

# ClimSel™ C48-X



Typically used in dangerous goods packaging for lithium-ion batteries, as well as for fire safety.

## Product description

ClimSel™ C48-X is a salt hydrate based Phase Change Material that works by either charging or discharging energy at different temperatures. ClimSel™ C48-X is delivered in various sizes of aluminium foil pouches, as a primary packaging. The main components are sodium acetate, water and additives.

## Physical data

Phase change temperature: Solid	48°C / 118°F
Phase change temperature: Liquid	53°C / 127°F
Latent heat of fusion (see curve)	41 Wh/kg – 149 kJ/kg (±10%)
Specific heat capacity: Solid	1.1 Wh/kg – 4 kJ/kg (±10%)
Specific heat capacity: Liquid	0.6 Wh/kg – 2 kJ/kg (±10%)
Density: Liquid	1.3 kg/l
Thermal conductivity: Solid	1.62 W/mK (±10%)
Thermal conductivity: Liquid	0.35 W/mK (±10%)
pH Value	Approx. 9

## Usage guidelines

- Recommended storage temperature: 15°C to 30°C / 59°F to 86°F.
- Preparation before use depends on application conditions.
- Handle the ClimSel™ C48-X pouch with care and do not bend when solid.
- Do not use damaged pouch, as the product functionality will be compromised.
- 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.

# 48°C

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



Body



Equipment



Safety

## Climator Sweden AB

Mejselvägen 15  
SE-541 34 Skövde  
SWEDEN

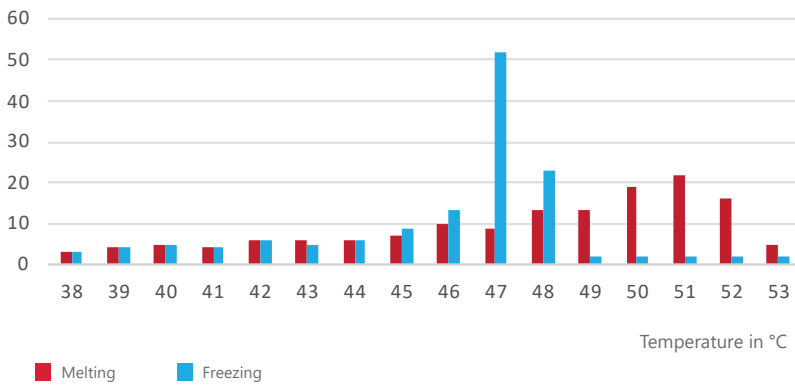
+46 (0)500 48 23 50  
www.climator.com  
climator@climator.com

# ClimSel™ C48-X

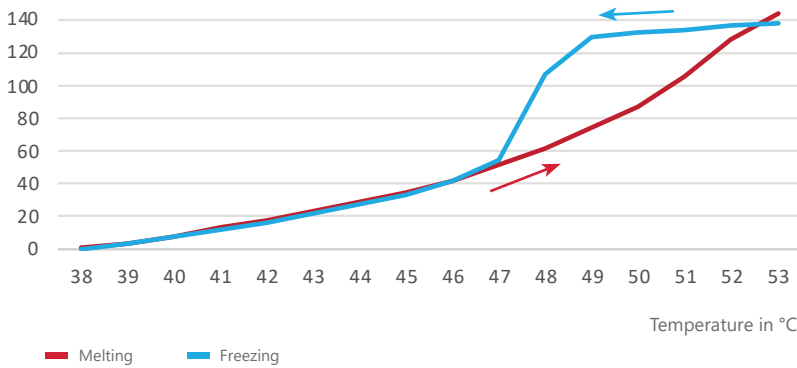
# 48°C

## Phase change properties

Part Enthalpy (J/g)



Enthalpy (J/g)



## Estimated functionality time

ClimSel™ C48-X 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.

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



Body



Equipment



Safety

### Climator Sweden AB

Mejselvägen 15  
SE-541 34 Skövde  
SWEDEN

+46 (0)500 48 23 50  
www.climator.com  
climator@climator.com