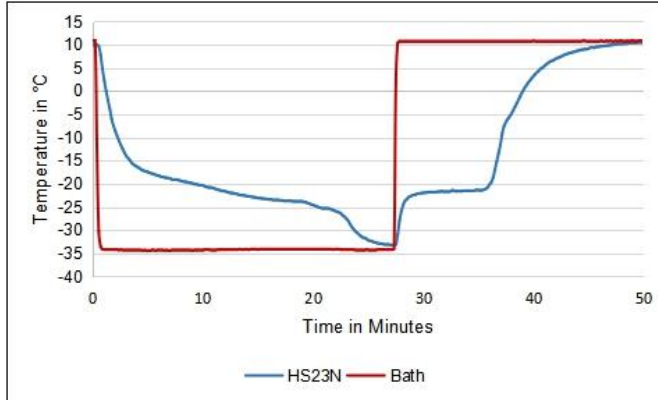


TECHNICAL DATA SHEET OF savE® HS23N

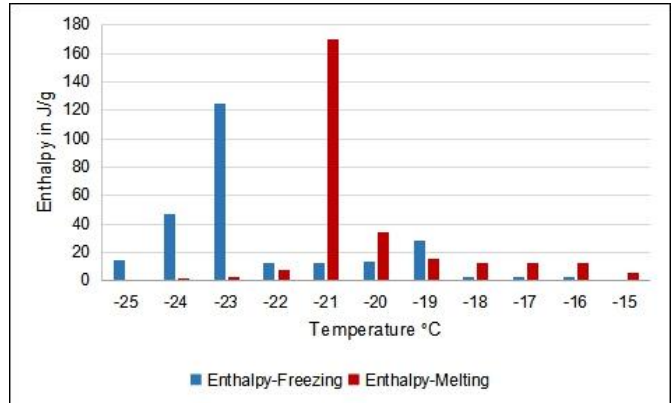
Technical specification:

Product : savE® HS23N
 Description : Inorganic phase change material
 Appearance : Bluish liquid with white sediment @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 | -22 °C | PLUSS® T-History | @ -13 °C Liquid bath |
| Freezing | -23 °C | PLUSS® T-History | @ -33 °C Liquid bath |
| Nucleation temperature | -23 °C | PLUSS® T-History | @ -33 °C Liquid bath |
| Latent heat/enthalpy | | | |
| Liquid | 274 kJ/kg | PLUSS® T-History | @ -25 to -15 °C |
| Solid | 261 kJ/kg | PLUSS® T-History | @ -15 to -25 °C |
| Density | | | |
| Liquid | 1155 kg/m ³ | ASTM D891-95 | @ 30 °C |
| Solid | 1078 kg/m ³ | ASTM D891-95 | @ -33 °C |
| Specific heat | | | |
| Liquid | 3.40 kJ/kgK | PLUSS® T-History | @ 30 °C |
| Solid | 1.58 kJ/kgK | PLUSS® T-History | @ -30 °C |
| Thermal conductivity | | | |
| Liquid | 0.702 W/mK | KD2Pro | @ 30 °C |
| Solid | 4.976 W/mK | KD2Pro | @ -21 °C |
| Number of cycles tested | ~2000 | PLUSS® Internal | |
| Maximum operating temperature | 90 °C | | |
| Flammability | No | | |

* Determined by T-history

**Nominal Valu[es. Actual values mentioned in test certificate.

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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