## TECHNICAL DATA SHEET OF savE® FS42

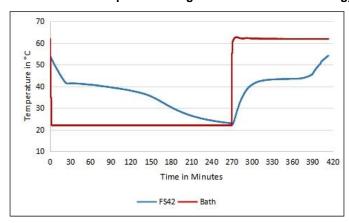
## **Technical specification:**

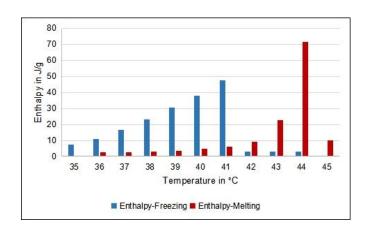
Product : savE® FS42

Description : Form stable phase change material – liquid PCM embedded in polymer matrix

Appearance : Black solid @25 °C

## Phase transition temperature range and stored thermal energy\*





Temperature vs time curve

Enthalpy vs temperature curve

Property	Value**	Test method	Test conditions (if any)
Phase transition temperature Melting	44 °C	PLUSS® T-History	@ 52 °C Air bath
Freezing	41 °C	PLUSS® T-History	@ 32 °C Air bath
Latent heat/enthalpy Melting Freezing	136 kJ/kg 182 kJ/kg	PLUSS® T-History PLUSS® T-History	@ 45 to 35 °C @ 35 to 45 °C
Density Liquid Solid	1100 kg/m <sup>3</sup> 997 kg/m <sup>3</sup>	ASTM D891-95 ASTM D891-95	@ 50 °C @ 30 °C
Specific heat Liquid Solid	2.68 kJ/kgK 3.01 kJ/kgK	PLUSS® T-History PLUSS® T-History	@ 60 °C @ 30 °C
Thermal conductivity Liquid Solid	NA 0.30 W/mK	KD2Pro	@ 5 °C
Number of cycles tested	~2000	PLUSS® Internal	
Maximum operating temperature	90 °C		
Flammability	Yes		
Flash point	160 °C		

<sup>\*</sup> Determined by T-history

Compatibility data available on request.

PCM is available in bulk, pouches or in containers of choice (Refer to Document 301\_PCM Encapsulation).

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<sup>\*\*</sup>Nominal Valu[es. Actual values mentioned in test certificate.