

RT42

RUBITHERM® RT is a pure PCM, this heat storage material 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 differences in operating temperature are applicable.

Properties for RT-line:

- high thermal energy storage capacity
- heat storage and release take place at relatively constant temperatures
- no supercooling effect, chemically inert
- long life product, with stable performance through the phase change cycles
- melting temperature range between -9 °C and 100 °C available



The most important data:

Melting area

Congeeing area

Heat storage capacity ± 7,5%

Combination of latent and sensible heat in a temperatur range of 35°C to 50°C.

Specific heat capacity

Density solid

at 15°C

Density liquid

at 80°C

Heat conductivity (both phases)

Volume expansion

Flash point

Max. operation temperature

Typical Values

38-43 [°C]

main peak: 41

43-37 [°C]

main peak: 42

165 [kJ/kg]*

48 [Wh/kg]*

2 [kJ/kg·K]

0,88 [kg/l]

0,76 [kg/l]

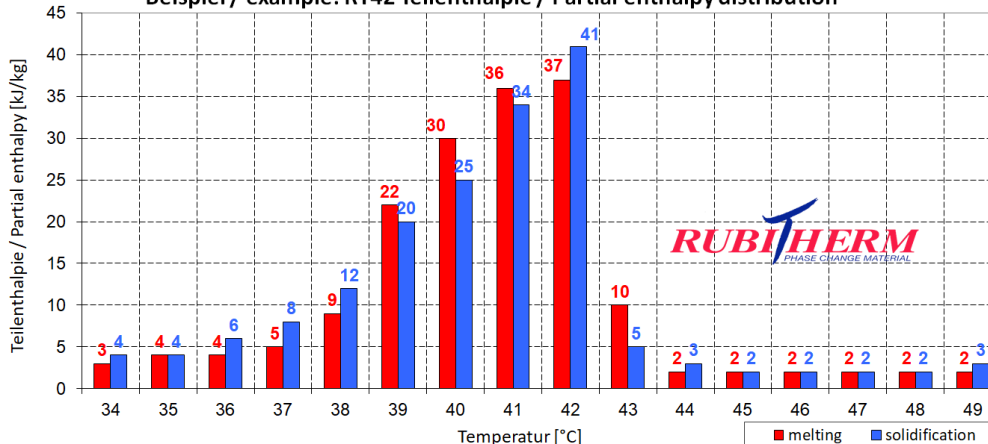
0,2 [W/(m·K)]

12,5 [%]

186 [°C]

72 [°C]

Beispiel / example: RT42 Teilenthalpie / Partial enthalpy distribution



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The product information given is a non-binding planning aid, subject to technical changes without notice.
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*Measured with 3-layer-calorimeter.