

Informal meeting on Code of Practice for Packing of Cargo Transport Units

at the request of the United Nations Economic Commission for Europe Working Party on Intermodal Transport and Logistics

Geneva and virtual, 29-30 March 2023

Labels, Marks and Placards

Submitted by ETS Consulting

This document proposes changes to the CTU Code to standardise the use of terms for warnings signs used on cargo packages and CTUs.

- To bring the definitions and use of signs, labels, marks and placards in line with the DG Model Regulations

Background information

UNECE Recommendations on the TRANSPORT OF DANGEROUS GOODS Model Regulations Volume 2 states:

- the term “Sign” is always preceded by the word “distinguishing” and in the term “distinguishing sign” and often accompanied by a footnote:

“Distinguishing sign of the state of registration used on motor vehicles and trailers in international road traffic, e.g., in accordance with the Geneva Convention on Road Traffic 1949 or in the Vienna Convention on Road Traffic of 1968”.

For example, in clause 5.4.1.5.10 Firework classification reference

When fireworks of UN number 0333, 0334, 0335, 0336 and 03's 37 are transported, the dangerous goods transport document shall include a classification reference issued by the competent authority the classification reference shall consist of the competent authorities state, indicated by the distinguishing sign used on vehicles in international road traffic, the competent authority identification and unique serial reference.

Examples of such classification references are:

GB/HSC123456

D/BAM1234

USA EX2009234.

- Mark

Clause 5.2.1 Marking indicates that a Mark is a marking that is informative, i.e., a typical package mark is:

Corrosive liquid, acidic, organic, n.o.s. (Caprylyl chloride) UN 3265.

Included in the generic Mark term are:

- Basic trefoil symbol such as shown in figure 5.2.1;
- Environmentally hazardous substance mark as shown in figure 5.2.2;
- Orientation arrows as shown in figures 5.2.3 and 5.2.4,
- Accepted quantities mark;
- Lithium battery mark as shown in figure 5.2.5.

According to the Model Regulations clause 5.2.1.2

all package marks required by 5.2.1.1:

- a) shall be readily visible and legible;
- b) shall be able to withstand open whether exposure without a substantial reduction in effectiveness;
- c) shall be displayed on a background of contrasting colour to the external surface of the package; and shall not be located with other package marks that could substantially reduce their effectiveness.

- Label

The Model Regulations includes a note:

These provisions relate essentially to danger labels. However, additional marks or symbols indicating precautions to be taken in the handling or storage a package (e.g., a symbol representing an umbrella indicating that a package shall be kept dry) may be displayed on a package if appropriate.

Typical labels include primary and secondary hazard classes and divisions as shown in figure 5.2.6: class/division label.

In Chapter 5.3 PLACARDING and MARKING of CARGO TRANSPORT UNITS and BULK CONTAINERS the Model regulations states:

Placards shall be affixed to the exterior surface of cargo transport units and bulk containers to provide a warning that the contents of the unit are dangerous goods and present hazards. Placards shall correspond to the primary hazard of the goods contained in the cargo transport unit and bulk container.

CTUs shall also display Marks identical to those described in the section covering Marks above and UN numbers, classes and divisions may be displayed on the placards. However, the list of marks covered by the Model Regulations are more limited:

- *Elevated temperature substance mark as shown in figure 5.3.4, and*
- *Environmentally hazardous substance mark,*

It is proposed that the following amendments are made to the IMO / ILO / UNECE Code of Practice for the Packing of CARGO TRANSPORT UNITS (CTU Code)

Definitions

These are the definitions used when adjusting the text for the CTU Code above.

Label	<p>a) An applied decal or panel that indicates a hazard or danger to persons or to the environment.</p> <p>b) A piece of material or plastic attached to, but not printed on, lashing equipment to provide information about its strength and other characteristics.</p>
Mark	An applied decal or panel that provides information concerning the cargo packed.
Sign (distinguishing sign)	Distinguishing sign of the state of registration used on motor vehicles and trailers in international road traffic, e.g., in accordance with the Geneva Convention on Road Traffic 1949 or in the Vienna Convention on Road Traffic of 1968.
Placards	Placards are a larger version of labels as defined in a) above.

