

PLUUMOPLUS

Information Pack

A pre-qualified thermal packaging solution, made from recycled feathers, for the Life Science industry.



Contents +

Our Company	03
PluumoPlus	04
Pre-validated Solutions	06
Bespoke Solutions	08
Contact Us	09

Our company 4

Inspired by the circular economy, creating a sustainable future for cold chain logistics.

PluumoPlus is an innovative thermal packaging solution developed by Aeropowder, an award-winning material and process innovation company.

We exist to ensure a better future for people and planet, and our focus is the problem of single-use plastic packaging.

Our mission is to build a more sustainable cold chain for the healthcare and life sciences industries by replacing expanded polystyrene shippers with our unique feather-based PluumoPlus solution.



"Refined over millions of years of evolution, nature already provides superior solutions for thermal protection. We exist to unlock that potential for the better of people and planet."

Ryan RobinsonFounder and CEO

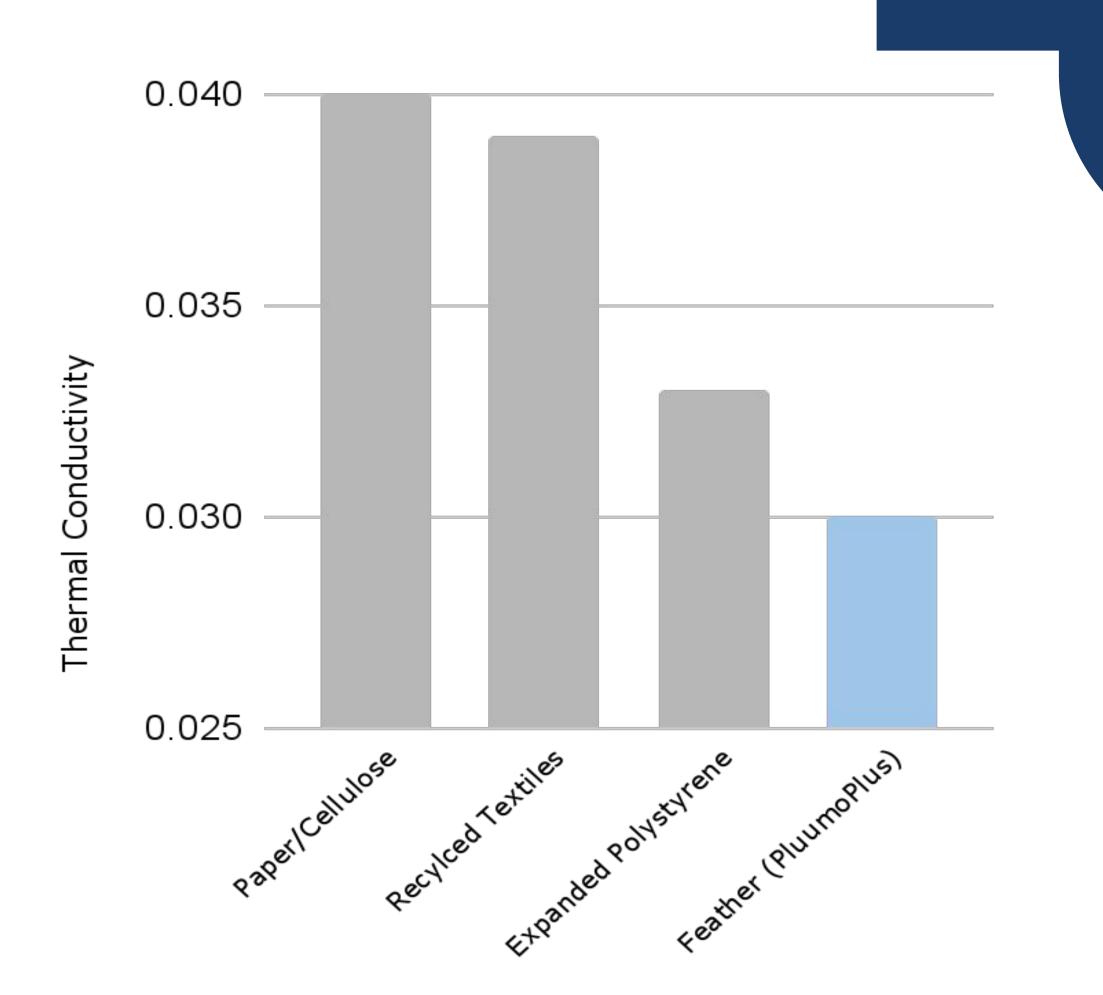




