

## PHASE CHANGE MATERIALS & EUTECTIC **SOLUTIONS SPECIAL APPLICATIONS**

PlusICE Mixtures of non-toxic Eutectic solutions have freezing and melting points higher or lower than those of water and offer *Thermal Energy Storage* capability between -62 °C and 117 °C.

They can be supplied as a raw material or alternatively encapsulated either in our standard or customer custom-made containers. We also supply ready-made solutions for field filling applications. We also offer a number of Licensing and Know-How Transfer Options for local manufacturing around the world.We

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	Phase	Phase
PlusICE	Change	Change
Type	Temp.	Temp.
	(C)	(F)
E117	117	243
E89	89	192
E58	58	136
E48	48	118
E32	32	90
E30	30	86
A28	28	82
E21	21	70
E19	19	66
E17	17	63
E13	13	55
E10	10	50
A8	8	46
E8	8	46
E7	7	45
A4	4	39
E0	0	32
E-2	-2	28
E-3	-3.7	25
E-4	-3.9	25
E-6	-6	21
E-8	-7.6	18
E-10	-10	14
E-11	-11.6	11
E-12	-12.3	10
E-14	-14.8	5
E-15	-15	5
E-19	-18.7	-2
E-21	-20.6	-5
E-22	-22	-8
E-26	-26	-15
E-27	-27	-17
E-29	-29	-20
E-32	-32	-26
E-34	-33.6	-28
E-37	-36.5	-34
E-50	-49.8	-58
E-62	-62	-80

PlusICE solutions have been successfully applied for a wide range of applications in both heating and cold energy storage products/processes around the world.

Our Organic and Salt based solutions can be modified to suit a specific application in order to provide the best possible thermodynamic and handling characteristics.

A large number of manufacturers and research institutions around the world produced impressive Global PCM applications from a simple personal cooling unit to large scale electronic chamber passive cooling, water heat and cooling storage, office passive cooling, dry wall applications.



Our research and development over the last decade produced not only the widest choice of PCM temperature range but we can modify the solutions to suit almost any applications. We have developed a number of techniques to produce liquid, thickened (paste or jelly-like), powder, granule or solid formats as illustrated in the following pictures.

> PlusICE Chilled Water

Storage Application

**Granule** 

Powder

The variation of these products find their way to the market in many different forms. The most familiar products are picnic coolers and transport Eutectic plates, underfloor heating and chilled water TES applications.

PCMs are also successfully applied to provide Passive Cooling and Heating applications. PCMs are even applied to dry plaster boards and concrete mixing applications for buildings and industry.

The extensive range between -62 °C and 117 °C offered by PlusICE opens completely new windows for a wide range of new applications and the application variety is increasing day by day. The only limit of how and where to apply these energy saving and environmentally friendly solution is the imagination of design engineers.



We can not only supply PCM solutions to suit customer's own design but also we can develop custom-made products for any specific application from conception to completion.



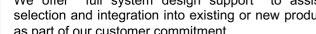
## TECHNICAL SUPPORT;

We offer full system design support to assist in proper selection and integration into existing or new product / installations as part of our customer commitment.

Please consult our technical sales at sales@pcmproducts.net specific application or visit our web site your



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## PlusICE Organic Solution Variations

















Plusice Organic Solution Variations











