Innovative PCM's
and
Thermal Technology

Product Information

RUBITHERM® SP

Latent Heat Blend

The creation of the latent heat blends *RUBITHERM* SP has lead to a new and innovative class of low flammability PCM. *RUBITHERM* SP consists of a unique composition of salt hydrates and organic compounds. This combination unites the advantages of both classes of PCM, salt hydrate based as well as latent heat paraffin based.

RUBITHERM SP is preferably processed into sustaining and/or absorptive structure (e. g. foams). Material densities of 1,0 kg/l and more can be achieved. These properties make *RUBITHERM* SP to the preferred PCM used in the construction industry. Passive and active cooling is now possible e.g. in wall elements and air conditioners.

Properties:

- Stable performance throughout the phase change cycles
- High thermal storage capacity
- Limited supercooling
- low flammability
- non toxic
- Different melting temperatures between 21°C und 31°C are available

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

Preliminary Data Sheet

***RUBITHERM*® SP25A08**

		Typical Values
Melting area*	°C	25 - 27 typical being: 25°C
Congealing area*	°C	22 - 24 typical being: 22°C
Heat storage capacity* temperature range 18°C to 33°C	kJ/kg	160
Density solid at 20°C	kg/l	1.43
Density liquid at 40°C	kg/l	1.23
Volume expansion with phase change and ΔT= 20 K	%	13.98
Heat conductivity	W/(m*K)	0.6
Kin. Viscosity at 50°C	mm²/s	16.88
corrosion		corrosive compared to metal
Water hazard		Water hazard class (WGK): 1, low hazardous to waters (self-classification)

Note: The product is hygroscopic. If stored in a not completely self contained container the material may absorb moisture. This could result in other than the given physical properties.

* This values be ascertained by an multi-layer-calorimeter.

Version: 26.09.2011