

Cooling Vest

Why do I need a Cooling Vest?

Heat Stress is a recognised and hazard first responders face when completing tasks whilst wearing Personal Protective Equipment (PPE). Although the SWEDE range of PPE has been designed to provide first responders with an excellent level of protection, durability and comfort, as the wearer begins their physical activities the body heats up producing excess heat energy. The PPE prevents the release of the excess heat which in turn can result in heat stress. Over heating still remains a problem – that is until now. SWEDE now provide a solution - the Cooling Vest.



How does it work?

The Cooling vest is fitted with 21 Phase Change Material (PCM) elements. Each element has an activation point set at 28°C. When the ambient temperature rises above this point, the PCM becomes active and starts to absorb the heat energy. But, more importantly, the PCM remains at the activation point temperature. The Cooling Vest provides a cooling effect to the body core thus reducing the heat stress hazard.

How long will it last?

In temperatures below the activation point the PCM elements have a solid form. As they absorb heat energy they change from a solid to liquid state. The cooling effect ceases once the transformation to liquid state is completed. The rate of change will vary according to the heat energy produced by the physical activity being undertaken and the environmental conditions. The cooling effect can range between 45 minutes – 2 hours.

Is it effective?

Tests completed in a hot environment showed that only a 2°C degree rise in body temperature were recorded for the individual wearing a Cooling Vest compared with a 7°C degree rise for a individual without the Cooling Vest. It really works!

Do I need batteries, ice or air pumps?

The short answer is NO. The Cooling Vest requires no batteries, pumps or ice. When the ambient temperature around the PCM element cools the stored heat energy is discharged and the PCM solidifies ready for the next use. It is simple, easy and safe.

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Technical Specification

Exterior Fabric Material:..... Polyester

Weight:..... >2 Kgs

PCM:

External Cover.....Polyester/Polyamid

Contents.....Blend of Salts

Sizes:

Part Number	Size	Breast Width
35 – 5282	S-M	84 – 100 cm
35 – 5284	L-XL	100 – 116 cm
35 – 5285	XXL	116 - 132 cm

