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:

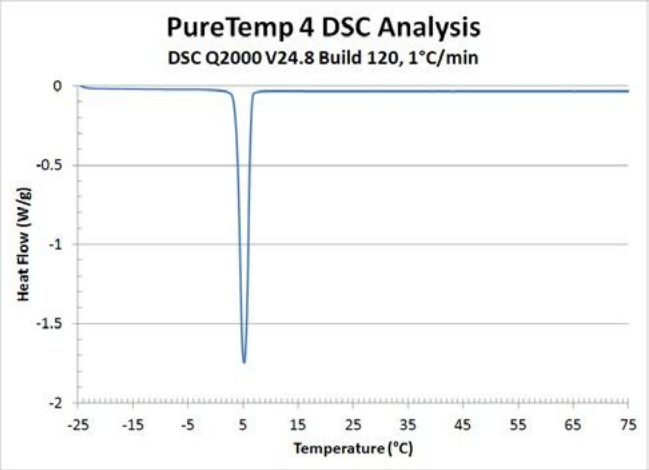
- Thermal energy storage capacities which average 200 J/g
- Over 200 unique, engineered phase change transition temperatures between -40°C and 151°C
- Consistent, repeatable performance over thousands of thermal (melt/solidify) cycles
- 100% renewable and readily biodegradable – produced from agricultural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

PureTemp 4 Technical Information

PureTemp 4 is a USDA Certified Biobased product

Appearance	Clear liquid, waxy solid
Melting point	5 °C
Heat storage capacity	187 J/g
Thermal conductivity (liquid)	0.15 W/m°C
Thermal conductivity (solid)	0.25 W/m°C
Density (liquid)	0.88 g/ml
Density (solid)	0.96 g/ml
Specific heat (liquid)	2.26 J/g°C
Specific heat (solid)	1.78 J/g°C

Typical physical properties are listed in the table above.



PureTemp LLC
2909 Wayzata Boulevard, Suite 72651, Minneapolis, MN 55405
Tel: 612-563-2233
Inquiry: www.puretemp.com/contact
Website: www.puretemp.com
© PureTemp LLC. All Rights Reserved

USDA CERTIFIED BIOBASED PRODUCT
PRODUCT 100%

IMPORTANT NOTE: The preceding data is based on tests and experience which PureTemp LLC believes reliable, and is supplied for informational purposes only. PureTemp LLC expressly disclaims any liability whatsoever for damage or injury which results from the use of the preceding data and nothing contained therein shall constitute a guarantee, warranty, or representation (including freedom from patent liability) by PureTemp LLC with respect to the data, the product described, or its fitness for use for any specific purpose, even if that purpose is known to PureTemp LLC. Individual requirements may vary and each purchaser is urged to perform their own tests, experiments, and investigations in the use of this product. For detailed safety and handling information regarding these products, please refer to the respective PureTemp Safety Data Sheet.