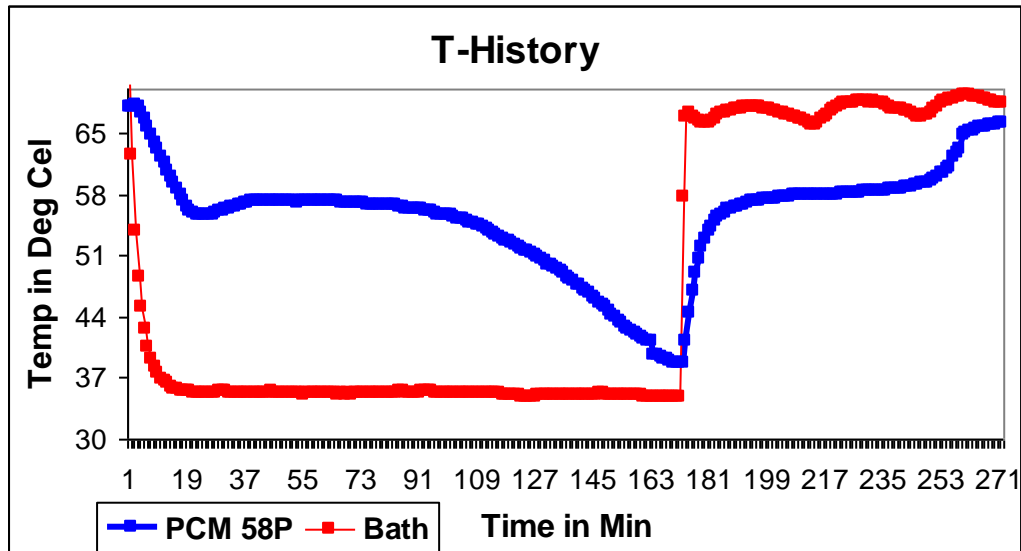


TECHNICAL DATA SHEET

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 Organic and In organics
 Appearance : Light White/Grey 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 around 35 °C during the freezing cycle and at 69 °C (maximum) during the melting cycle.

Property	Value	Test Method	Test Conditions (if any)
Melting Temp. (°C)	58	T - History	@ 69 °C (maximum) Bath
Freezing Temp. (°C)	57	T - History	@ 35 °C Bath
Liquid Density (kg/m ³)	1290	ASTM D891-95	@ 68 °C
Solid Density (kg/m ³)	1400	Internal	@ 32 °C
Latent Heat (kJ/kg)	250	Calorimeter	solid PCM taken at 32 °C
Specific Heat-Liquid (kcal/kg.K)	0.6	Calorimeter	@ 68 °C
Thermal Conductivity (W/m.K) Liquid	0.4		
Thermal Conductivity (W/m.K) Solid	0.6 to 0.7		
Base Material	Inorganic and organic chemicals		-
Congruent Melting	Yes	-	
Sub Cooling	Yes (55°C)	T-History	
Flammability	No	-	
Thermal Stability (cycles)	~1000	Internal	
Max. Operating Temp. (°C)	~90		



RGEES LLC, 1465 Sand Hill Road, Candler, NC 28715 United States of America
 Tel: +1.828.708.7178; +1.828.708.7179
 Email: info@rgees.com Website: www.rgees.com