The world's first thermal packaging solution created from recycled feathers.

Harnessing nature's superior insulator for best-in-class performance

With feathers naturally possessing very low thermal conductivity values, our patented feather-based material is an exceptional insulator.



We convert recycled feathers into a high-performance insulation textile and cover it with a compostable film for ease of handling.

Rigorously tested to the highest standards

Validated against industry standard ISTA 7D profiles, for protection even under challenging conditions.

Replacing single-use expanded polystyrene

Fighting plastic packaging waste in life science cold chains without compromising performance.

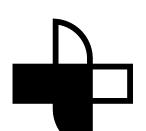
Flexible design and customisable solutions

Our technology is adaptable for various payload and shipping lane requirements.

Embracing the circular economy for a better future

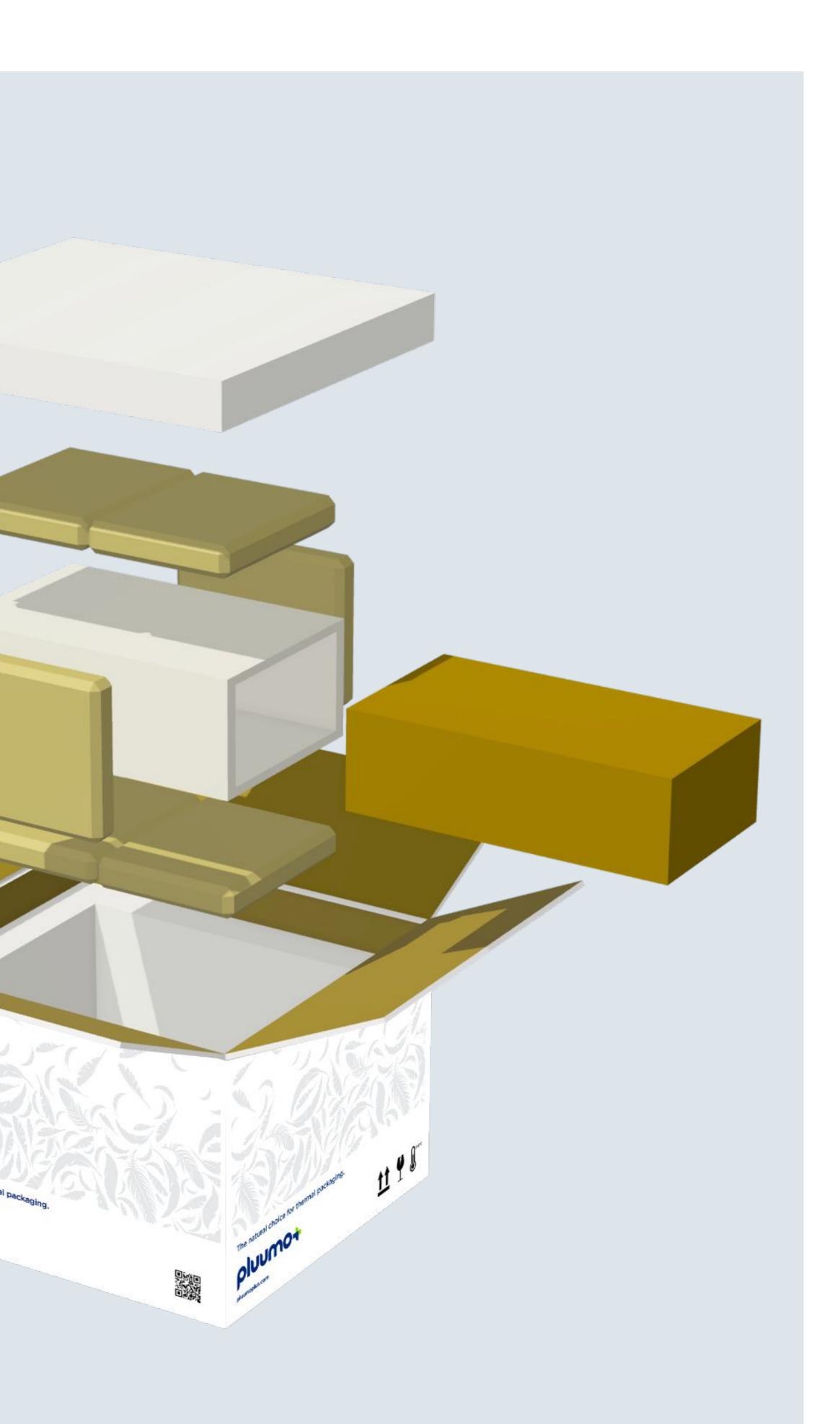
Created from recycled feathers from consumer products as part of a more sustainable supply chain.

