

## Blue Ice™412

Non-Silicone Thermal Grease

### DESCRIPTIONS

**Blue Ice 412** Heat Sink Compound specially formulated with thixotropic agent to control bleed and pump out during thermal cycles. Offers high thermal conductivity, low thermal resistance and excellent wetting property No-Slump property allowed using in vertical applications.

**Blue Ice 412** has been engineered to solve the problems of contamination and migration associated with silicone-based products. The compound is unique Polysynthetic-based thermal grease used to insure rapid and efficient heat transfer and dissipation for the full operational life of your hardware

### KEY FUTURES AND BENEFITS

- Thixotropic Paste-No-Slump Type
- Cost-Effective Thermal Solution
- Non-Silicone Advantages, No creep or contamination
- Thin Bond line Thickness >40 micron

### APPLICATIONS

- Interface for semiconductors requiring low pressure or spring clamp mounting
- Thermal sensors, TEC modules, Thermal Wells
- IGBT's, LED
- Power Transistors, Diodes, Power Resistors

### AVAILABILITY

Syringes (3cc, 10cc, 30cc). Jars (8 oz & 1 Kg). Cartridges (6 oz. Semco & 300cc). 1 gallon & 5 gallon pail

| Typical Property                         | Test Method | Results  |
|--|-------------|--|
| Type                                     |             | Silicone Free                                  |
| Special Future                           |             | High Dielectric. Thixotropic. Minimum pump out |
| Color                                    | Visual      | White  |
| Viscosity 5 rpm @ 25°C, PaS              | Helipath    | 400  |
| Specific Gravity                         | ASTM D792   | 2.7  |
| Operating Temperature Range.°C           |             | -55°C to 200°C                                 |
| Shelf Life @25C                          |             | 5 years  |
| <b>THERMAL</b>                           |             |  |
| Thermal Conductivity (W/m-K)             | ASTM D5470  | 2.0  |
| Thermal Resistance °C-in <sup>2</sup> /W | ASTM D5470  | 0.03   |
| <b>ELECTRICAL</b>                        |             |  |
| Breakdown Voltage (KV/mm)                | ASTM D149   | 16   |
| Dissipation Factor (1KHz)                | ASTM D150   | 0.003  |
| Volume Resistivity (Ohm-cm)              | ASTM D257   | 10 <sup>14</sup>                               |

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