

## PACKAGING

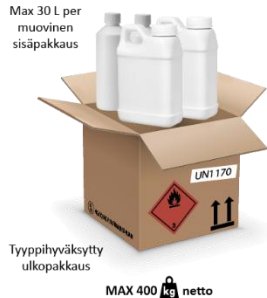
Packaging is a basic unit of logistics in which products are transferred from the producer to the consumer. Different products require different packaging, and the mode of transport also affects the choice of packaging. The main purpose of packaging is to protect the product and the product's environment, facilitate the handling of the product in the logistics chain, and provide information about the product.



Food packaging. Figure: SealedAir (<https://www.sealedair.com/products/food-packaging>)

Pakkaustavalla P001  
Pakkausyhdistelmä

Max 30 L per  
muovinen  
sisäpakkaus



Tyyp hyväksytty  
ulkopakkaus

MAX 400 kg netto

IBC-pakkaustavalla IBC02

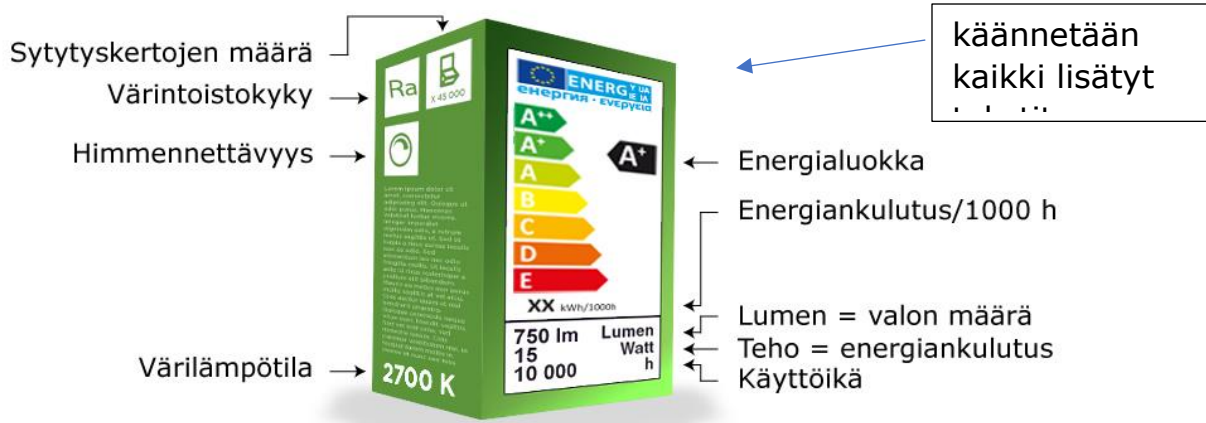
Tyyp hyväksytyn IBC-pakkauksen  
tilavuus on enintään 3000 L



IBC-pakkaus pitää määrittäikäistarkastaa  
2,5 vuoden välein. Muovisen käyttöikä  
on max 5 vuotta

Packaging method P001	IBC packaging method IBC02
<b>Bulk packaging</b>	The capacity of type-approved intermediate bulk containers (IBCs) must not exceed 3,000 litres
Max. 30 litres per plastic inner packaging	IBCs must be inspected periodically every 2.5 years The service life of plastic packaging is max. 5 years
Type-approved outer packaging	
<b>MAX 400 kg net</b>	

Packaging of hazardous substances. Figure: Finnish Safety and Chemicals Agency (Tukes) (<https://tukes.fi/vak/esimerkkeja-pakkaamisesta-ja-merkinnasta>) (in Finnish)



Number of switching cycles	Energy class
Colour rendering index	Energy consumption / 1,000 h
Dimmability	Lumens = light output
Colour temperature	Power
	Lifespan

Light bulb packaging. Figure: Motiva (<https://lampputieto.fi/lampun-valinta/lamppujen-pakkausmerkinnat/>)

The purpose of packaging is to protect the product from damage and spoilage during handling and storage. Proper packaging also protects the environment by preventing hazardous and harmful substances from being released into the environment. Packaging that complies with the relevant industry standards enables the efficient handling of goods during transport and storage. The purpose of packaging labels and instructions is to facilitate the identification, handling, and traceability of the goods during storage and transport. Packages are often marked with commonly known handling instructions to prevent damage to the goods.

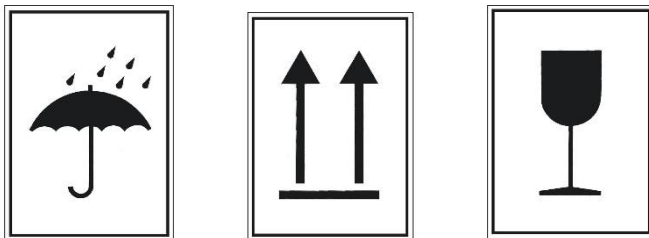


Figure: Suomen turvakilpi Oy <https://www.turvakilvet.fi/Pakkausten-kaesittelymerkit>

The packaging must be able to hold the weight of its contents and protect the content under all normal transport conditions. The packaging must be approved for its intended use. If the distribution chain is long, the packages are handled in different situations, for example during loading and intermediate storage, which is why the packaging should be durable. Climatic conditions also pose their own challenges, especially when products are delivered, for example, from a cold country like Finland to a tropical location. The packaging must therefore be able to withstand humidity and temperature fluctuations during transport. (Logistiikan maailma, 2021)

Vibration during transport can also damage the packaging and its contents. Especially in developing countries, roads are often in poor condition, which means that particular care and attention needs to be paid to packaging. In road transport, faulty suspension components and high speeds may also cause vibrations. Proper lashing helps prevent damage to the packaging. (Logistiikan maailma, 2021)

Packaging your product in the correct manner, and using proper packaging material, can help prevent food spoilage in the logistics chain. The packaging must protect the contents from bacteria, dirt, and moisture. The packaging should also protect the food from absorbing any odours, or flavours. (Logistiikan maailma, 2021)

More information and instructions on packaging:

<https://www.logistiikanmaailma.fi/en/logistics/packaging/>

[https://docs.google.com/presentation/d/e/2PACX-1vQ9nmvLAZLHE3w2pRs6kz8dJSaqN\\_Ycfoto0u0bsvOn\\_VN307M5A2ShUi43Af9MiJpEogQM-dwcljJD/pub?start=false&loop=false&delayms=3000&slide=id.gd5dc7f94d5\\_0\\_96](https://docs.google.com/presentation/d/e/2PACX-1vQ9nmvLAZLHE3w2pRs6kz8dJSaqN_Ycfoto0u0bsvOn_VN307M5A2ShUi43Af9MiJpEogQM-dwcljJD/pub?start=false&loop=false&delayms=3000&slide=id.gd5dc7f94d5_0_96)

EUROPEAN BEST PRACTICES GUIDELINES ON CARGO SECURING FOR ROAD TRANSPORT, EU publication 2014 (Separate publication, pages 26-29)

Videos, packaging examples:

[Packaging Systems - Pallet Patterns](#)

[How to Wrap a Pallet for Shipment - Kruk Cards](#)

[Noxon EKKO 90 Pallet Wrapping Machine](#)

[Sealed Air Instapak Quick® Room Temperature Foam Packaging](#)

[Explore the Sealed Air and UPS Packaging Innovation Center](#)