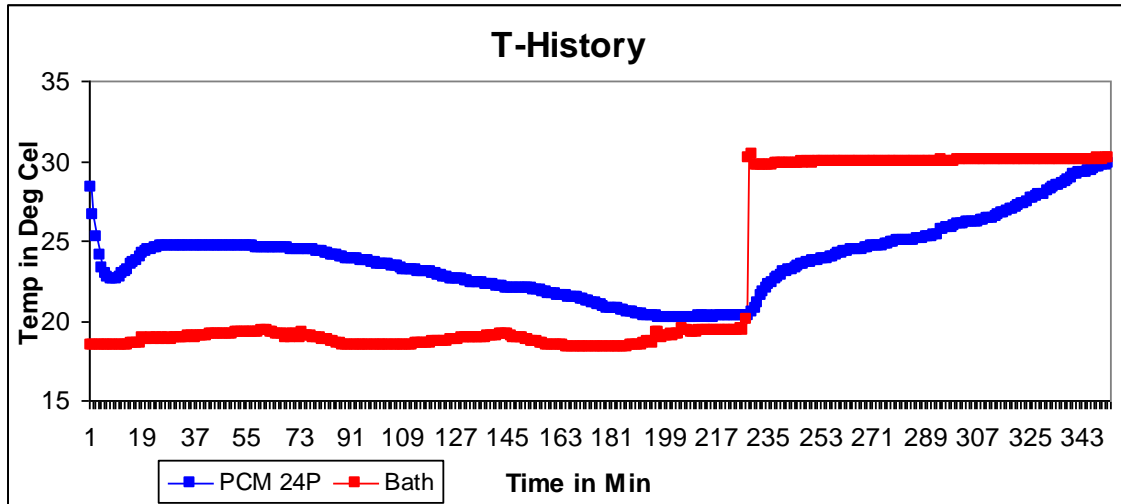


TECHNICAL DATA SHEET

Phase Change Materials (PCM) are hydrated salts that have large amount of heat energy stored in the form of Latent Heat which is absorbed or released when the materials change state from solid to liquid or liquid to solid. The PCM retains its latent heat without any change in physical or chemical properties over thousands of cycles.

Technical Specification:

Description : Mixture of Inorganic salts
 Appearance : Grey/Brown colored liquid



A 30g sample is taken in a test tube in molten condition and placed in a temperature controlled bath. A temperature sensor is placed in the test tube and bath to record the temperatures using a data logger. The bath is maintained at 19 °C during the freezing cycle and at 30 °C during the melting cycle.

Property	Value	Test Method	Test Conditions (if any)
Melting Temp. (°C)	24	T - History	at 30 °C
Freezing Temp. (°C)	25	T - History	at 19 °C
Liquid Density (kg/m ³)	1540	ASTM D891-95	at 32 °C
Solid Density (kg/m ³)	1820	Internal	at 14 °C
Latent Heat (kJ/kg)	185	Calorimetric	solid PCM taken at 14 °C
Specific Heat-Liquid (kcal/kg.K)	0.54	Calorimetric	at 32 °C
Thermal Conductivity (W/m.K) Liquid	0.54		
Thermal Conductivity (W/m.K) Solid	1.09		
Base Material	Inorganic chemical	-	
Congruent Melting	Yes	-	
Sub Cooling	Low	T-History	
Flammability	No	-	
Thermal Stability (cycles)	~2000	Internal	
Max.Operating Temp. (°C)	~80		



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