Section	Clause	Bullet	Proposed text
Chapter 2	Clean CTU	3 rd bullet	Any labels , marks or , placards or signs associated with previous consignments.
Chapter 3		4 th bullet	Do affix required labels, marks and placards, marks and signs on exterior of the CTU
	3.7	9 th bullet	Do remove all labels, marks and , placards and signs regarding the previous consignment from the exterior of the CTU once it has been cleaned
Chapter 4	4.2.2	7 th bullet	Ensuring that dangerous goods are correctly classified, packed, marked and labelled
	4.2.9	6 th bullet	Removing all labels, marks or , placards or signs regarding the previous consignments.
Chapter 8	8.2.2.8		Labels, placards, marks or signs or marks regarding previous usages of the CTU should be removed. Permanently affixed signs ¹ and marks are never removed
Chapter 11	11.2.1		The applicable dangerous goods regulations may require that placards (enlarged labels), marks and other signs-labels be affixed to the surfaces of a CTU. The specifications of these placards and marks and signs-labels and the locations where they should be affixed are described in detail in the applicable dangerous goods regulations and Chapter 11 of this Code .
	11.2.2		The applicable dangerous goods regulations may require other labels warning signs for of specific risks, e.g., a sign-label warning of the possibility of asphyxiating atmosphere when solid carbon dioxide (CO ₂ - dry ice) or other expendable refrigerant has been used for cooling purposes or a sign-label warning of a potentially explosive atmosphere when vehicles or lighters have been packed into the CTU.

¹ [Permanently affixed signs would include distinguishing sign of the state of registration](#)

	11.2.3		The applicable dangerous goods regulations may require specific warning signs-labels for CTUs under fumigation even though the cargo is not classified as dangerous. The details of marking and further instructions for the handling of such CTUs are set forth in the applicable dangerous goods regulations (see annex 9).
Chapter 12	12.1.7		CTUs that are fumigated should be properly marked labelled. On occasion, marks-the labels may become obliterated or lost during transport. As CTUs may not be appropriately marked labelled, the doors and vents should be checked. Tape applied to door gaskets or to vents may indicate the risk of fumigant presence.
Annex 4	Figure 4.13	Column 1	Signs-Marks showing the length of the supporting surfaces of concentrated loads, or the distance between supports.
		Column 2	Distance between the signs-marks showing the length
	5		No change
Annex 5	4.1.1.1.		Check the exterior for placards, marks or labels signs, marks or other labels that may indicate that the cargo may put those involved in unpacking the CTU at risk.
	4.1.2.4		CTUs that are fumigated should be properly marked labelled. On occasion, marks-the labels may become obliterated or lost during transport. As CTUs may not be appropriately marked labelled, the doors and vents should be checked. Tape applied to door gaskets or to vents may indicate the risk of fumigant presence (see figure 5.20).
	4.1.3		If there are concerns that there are signs-labels or other indications of a dangerous atmosphere, a safety data sheet (SDS) should be requested from the consignor or from the shipper, as appropriate and sampling the air inside the CTU before opening could be considered.
	8.1.2	1 st bullet	Completely empty and clean. A clean CTU should be free of all cargo residues, plants, plant products, visible signs-indications of pests, packing, lashing and securing materials, labels, marks, signs and placards associated with the packing of the CTU or the cargo, and any other debris removed. This includes fumigant materials or other noxious substances (see definitions in chapter 2 of this Code). Personal protective equipment should be provided for such work;
	8.2.2		After a CTU with dangerous cargoes, including fumigated cargoes, has been unpacked, particular care should be taken to ensure that no hazard remains. This may require special cleaning, particularly if spillage of a toxic substance has occurred or is suspected. When the CTU offers no further hazard, the dangerous goods placards, placards and any other marks or signs labels, marks or placards regarding their cargoes should be removed. A CTU that retains these exterior signs and marks any label, mark or placard related to a dangerous goods should continue to be handled as though it still carried the indicated dangerous goods.
	2.1.1		Symbols should preferably be stencilled directly on the package or may appear on a label decal. It is recommended that the symbols are painted, printed or otherwise reproduced as specified in this ISO standard. They need not be framed by borderlines.
Annex 10	15	5 th bullet	Labelling, marking and placarding