

Eco-Breath thermocover



Eco-Breath: breathable protection for transport interfaces. Here are the key facts:

- Basic protection for all temperature-sensitive products at transport interfaces, especially in air freight
- Ethylene and moisture regulating due to microperforation
- Ideally suited for the protection of fruit and vegetables, berries and cut flowers



Breathable thermal protection

The ECO-BREATH thermocover consists of reflective, micro-perforated foil on both sides on a tear- and punctureresistant PP fabric. The reflective film layers insulate very effectively and thus protect the goods from heat and frost damage.

The micro-perforated structure helps to remove ethylene produced by ripening processes and prevents ethylene-related product ageing. In addition, the micro-perforation improves the exchange of humidity on the goods in case of strong temperature fluctuations and thus prevents condensation.

This makes it particularly suitable for the protection of sensitive products such as fruit and vegetables, berries

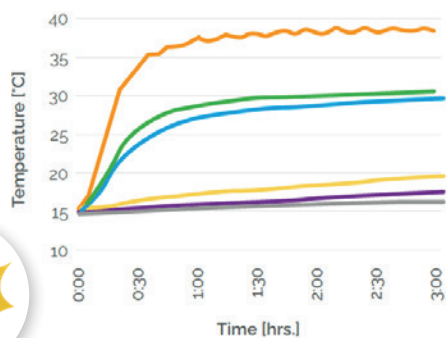
and cut flowers. It extends the shelf life and reduces temperature damage along the logistics chain.

Test conditions and results

- **Test set-up:** EUR pallet with 40 cartons with dummy load
- **Dimensions:** 120 x 80 x 100 cm
- **Dummy load:** 3L water per carton, total 120L (12,5% total volume)
- **Temperature scenarios:** Summer: +40 °C ambient temperature; Winter: -10 °C ambient temperature

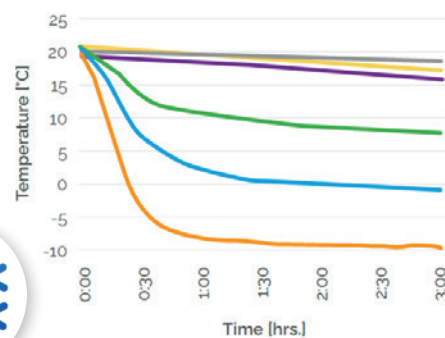
Climate chamber test Summer

(Extract of the first 3 hours)



Climate chamber test Winter

(Extract of the first 3 hours)



— Ambient temperature
 — Upper corner, outside
 — Bottom corner, outside
— Goods, upper corner
 — Goods, bottom corner
 — Core temperature

The test results prove the significant protective effect of the ECO-BREATH thermocover. The temperature acting on the product cartons is approx. 10-15°C less extreme than the respective ambient temperature*. The time required for the core temperature to rise or fall by 5°C is significantly extended by the ECO-BREATH thermocover. The time span determined in the test was up to 335% of the time required without thermal protection.

*Measuring points upper/lower carton corner outside vs. ambient temperature