# THERMAL PROTEC TORS

Container Liners Cargo Blankets Pallet Covers



## THERMAL PROTECTORS

ECE THERMAL PROTECTORS ARE THE EASIEST WAY TO PROTECT AND SHIP TEMPERATURE-SENSITIVE CARGO, LOWERING COSTS AND MINIMIZING CO\_ FOOTPRINT.

- Maintain cold chain
- Protect against Freeze/Heat
- Block radiation, convection and conduction
- Lightweight and durable materials

#### ECE ADDED VALUE

- We are committed to selecting and providing only the best-in-class solutions for our customers
- Eceplast is introducing a new, more scientific approach to thermal issues on the European intermodal transport market

#### **INNOVATION DRIVEN**

In-depth analysis of the science behind insulation, partnerships with leading research organizations to test ideas, and innovative products and tactics for loading and shipping, make ECE Thermal Protectors an efficient, groundbreaking solution in the insulation industry.

#### FIELDS OF APPLICATION



**Food & Beverage** Wine, Beer, Oil, Soda, Confections, Chocolate, Condiments, Fruit, Vegetables.





Pharmaceuticals & Medical Products



**Industrial** Chemicals, Paints, Adhesives, Dangerous Goods.

#### **SUSTAINABILITY**

ECE Thermal Packaging Solutions include sustainability features specifically incorporated into each product line, facilitating the recycle, reuse and reposition of all insulation materials.



### **Container** Liners

#### Suitable for:

#### BEVERAGE

- Wine
- Beer
- Spirits
- Minerals Bottled Water

#### FOOD

- Sauces
- Dressings
- Ingredients
- Coffee
- Canned Fruit
- Candy
- Chocolate
- Soda
- Milk Powder
- Vegetal Oils

#### CHEMICALS

- Adhesives
- Glue
- Paints

#### PHARMA

#### ELECTRONIC COMPONENTS

INDUSTRIAL EQUIPMENT

#### MINIMIZING TEMPERATURE EXCURSIONS AT THE PORT.

Thermal Liner is a protective foil liner application, fitted to standard dry ocean shipping containers. The Thermal Liner is designed to insulate and protect against radiation, container rain and cargo sweat. Varying climates and unpredictable global temperatures can wreak havoc on cargo. The combination of a long ocean transit, port traffic, and drayage to final destination can make global shipping problematic. Whether shipping wine or beverages, canned goods or coffee beans the various climatic environments the cargo travels through is strenuous and can destroy the quality of the product or the packaging.

MADE OF

process.

#### PLUS

- Protect from Heat
- Eliminate Container Rain
- Maximize Dry container fleet
- On site install available
- Provide a protective barrier against potential contamination
- Reduce Thermal shock from port to inland journey
- Available for containers: 20', 40' STD and 40' High Cube



Multi-layers HDPE woven fabric

the highest reflectivity degrees.

for a simple and fast installation

coated with Aluminum foil to grant

Equipped with lashings and straps



## Cargo Blankets

#### Suitable for:

#### BEVERAGE

- Wine
- Beer
- Spirits
- Minerals Bottled Water

#### FOOD

- Sauces
- Canned Fruit
- Chocolate
- Soda

#### CHEMICALS

- Adhesives
- Glue
- Paints

#### ELECTRONIC COMPONENTS

#### INDUSTRIAL EQUIPMENT

The attention to durability and quality, makes the Cargo Blankets a true sustainable alternative and gives shippers the assurance that the blanket's insulating qualities remain consistent. Cold containers wick away ambient warmth and allow the cold to penetrate and surround your cargo. For the winter, cargo blankets work to trap the warmth so temperatures of a shipment remain stable and above freezing for longer periods of time. In the summer, the foil layer is optimized to reflect the IR radiation (heat) and maintain target temperature ranges for the duration of a typical intermodal shipment.

