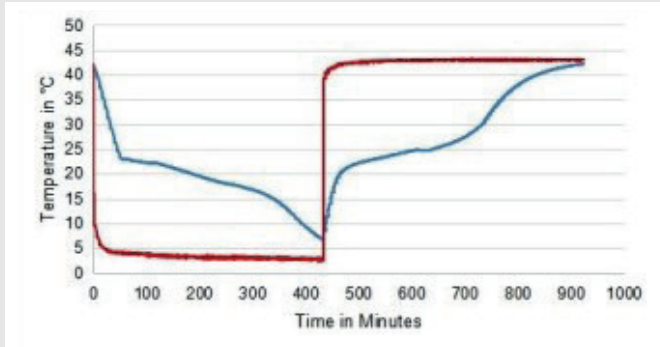




# PHASE CHANGE MATERIAL

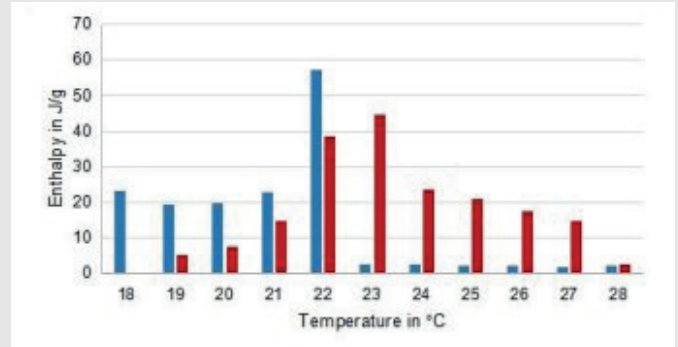
+ 22°C

## Phase transition temperature range and stored thermal energy determined by T-history



■ Bath

■ PCM+22



■ Enthalpy-Melting

■ Enthalpy-Freezing

| Property                            | Value                  | Test conditions     |
|-------------------------------------|------------------------|---------------------|
| <b>Phase transition temperature</b> |                        |                     |
| Melting                             | 23 °C                  | @ 32 °C Liquid bath |
| Freezing                            | 22 °C                  | @ 12 °C Liquid bath |
| Nucleation temperature              | 21 °C                  | @ 12 °C Liquid bath |
| <b>Latent heat/enthalpy</b>         |                        |                     |
| Melting                             | 190 kJ/kg              | @ 18 to 28 °C       |
| Freezing                            | 162 kJ/kg              | @ 28 to 18 °C       |
| <b>Density</b>                      |                        |                     |
| Liquid                              | 1540 kg/m <sup>3</sup> | @ 30 °C             |
| Solid                               | 1651 kg/m <sup>3</sup> | @ 0 °C              |
| <b>Specific heat</b>                |                        |                     |
| Liquid                              | 2.53 kJ/kgK            | @ 31 °C             |
| Solid                               | 2.27 kJ/kgK            | @ 0 °C              |
| <b>Thermal conductivity</b>         |                        |                     |
| Liquid                              | 0.56 W/mK              | @ 30 °C             |
| Solid                               | 1.13 W/mK              | @ 15 °C             |
| Number of cycles tested             | ~2000                  |                     |
| Maximum operating temperature       | 90 °C                  |                     |
| Flammability                        | No                     |                     |

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**Questions?**  
**Get in touch with us!**

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