

Tyvek.

DuPont™ Tyvek™ air cargo covers offer advanced protection for pharmaceuticals, perishables and temperature-sensitive products



DuPont™ Tyvek™ Air Cargo Covers Help Protect Your Products and Improve Your Bottom Line

DuPont™ Tyvek™ air cargo covers¹ are used by pharmaceutical companies, perishables distributors, 3PLs and airlines worldwide because they offer proven performance with real benefits from a trusted brand.

Proven protection

Tyvek™ air cargo covers are specifically engineered to address the threat of cold chain breaks during air transit—when your products are at the greatest risk for temperature excursions. Validated in a wide variety of applications worldwide, Tyvek™ air cargo covers provide:

Tyvek™ Air Cargo Covers for Pharmaceuticals
Ideal for “control room temperature” products
Strengthen 2°C to 8°C cold chain solution
Provide hours of extended cold chain break protection
Validated by manufacturers for use in EU GDP applications

Low Emissivity Covers²—
Our most advanced protection

Excellent protection against temperature excursions by shielding your products from the threats of solar radiation and extreme ambient temperatures (hot and cold)



Protection from physical hazards including rain, snow and insects



Breathable barrier that allows gas exchange (O₂), vents harmful gases (CO₂, C₂H₄) and helps reduce probability of condensation damage



Enhanced shipment security because these white, opaque covers shield your cargo from view and are inherently tamper-evident



Real benefits



Help reduce losses and protect your brand



Ease of use—install or remove in as little as one minute

1-2-3

Simple, robust design means there is no complicated training and no return logistics required



Save money—help improve your bottom line by reducing costs associated with losses, excursion management, secondary packaging and shipping (lightweight thin cover)

Tyvek™ Air Cargo Covers for Perishables
Breathable, multi-threat protective cover
Reduce pest infestation
Significantly improve yields and shelf life
USDA approved for fumigation—keep your cold chain protection intact

From a respected global brand

Tyvek™ air cargo covers are backed by DuPont, one of the most respected brands worldwide.

¹Multiple patents/patents pending.

²Low emissivity covers are marketed as Tyvek™ air cargo covers for Pharmaceuticals. For best results, install these covers with the metallized side facing inward.

DuPont™ Tyvek™ Air Cargo Covers Provide Excellent “All-in-One” Protection Against Temperature Excursions

When it comes to managing the risk of temperature excursions throughout the cold chain, protecting your products against ambient temperature extremes is important. However, solar radiation may be the most critical—and under-appreciated—threat you face. That’s because solar radiation is the leading cause of high-temperature spikes on the tarmac.

Are you focused on the right R? Reflectivity or R-value?

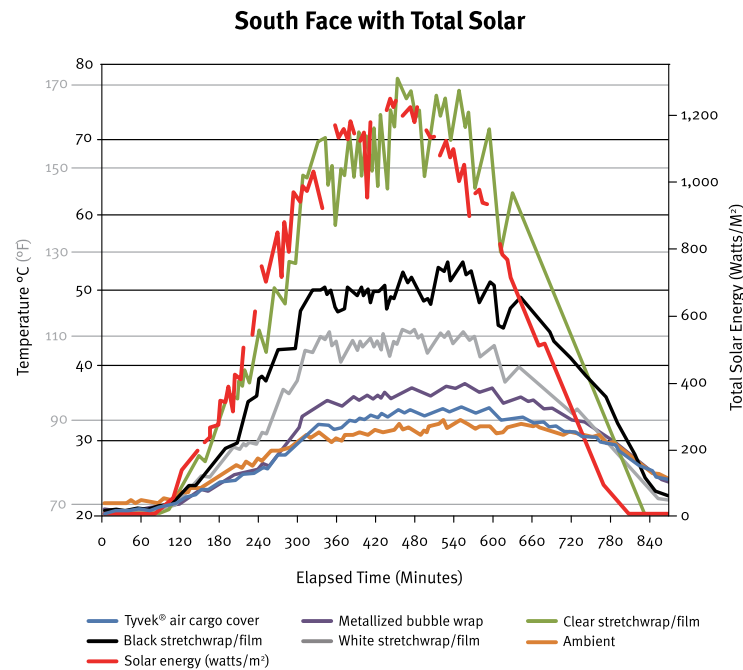
Tyvek™ air cargo covers offer multi-threat protection that helps reduce temperature excursions by providing:

