

Product
Information



RUBITHERM® PX

Latent Heat Powder based on Paraffins

RUBITHERM PX is a heat storage powder in which a phase change material (PCM) is contained within a secondary supporting structure, in this case a hydrophilic silica powder. 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 operating temperature differences 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
- Long life product, with stable performance through the phase change cycles
- Ecologically harmless and non-toxic
- Chemically inert
- Melting temperature range between approx. -4°C and 100°C

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Data Sheet

RUBITHERM® PX 58



Typical Values

Components

SiO₂, Paraffin

Bulk density

kg/l 0.694.

Melting area (PCM)

°C 55 - 59

Typical being: 58 °C

Average particle size

µm 250

Heat storage capacity

kJ/kg 117

Temperature range 51 °C - 66 °C

Volume expansion

% none

Specific heat capacity

kJ/(kg*K) 1.6

Heat conductivity

W/(m*K) 0.1

Flash point (PCM)

°C 222

Operating Temperature

°C max. 90

Corrosion

chemical inert towards most materials

Water hazard

No water endangering substance according to Annex I VwVws (KBwS classification, identification no. 268)

* These values are ascertained by a multi-layer-calorimeter.

version: 23.04.2009