

SP-21

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 dependig 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 -30 °C to 15 °C.

Specific heat capacity

Density solid

at -25°C

Density liquid

at 20 °C

Heat conductivity

Max. operation temperature

Corrosion

Notes:

Typical Values:

-21 bis -19 [°C]

main peak: -21

-21 bis -24 [°C]

main peak: -22

285 [kJ/kg]

80 [Wh/kg]*

2 [kJ/kg·K]*

~ 1,3 [kg/l]

~ 1,2 [kg/l]

0,6 [W/(m·K)]

30 [°C]

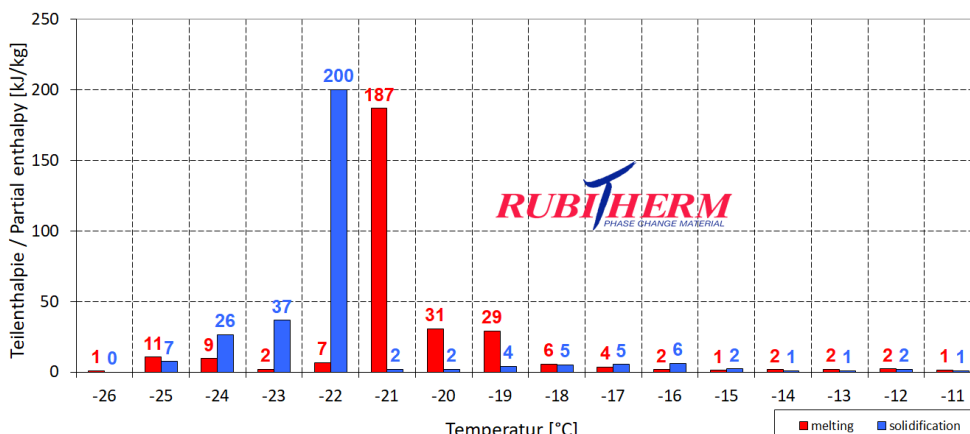
corrosive effect on metals

-25°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.

Beispiel / example: SP-21 Teilenthalpie / Partial enthalpy distribution*



Rubitherm Technologies GmbH
 Imhoffweg 6
 D-12307 Berlin
 phone: +49 (30) 7109622-0
 E-Mail: info@rubitherm.com
 Web: www.rubitherm.com

The product information given is a non-binding planning aid, subject to technical changes without notice. Version: 12.07.2022

*Measured with 3-layer-calorimeter.