# limSel™<sup>C28</sup>





Typically used for passive cooling of people and animals, as well as for thermal management of electronics.

# **Product description**

ClimSel™ C28 is a salt hydrate based Phase Change Material that works by either charging or discharging energy at different temperatures. ClimSel™ C28 is delivered in various sizes of aluminium foil pouches, as a primary packaging. The main components are sodium sulphate, water and additives.

# Physical data

Phase change temperature: Solid	27°C / 80°F
Phase change temperature: Liquid	31°C / 88°F
Latent heat of fusion (see curve)	43 Wh/kg - 154 kJ/kg (±10%)
Specific heat capacity: Solid	1.4 Wh/kg - 5 kJ/kg (±10%)
Specific heat capacity: Liquid	0.8 Wh/kg - 3 kJ/kg (±10%)
Density: Liquid	1.5 kg/l
Thermal conductivity: Solid	0.98 W/mK (±10%)
Thermal conductivity: Liquid	0.67 W/mK (±10%)
pH Value	Approx. 9

# **Usage guidelines**

- Recommended storage temperature: 10°C to 25°C / 50°F to 77°F.
- Recommended min. and max. temperature is 0°C to 38°C / 32°F to 100°F.
- Preparation before use depends on application conditions.
- Handle the ClimSel™ C28 pouch with care and do not bend when solid.
- Do not use damaged pouch, as the product functionality will be compromized.
- The product should not be opened or tampered with.
- If in contact with skin, wash with soap and water.
- If in contact with eyes, immediately flush with plenty of water.

#### During storage:

Shall not be exposed to direct sunlight, vibrations, sharp objects, additional top load pressure or uncareful handling. Experience shows that ClimSel C28 has a shelf life up to five years, if stored in accordance with usage guidelines. Depending on circumstances, a moderate reduction of the initial capacity may be noted over time.



Climator is one of the world's leading companies within Phase-change material (PCM) and temperature stabilization solutions.

Through our know-how, PCM expertise and innovation power, we develop project-based solutions that solve our customers' temperature stabilization and control problems.

We operate within five application areas.



Transport



Room



Equipment



Climator Sweden AB

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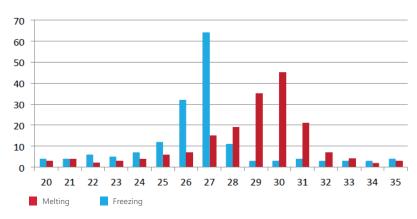
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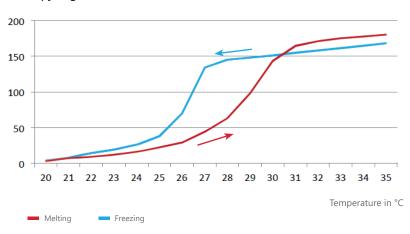
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# Phase change properties

### Part Enthalpy (J/g)



### Enthalpy (J/g)



## **Estimated functionality time**

ClimSel™ C28 can be used/cycled as long as the primary packaging is kept uncompromised and it is handled in accordance with usage guidelines. The product will only work as declared for as long as the pouch is intact. The estimated functionality time can be affected by type of application and other external factors.

Contact Climator for further information.

## Waste Management

For disposal of the product please contact your federal, state or local waste management organisation. The product should be treated in accordance with requirements for EWC (=European Waste code) = 060314.

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