

# The "Do's & Don'ts" of packing, labelling, loading and stowage of packaged waste for shipment

## Packaging types and general stowage requirements

ALWAYS CHECK UN MARK ON PACKAGING  
UN 1H2/X225/SI--/D/BAM 9624

HAZARDOUS LIQUIDS SHOULD BE IN TIGHT HEAD DRUMS

ENSURE LID AND LEVER ON IBC ARE SECURELY CLOSED & DRIP CAP IS PRESENT

ALL IBCS MANUFACTURED, REPAIRED OR REMANUFACTURED AS FROM 1 JANUARY 2011 MUST BEAR THIS SYMBOL WHICH INDICATES THAT THE IBC IS NOT SUITABLE FOR STACKING

A 'COMBI' IS AN OPEN TOP DRUM THAT IS SUITABLE FOR BOTH SOLIDS & LIQUIDS

CORROSIVE LIQUIDS SHOULD BE IN TIGHT HEAD LEAK PROOF PLASTIC DRUMS

SOLIDS SHOULD BE IN OPEN TOP DRUMS

ALL IBCS MANUFACTURED, REPAIRED OR REMANUFACTURED AS FROM 1 JANUARY 2011 MUST BEAR THIS SYMBOL WHICH INDICATES MAX WEIGHT THAT CAN BE STACKED ON AN IBC

PLASTIC PACKAGINGS ARE ONLY UN APPROVED FOR A PERIOD OF 5 YEARS AFTER THE DATE OF MANUFACTURE

## Filling and closures

ENSURE CLAMPS ARE CORRECTLY CLOSED WITH T-BAR OR CLIP

ENSURE CLAMPS ARE CLOSED CORRECTLY

DO NOT EXCEED THE MAXIMUM GROSS MASS OF THE DRUM

MUST BEAR UN MARKINGS PRESCRIBED BY ADR AND IMDG CODES

## Labelling

WASTE PRODUCERS NAME

UN NUMBER

PROPER SHIPPING NAME

HAZARD DIAMOND INCLUDING SUB-RISK DIAMOND IF APPLICABLE

EMERGENCY CONTACT DETAILS

APPLY ORIENTATION ARROWS TO PARTICULAR PACKAGES E.G. DRUMS WITH INNER RECEPTACLES CONTAINING LIQUID OR VENTED PACKAGES

## Pallets

SECURE PACKAGES ON PALLET

REGULARLY SHAPED PALLET THAT IS CORRECTLY WRAPPED, BANDED & STABLE

THIS LOAD DOES NOT PROJECT BEYOND EDGES OF PALLET

## Stowage on curtainsiders

CORRECT STOWAGE

PALLETS MUST BE SECURED TO THE VEHICLE BY USING A SIDE BOARD OR RATCHET STRAPS OR SIMILAR SECURING DEVICES

## Stowage and Placarding on Cargo Transport Units (CTUs)

THE CONTAINER / VEHICLES AND PACKAGES MUST BE PROPERLY MARKED, LABELLED AND PLACARDED AS APPROPRIATE AND IN GOOD CONDITION BEFORE LOADING

THE CTU SHOULD HAVE A READILY VISIBLE CSC PLATE

ENSURE A SECURE FACE TO PREVENT "FALL OUT" WHEN DOORS ARE OPENED

THE LOAD MUST BE EVENLY DISTRIBUTED WITHIN THE CTU

DANGEROUS CARGOES SHOULD BE PACKED SO AS TO BE ACCESSIBLE FROM THE BACK DOORS

SPACES MUST BE FILLED WITH DUNNAGE E.G. FOLDED CARDBOARD OR PALLET

## The "Do's"

### 1 Packaging types and general stowage requirements

- Drums containing dangerous goods should be stowed upright
- Dangerous goods must be packed in correctly labelled, UN approved containers
- Each container must have its UN approval marking readily visible to show its compliance with the transport regulations
- Dangerous goods must be compatible with the packaging material
- All containers must be clean, dry and correctly labelled
- The weight of the load should be evenly distributed throughout the vehicle
- No heavy items should be placed on lightweight items, nor liquids on solids

