden. Non-Silicone formula solve the problems of contamination and migration associated with silicone-based products.

#### Key Features and Benefits

• <i>Aqueous Cleanability. Easy clean up</i>
• <i>High Thermal Conductivity, High dielectric strength.</i>
• <i>Non-Silicone Advantages/No creep or Migration over wide temperature range.</i>
• <i>Exceptionally low bleed.</i>
• <i>Thin Bondline to &lt;1 mil</i>

- Reworkable/Easy to Remove.
- Easy to Apply by Dispensing or Printing.

#### Typical Applications

*Blue Ice 425 heat sink compound* applied to the base and mounting studs of transistors, diodes and silicone controlled rectifiers. In these situations, a small amount of the thermal grease is applied using either the dispensing or screen printing/stencil methods. *Blue Ice 425* ideally suited for use on microprocessor, graphic accelerator, DSP and high speed memory devices. It is also used in mounting semi-conductor devices; thermoelectric modules; power transistors and diodes; coupling entire heat generating assemblies to chassis; heat transfer medium on ballasts; thermal joints; thermocouple wells; mounting power resistors; and for any devices where efficient cooling is required in major industries including, electronic (computer, appliance, wireless, etc.), automotive and electrical.

#### Shelf-Life

*Blue Ice 425* has a shelf-life of 5 years at room temperature (25°C) in unopened containers. Slight settling of the filler may occur during long-term storage. In this case, it is recommended to re-disperse the filler by hand or mechanical mixing. Refrigerate material at 0-10°C to avoid any settling.

#### Clean Up:

Standard approved clean-up and disposal procedures should be followed in every situation. The use of disposable containers and utensils are recommended whenever possible to simplify and expedite clean-up. However, when disposable containers are impractical, *Blue Ice 425 can be removed by cleaning equipment with water or aqueous detergent solutions.*

#### Typical Properties

<i>Property</i>	<i>Value</i>
Viscosity:	Thixotropic Paste
Specific Gravity, @ 25°C	2.4
Color:	Blue or White
Bleed @150°C, 24 Hrs., %/Wt.	Nil
Evaporation, @150°C, 24 Hrs., %/Wt.	0.3
Thermal Conductivity, (ASTM D5470)	
<b>W/m.°K</b>	<b>1.2</b>
<b><u>Electrical Properties :</u></b>	
Dielectric strength. (ASTM D149) 0.05" gap, V/mil	255
Dielectric constant. (ASTM D150) 25°C @ 1,000 Hz.	4.85
Dissipation factor. (ASTM D150) 25°C @ 1,000 Hz.	0.0026
Volume Resistivity. (ASTM D257) Ohm-cm.	1.8 x 10 <sup>15</sup>
Operating Temperature Range.	-40°C to 150°C