#### PLUS

- Easy to install
- Reduce transportation cost
- Protect from Freeze/Heat
- Block Radiation, Convection
  and Conduction
- Sustainable & Reusable, No Landfill

#### MADE OF

The combination of a thin layer of reflective aluminum, laminated to polyethylene bubble foil that acts as the insulation, it grant an effective shield against radiant, conductive, and convective heat transfer.







## Pallet Covers

#### Suitable for:

#### BEVERAGE

- Wine
- Beer
- Spirits
- Bottled water

#### FOOD

- Sauces
- Dressings
- Ingredients
- Coffee
- Canned Fruit
- Candy
- Chocolate
- Soda
- Milk Powders
- Vegetal Oils

#### CHEMICALS

- Adhedives
- Glue
- Paints

#### PHARMA

#### **ELECTRONIC COMPONENTS**

Pallet covers shield perishable goods against thermal related damages in transit helping to prevent temporary cold chain interruption. Pallet covers shield perishable goods against thermal related damages in transit helping to prevent temporary cold chain interruption.

#### PLUS

- Maintain cold chain
- Protect from Freeze / Heat
- Block radiation, convection
- and conduction
- Sustainable & Durable
- Added value to your existing fleet

#### MADE OF

The combination of a thin layer of reflective aluminum, laminated to polyethylene bubble foil that acts as the insulation, it grant an effective shield against radiant, conductive, and convective heat transfer.





## Alternative compounds for specific needs

#### Aluminum foil + HDPE woven fabric

Our compound for the liner is a protective foil designed to insulate and protect cargos against radiation, container rain, and cargo. sweat.

SOLAR REFLECTANCE: 97% (ASTM E1980) EMITTANCE: .01 (ASTM C13171) THERMAL RESISTANCE: R 1 (ASTM C 518)

- Protects from Heat
- Reduce thermal shock
- Protective barrier against contamination

Aluminum foil + LDPE airbubble film Pure Aluminum foil coated with one or more layers of LDPE air bubble film, offers the maximum level of protection when you need instant one-way temperature and radiation control

#### SOLAR REFLECTANCE:

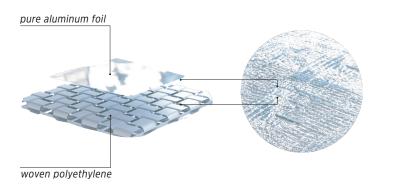
97% (ASTM E1980) EMITTANCE: .01 (ASTM C13171) THERMAL RESISTANCE: R-2.5 - R7 (ASTM C 518)

- Protects against: radiation, conduction, convection
- Light weight / easy to handle
- Protects from Freeze / Heat
- Wide range of solutions available in terms of compound, grammage and layering
- Reusable
- Long life span

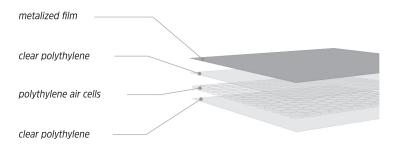
Metallised PET foil + LDPE airbubble film The entry level protection for temperature stability, preventing damages and losses of your goods.

SOLAR REFLECTANCE: 82% (ASTM E1980) THERMAL RESISTANCE: R-1.6 (ASTM C 518)

- Limit Radiation, Convection and Conduction
- Sustainable & Reusable, No Landfill
- Low cost
- Reusable
- Lightweight



aluminum foil	
clear polyethylene	
polyethylene air cells	
clear polyethylene	
polyethylene air cells	
clear polyethylene	



PRINTED ON 100% RECYCLED PAPER



#### **ECEPLAST SRL**

P: +39 0881 97 80 80 F: +39 0881 97 91 00 E: INFO@ECEPLAST.IT

#### **REGISTERED OFFICE**

VIA DELLA REPUBBLICA ITALIANA, 110 70032 BITONTO (BA) - ITALY

#### **HEAD OFFICE**

S.P. 115, KM 15,050 71029 TROIA (FG) - ITALY

#### ITALIAN COMPANY ESTABLISHED IN 1995

UNI EN ISO 9001:2015 UNI EN ISO 14001:2015 UNI EN ISO 22000:2018 UNI EN ISO 45001:2018

eceplast.com