### 2 Filling & closures

- Only UN approved packaging suitable for substance concerned must be used
- Closures must be secured as per the manufacturer's instructions
- Containers must not be overfilled to allow for expansion due to temperature changes

### 3 Labelling

- Each package should be labelled with hazard diamonds for each risk and marked with the UN number and proper Shipping name
- An overpack must be marked with the word "overpack"
- IBCs must be labelled on opposite sides when capacity is greater than 450L
- An Environmentally Hazardous mark is required on packaging containing >5L / 5kg of environmentally hazardous dangerous goods
- Single packaging fitted with a vent and combination packaging with inners containing liquid dangerous goods shall be marked on two opposite vertical sides with orientation arrows
- All marks and labels must be applied to a clean dry surface

### 4 Pallets

- A unit load must be regularly shaped and have vertical sides
- Only good quality pallets should be used
- No dangerous substance should adhere to the pallet, cling wrap or the outside of the package
- Damaged pallets can create unstable loads

### 5 Stowage on curtainsiders

- These vehicles do not have rigid sides
- All packages must be secured to pallets
- All pallets / packages must be secured to the vehicle
- A curtain is not a load-securing device
- Cargo must not project beyond the overall dimensions of the curtainsider

### 6 Stowage and Placarding on Cargo Transport Units (CTUs)

- Placards for each of the hazards must be displayed on the front, rear and sides of the CTU
- Irrelevant placards and marks must be removed.
- For a CTU going on a sea journey containing at least 4000kg of dangerous goods of a single UN number, that UN number must be displayed on the front, rear and sides of the CTU
- After closing the doors, closures must be secure but easily opened in an emergency
- CTU must not be packed above its maximum gross weight

## The "Don'ts"

DRUMS CONTAINING LIQUIDS SHOULD NOT BE PLACED ON DRUMS OF SOLID WASTE

NO BULGES / DOMING DRUMS

NO DENTS

NO RESIDUES

NO CORROSION

NO UNSECURED CAPS

NO CONTAINERS ON THEIR SIDE

NO UNSECURED LIDS CLAMP MUST BE CLOSED

NO UNLABELLED CONTAINERS

DO NOT OVERFILL ALLOW 10% ULLAGE

FOR LIQUIDS, DO NOT EXCEED THE RELATIVE DENSITY OF THE PACKAGING

ALL NON INDAVER LABELS MUST BE REMOVED OR BLACKED OUT AS OLD LABELS CAN CAUSE CONFUSION

DIMENSIONS OF MARKS & HAZARD DIAMONDS (100MM X 100MM) MUST CORRESPOND WITH THE TRANSPORT REGULATIONS

AN IRREGULARLY SHAPED PALLET THAT IS UNWRAPPED, UNBANDED, UNSTABLE & CONTAINS NON-COMPLIANT PACKAGES.

PROTRUDING NAILS & JAGGED EDGES CAN RUPTURE CONTAINERS

### INCORRECT STOWAGE

PALLETS CANNOT BE DOUBLE STACKED UNLESS EACH PALLET IS SECURED TO THE VEHICLE

DRUMS SHOULD BE UPRIGHT, WRAPPED, BANDED AND SECURED

ON A SEA JOURNEY, CERTAIN SUBSTANCES MUST NOT BE LOADED ON THE SAME CTU (SEE IMDG SEGREGATION TABLE) E.G. AN ORGANIC PEROXIDE AND A FLAMMABLE LIQUID.

NO UNSECURED CONTAINERS

ALL ITEMS OF CARGO SHOULD BE SECURED WHETHER THEY ARE LIGHT OR HEAVY

NO BROKEN FLOORING

NO RESIDUES

NO DAMAGE TO DOORS