Data Sheet

PX42HC

RUBITHERM® PX is a heat storage powder which contains phase change material (PCM) within a secondary supporting structure, in this case a hydrophilic silica powder. The result is that the bound PCM is always a solid in its macroscopic form. Used in thermal energy storage applications, the bound PCM melts and congeals, thus storing and releasing the latent heat associated with the phase change process.
Advantageous is that for many applications, large quantities of thermal energy can be stored and released at a relatively constant temperature, even when limited volumes and low differences in operating temperature are applicable.

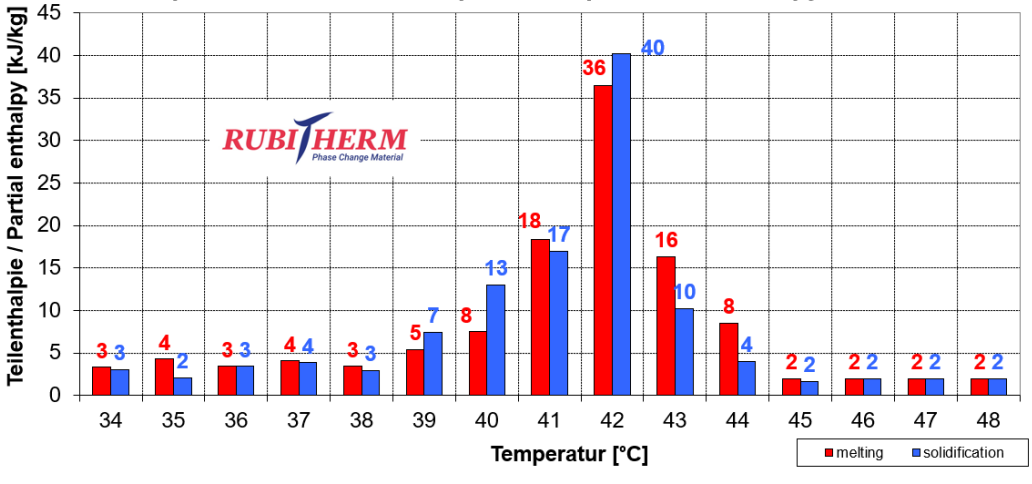
We look forward to discussing your particular questions, needs and interests with you.

Properties:
- high thermal energy storage capacity
- heat storage and release take place at relatively constant temperatures
- no supercooling effect, chemically inert, almost no volumen expansion
- long life product, with stable performance through the phase change cycles
- melting temperature range between approx. -4°C and 100 °C

The most important data:

	Typical Values	
Melting area	**40-44** main peak: 42	**[°C]**
Congealing area	**40-44** main peak: 42	**[°C]**
Heat storage capacity ± 7,5%	**120**	**[kJ/kg]***
Combination of latent and sensible heat in a temperatur range of 33°C to48°C.	**33**	**[Wh/kg]***
Specific heat capacity	**2**	**[kJ/kg·K]**
Bulk density	**0,65**	**[kg/l]**
Flash point (PCM)	**190**	**[°C]**
PCM content	**60**	**[%]**
Max. operation temperature	**75**	**[°C]**

Beispiel: PX42HC Teilenthalpie / Example Partial enthalpy distribution



Rubitherm Technologies GmbH
Sperenberger Straße 5a
D-12277 Berlin
Tel: +49 (30) 7109622-0
E-Mail: info@rubitherm.com
Internet: www.rubitherm.com

The product information given is a non-binding planning aid, subject to technical changes without notice. Version: 30.07.2026

**Measured with 3-layer-calorimeter.*