Innovative PCM's
and
Thermal Technology

Product Information

RUBITHERM® GR

Latent Heat Granulate based on Paraffins

RUBITHERM GR is a heat storage granulate in which a phase change material (PCM) is contained within a secondary supporting structure, in this case a natural porous mineral particle. 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.

In *RUBITHERM*® GR our patented mechanism ensures that the PCM, when in the liquid form, does not leak out of the granulate. The result is that the bound PCM is always a solid in its macroscopic form.

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 heat storage capacity
- Heat storage and release take place at relatively constant temperatures
- Bound RCM's exhibit little volume change during phase change
- operate without fluid materials
- Long life product, cycles rugged
- Ecologically harmless and non-toxic
- easy handling
- Melting temperatures range between –3 °C and 100 °C.
- Various granulate sizes are possible

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Data Sheet

***RUBITHERM*® GR 50**

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		Typical Values
Components		SiO_2, Paraffin
Bulk density	kg/l	0.849
Melting area (PCM)	°C	45 - 51 Typical being: 49 °C
Heat storage capacity Temperature range 37 °C - 52 °C	kJ/kg	55
Volume expansion	%	none
Specific heat capacity	kJ/(kg*K)	1.5
Heat conductivity	W/(m*K)	0.2
Flash point (PCM)	°C	approx. 190
Operating Temperature	°C	max. 70
Corrosion		chemical inert towards most materials
Water hazard		No water endangering substance according to Annex I VwVws (KBwS classification, identification no. 268)

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