Pre-validated Solutions +



Our stock solutions have been engineered to provide category defining thermal protection for life science shipments.

With a simple panel system, our PluumoPlus thermal packaging solutions provide superior protection whatever the application.



Adjustable protection, whether rain or shine.

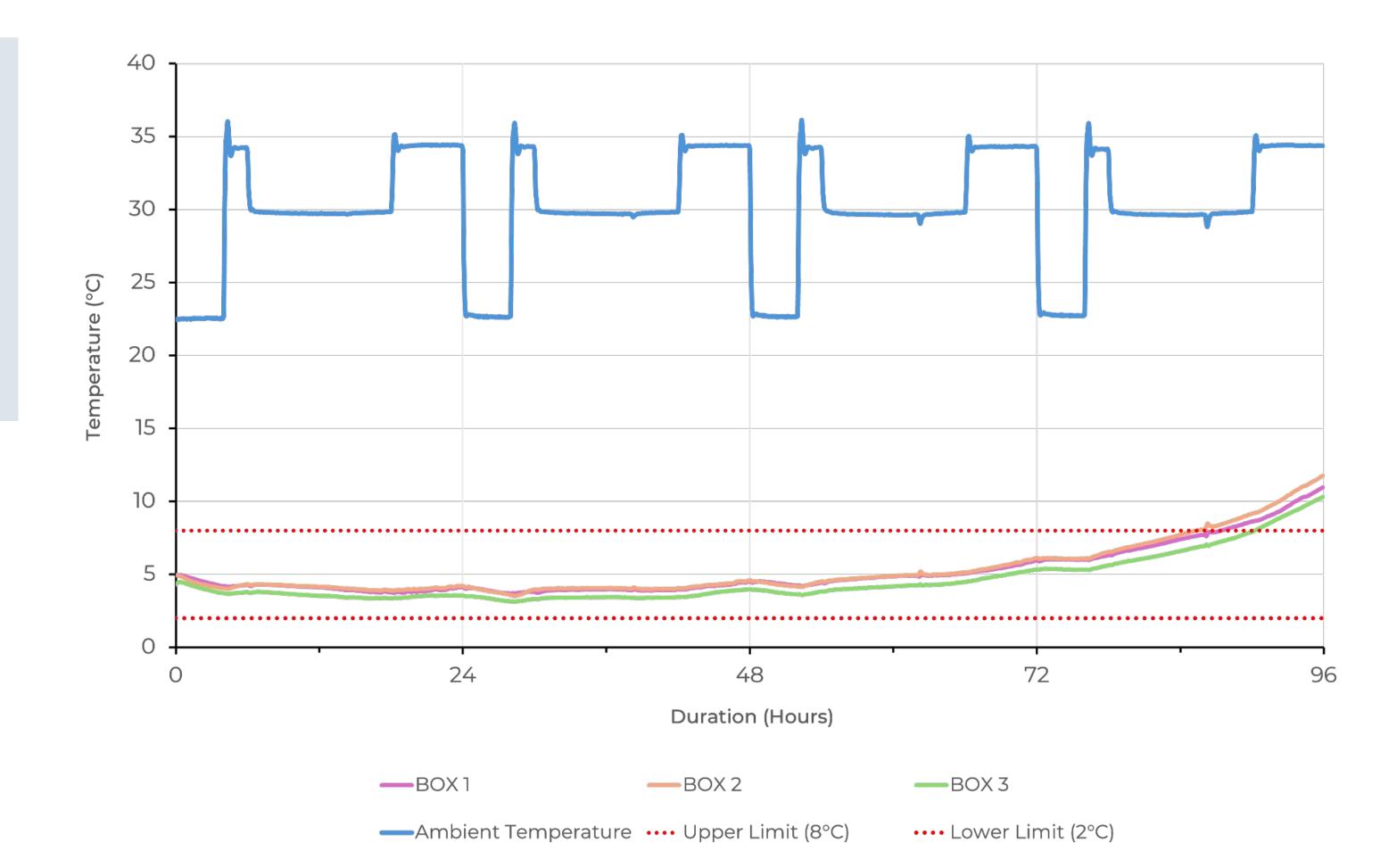
Whether during summer or winter conditions, a simple adjustment to the pre-conditioning steps of the coolants prior to packout allows PluumoPlus solutions to have maximum flexibility.

