RUBI HERM Phase Change Material

SP-24



The creation of the latent heat material RUBITHERM® SP has led to a new and innovative class of low flammability PCM.

RUBITHERM® SP consists of a unique composition of inorganic components. RUBITHERM® SP is preferably used as macroencapsulated material. With melting points below 0°C these materials are ideal for temperature controlled transport of frozen goods.

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

Properties:

- stable performance throughout the phase change cycles
- high thermal storage capacity per volume
- limited supercooling (2-3K depenndig on volume and cooling rate),
- low flammability, non toxic
- different melting temperatures between -50°C und 70°C are available
- encapsulation necessary, minimum volume: 50ml

The most important data:

Melting area

Congealing area

Heat storage capacity ± 7,5%

Combination of sensible and latent heat in a temperatur range of $-32\,^{\circ}\text{C}$ to $-17\,^{\circ}\text{C}$.

Specific heat capacity

Density solid

at -30°C

Density liquid

at 20 °C

Heat conductivity

Max. operation temperature

Corrosion

Notes:

Typical Values:

-23 bis -22 [°C]

main peak: 23

-24 bis - 25[°C] main peak:24

and peak.24

250 [kJ/kg]

70 [Wh/kg]*

2 [kJ/kg·K]*

~ **1,2** [kg/l]

~ **1,3** [kg/l]

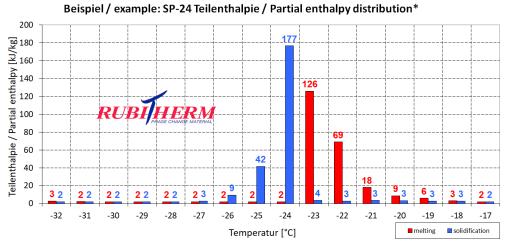
0,6 [W/(m·K)]

30 [°C]

corrosive effect on metals

-30°C recommended for freezing

Many SP-product are hygroscopic and may absorb moisture if stored improperly. This can result in a change of the physical properties given. Storing in closed containers mandatory.



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The product information given is a non-binding planning aid, subject to technical changes without notice. Version:

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^{*}Measured with 3-layer-calorimeter.