

PureTemp® Thermal Energy Storage Materials

PureTemp thermal energy storage materials offer new levels of performance in storing or releasing large quantities of thermal energy at any given temperature. Our proprietary formulations and patented manufacturing processes yield superior quality biobased phase change materials at cost effective prices.

Some key properties:

- Thermal energy storage capacities which average 200 J/g
- Over 200 unique, engineered phase change transition temperatures between -40 °C and 151 °C
- Consistent, repeatable performance over thousands of thermal (melt/solidify) cycles
- 100% renewable and readily biodegradable produced from agricultural sources, not petroleum

PureTemp 58 Technical Information

PureTemp 58 is a USDA Certified Biobased product PureTemp 58 DSC Analysis Appearance Clear liquid, waxy solid DSC Q2000 V24.8 Build 120, 1°C/min 0 58 °C Melting point 225 J/g Heat storage capacity -0.5 Thermal conductivity (liquid) 0.15 W/m°C Heat Flow (W/g) 0.25 W/m°C Thermal conductivity (solid) -1 Density (liquid) 0.81 g/ml Density (solid) 0.89 g/ml -1.5 Specific heat (liquid) 2.71 J/g°C -2 2.47 J/g°C Specific heat (solid) 10 20 30 40 50 60 70 80 Typical physical properties are listed in the table above. Temperature (°C)

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