Robustly tested and validated for assured performance

PluumoPlus solutions have been optimsed and developed utilising our in-house temperature-controlled climatic chamber as well as external ISTA-certified validation laboratories.

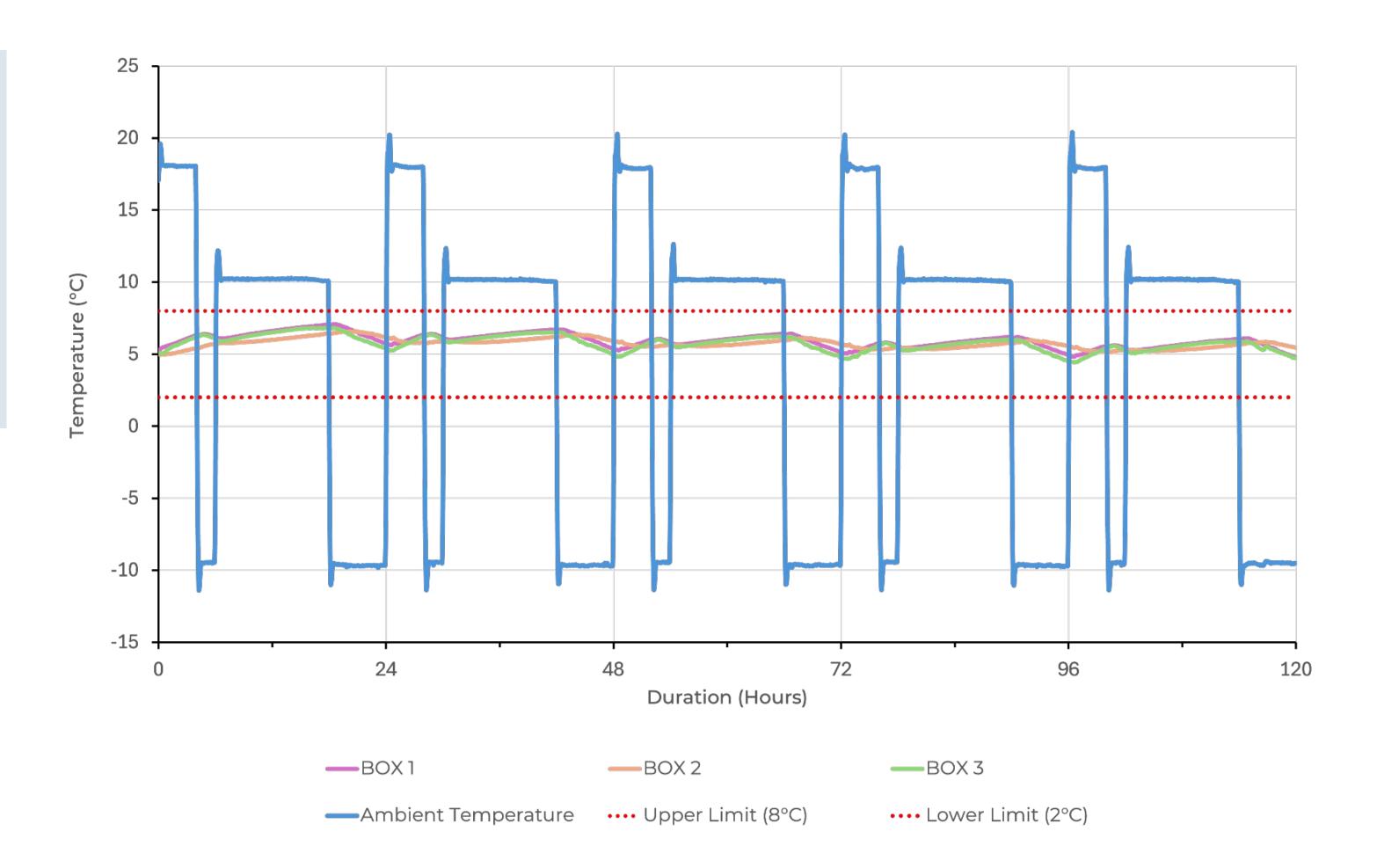
PluumoPlus 6L 2-8°C - ISTA 7D Summer

72 Hrs



PluumoPlus 6L 2-8°C - ISTA 7D Winter

120+ Hrs



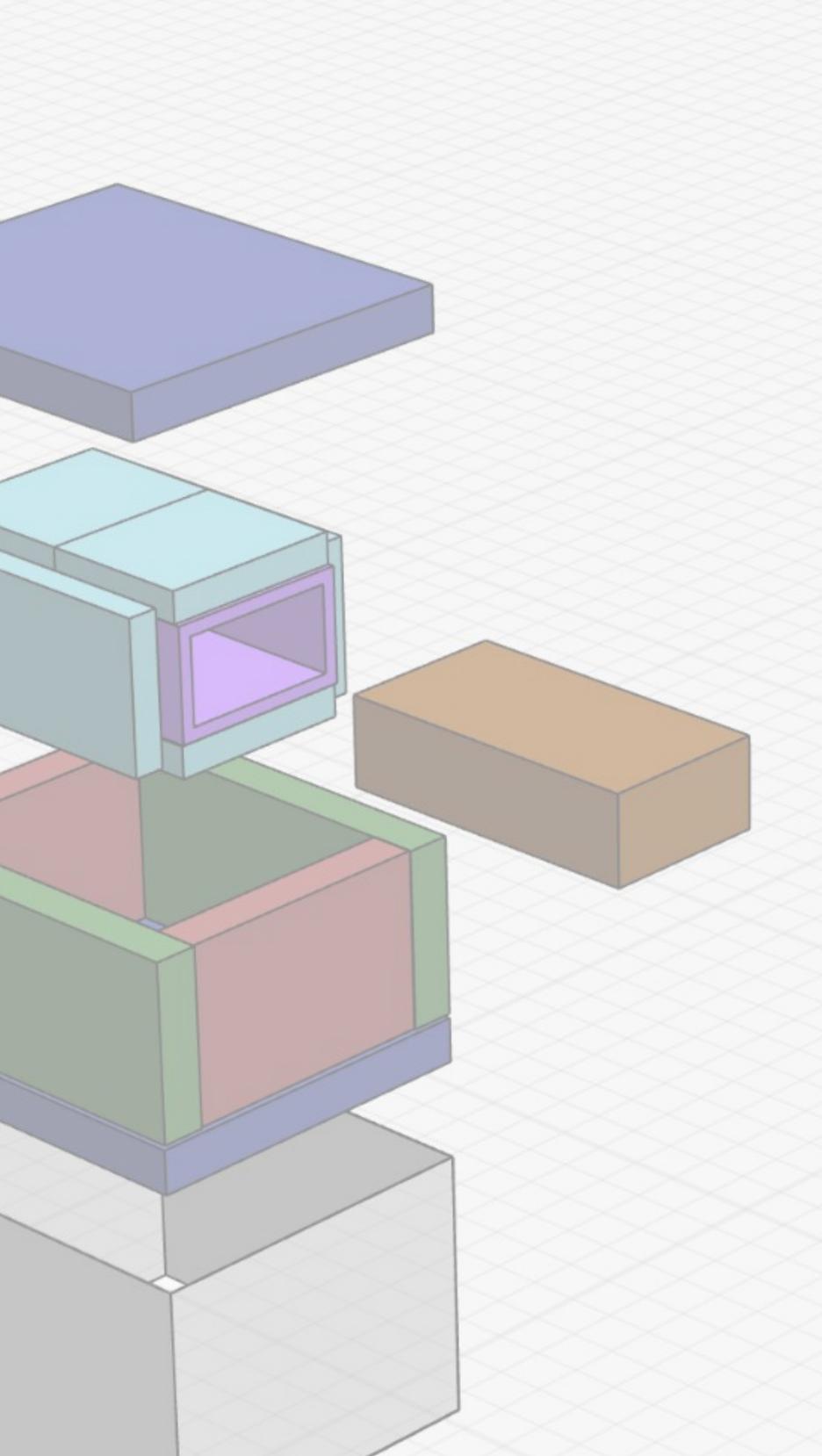
Product Number	Temperature Range (°C)	Payload Volume (L)	Payload Dims L x W x H (mm)	Outer Dims L x W x H (mm)	System Weight (kg)	Temp Profile	Duration (hrs)
PP-6L CHILL	2-8	6L 34	345 x 180	450 x 400 x 310	11.3	ISTA 7D Summer	72
			x 96			ISTA 7D Winter	120+
PP-6L CRT*	15-25	9L	345 x 210 x 115	450 x 400 x 310	11.3	ISTA 7D Summer	96

^{*} Under development - As well as additional payload configurations (including 2L, 15L, 27L)

Bespoke Solutions +



Our team of industry veterans have decades of combined experience across global healthcare cold chains. Together with our cutting-edge scientists, we are dedicated to solving challenges using our feather-based materials and reduce single-use plastic packaging waste. Whilst initially designed for single use, our liners have proven capabilities to be used again and again with no deterioration in performance.



Material flexibility with superior performance.

Our best-in-class feather-based insulation is manufactured using our patented process. Years of experience allow us to control the sizes, thicknesses and densities of the insulation materials we produce to be optimise for any particular shipment.

Rapid Development

Combining computer aided design, digital twin cold chain simulations and our in-house 1200L capacity temperature-controlled climatic chamber allows us to significantly minimise the time from initial enquiry to commercial production.

Contact Us +

Get in touch to learn more about using a more sustainable, high-performance insulation solution for your cold chain.



www.pluumoplus.com

info@pluumoplus.com