

# Ready for carriage -Liquid cargo guidelines



## **Definitions**

Cargolux defines 2 different sizes of packaging containing liquid:

- 1. Small packaging of liquid cargo: packagings with a net quantity of 200L or less (e.g. jerrycans)
- 2. Large packaging of liquid cargo: packagings with a net quantity of more than 200L (e.g. drum, IBC container)

For packages with a capacity of more than 1000L, please contact the local Cargolux Office for a custom loadability evaluation.

#### Information required from you

Cargolux needs to know if stacking of skids is allowed, and if top-loading of other cargo is allowed during build-up (if yes, the max top load weight?).

## **Requirements for all size packaging**

#### Packaging itself:

- The packaging should be MAX 95% full volumetrically, to avoid spillage and to allow thermal expansion of the liquid.
- The packaging should not have bottom openings (e.g. outlet valve). Where a bottom discharge valve/lever is fitted, it must be secured and sealed against accidental opening.
- The packaging must be tested to withstand conditions normal to air transport (e.g. packaging certification UN 31 HA1) in order to avoid leakage/spills (e.g. pressure differentials).
- The packaging must be resistant to stresses when stacked or top-loaded (if allowed).

#### Skidding:

It is recommendable to deliver jerrycans or drums, individually or bundled, on a wooden skid as it reduces the risk of damage and subsequent leakage.

#### The skid must be:

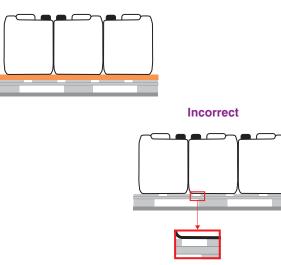
- Designed for mechanical handling (e.g. forklift, trucking);
- Resistant to the forces and loads applied in ground handling and transport operations; including stacking or top-loading during build-up at Cargolux (if allowed).

The skid should be leveled to allow equal load distribution and stacking of packages in an upright position. If there is no flat area on the skid, then a rigid intra-layer should be used between the pallet and the drums/jerrycans to avoid stressed corners and risk of unbalance.

If jerrycans/drums are transported on a wooden skid, they should be supported over the entire footprint. The bottom of the jerrycans/drums that stands out from the pallet can cause unbalance.

Correct

Correct



Solicitations and strong crashes can make the corners lacerate the bottom of the drum/jerrycan and create leaks.

Incorrect

For jerrycans, position the necks towards the inner part of the skid.



If you prepare liquid packagings in stacks on a skid, place heaviest units at the bottom and stack gradually up to the lightest. Separate layers with wooden planks or thick fiberboard/plywood sheets. Consider overall stability and strength against crushing. Consider banding around each layer.

## Additional requirements for large size packaging

Whenever possible, large packaging should (in addition to a maximum filling level of 95%) not be filled less than 90%, to reduce potential load shifting due to sloshing.

Contact the local Cargolux Office for shipments of large size packagings either with filling levels of less than 90% and/or of type other than drums or IBCs.

