

Product
Information



RUBITHERM® RT

Phase Change Material based on n-Paraffins and Waxes

A new generation of ecological heat storage materials utilising the processes of phase change between solid and liquid (melting and congealing) to store and release large quantities of thermal energy at nearly constant temperature.

The *RUBITHERM*® phase change materials (PCM's) provide a very effective means for storing heat and cold, even when limited volumes and low operating temperature differences are applicable.

We look forward to discussing your particular questions, needs and interests with you.

Properties:

- High thermal energy storage capacity
- Heat storage and release take place at relatively constant temperatures
- No supercooling effect
- Long life product, with stable performance through the phase change cycles
- Ecologically harmless and non-toxic
- chemically inert
- Melting temperature range between approx. -4 °C and 100 °C

Rubitherm Technologies GmbH
Sperenberger Str. 5a
D-12277 Berlin

Tel: +49 30 720004-62
Fax: +49 30 720004-99
E-Mail: info@rubitherm.com
Internet: www.rubitherm.com

Data Sheet

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Typical Values

Melting area	°C	38 - 43 Typical being: 41 °C
Congeaing area	°C	43 - 37 Typical being: 42 °C
Heat storage capacity Temperature range 35 °C to 50 °C	kJ/kg	174
Density solid at 30 °C	kg/l	0.97
Density liquid at 60 °C	kg/l	0.75
Volume expansion with phase change and $\Delta T = 20$ K	%	
Heat conductivity	W/(m*K)	0.2
Kin. Viscosity at °C	mm ² /s	30.93
Flash point (PCM)	°C	> 100
corrosion		chemically inert with respect to most materials
water hazard		Water hazard class (WGK) 1