- Superior protection from solar radiation as a result of their unique reflective outer surface
- Excellent protection from ambient temperature extremes—hot and cold—without the weight or bulk of alternative covers

Simply stated, Tyvek™ air cargo covers provide excellent “all-in-one” protection against the threats of solar radiation and extreme ambient temperatures.

Did you know?

At low thermal mass (empty boxes in test case below), the temperature inside a pallet can far exceed ambient temperature¹.

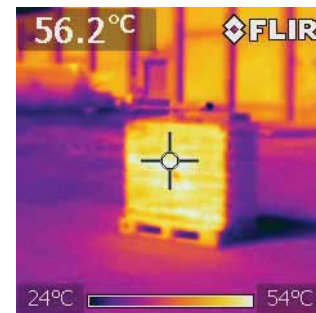


Test conditions: Euro sized covered pallets on ground near Homestead, FL, 23 March 2013. Empty boxes. Full sun exposure with ambient high of 32°C/90°F. Solar wattage data when clouds obscured sun not shown to remove noise from graph. Tyvek® low emissivity cover shown.

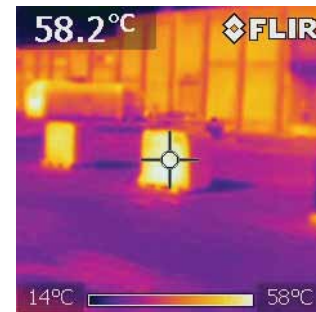
Solar energy measured at 26° north latitude per ASTM G7.

Comparison of surface temperatures (°C)

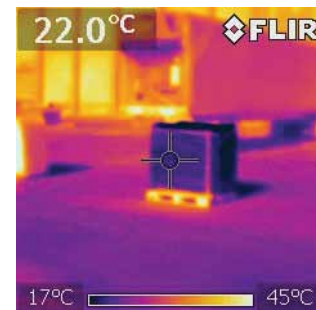
Courtesy of The Illuminate Group



Control (stretch wrap)



Thermal blanket



Tyvek™ air cargo covers

Test conditions: Covered pallets on simulated tarmac in Lakeland, FL, November 2012 at ~11 a.m. Full sun with ambient temperature at 20°C.

¹A zero thermal mass experiment best isolates the relative temperature management effect of the cover.

DuPont™ Tyvek™ Air Cargo Covers Are Available Worldwide

- Two basic designs—a one-piece top cover and a two-piece top and bottom cover
- Made from either classic Tyvek® or low emissivity Tyvek® for your most challenging applications
- Covers tailor-made to fit upper and lower deck standard cargo sizes, such as Euro and UK/US pallets, ULD, PMC, PAG, AKE, LD3, etc.
- Custom sizing is available

What makes Tyvek® different?

Tyvek® brings advanced material science and a unique balance of properties to cold chain protection.



High reflectivity



Low thermal conductivity



Low emissivity (available)



Water resistant



Lightweight & thin



Strong



Breathable



HDPE

Ask Us About How We Can Help

Tyvek™ air cargo covers are only available from DuPont and our authorized distributors. Please visit our website for more information. Contact your regional DuPont™ Tyvek™ air cargo covers representative for a product list or to discuss your sizing needs.

www.aircargocovers.dupont.com



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To maintain efficacy, DuPont™ Tyvek™ air cargo covers must be stored in the original package under dry, normal temperature conditions. DuPont™ Tyvek™ air cargo covers have been designed for one-time or limited use in line with sanitary regulations and pest management best practices. Sufficient pre-cooling and correct temperature management from start of the cool chain is essential for optimal performance. DuPont is not liable for product damage during the use of the cover.

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