Checklist for Marking and Placarding of Cargo Transport Units (CTUs) and Bulk Containers

IMDG Code Chapter 5.3, Amendment 42-24, 2024 Edition

This checklist covers placarding (enlarged labels) and marking of CTUs (freight containers, tanks, vehicles, bulk containers) carrying dangerous goods, based on Chapter 5.3 of the IMDG Code: general provisions, specifications and special marks. Always cross-reference the Code, as requirements vary by hazard class, substance and special provision. Placarding and marking methods must leave the information identifiable on units surviving at least three months' immersion in the sea (5.3.1.1.1.2). Remove or mask placards and marks once the dangerous goods or their residues are discharged (5.3.1.1.1.3).

This checklist is based on the IMDG Code. We have done our best to avoid mistakes. If you notice any errors or inconsistencies, please let us know; the official IMDG Code takes precedence.

1. General provisions

Requirement	Description	Yes	No	N/A
Visibility (5.3.1.1.1.1)	Placards, marks and signs affixed to exterior surfaces unless package labels and marks are clearly visible from outside the CTU or bulk container.	☐	☐	☐
Durability (5.3.1.1.1.2)	Method of placarding and marking suits the surface of the CTU and leaves the information identifiable after at least three months' immersion in the sea.	☐	☐	☐
Removal or masking (5.3.1.1.1.3)	All placards, orange panels, marks and signs removed or masked once the dangerous goods or residues that led to their use are discharged.	☐	☐	☐
Primary hazard (5.3.1.1.2)	Placard corresponds to the primary hazard of the contents. No placard needed for division 1.4, compatibility group S, in any quantity (5.3.1.1.2.1).	☐	☐	☐
Several divisions of class 1 (5.3.1.1.2.2)	Only the placard for the highest hazard division is affixed.	☐	☐	☐
Subsidiary hazards (5.3.1.1.3)	Subsidiary hazard placard displayed where a subsidiary label is required (5.2.2.1.2), unless the hazard is already shown by a primary hazard placard for other goods in the CTU.	☐	☐	☐
Class 9 (5.3.1.1.2)	Label model No. 9 is used for the placard; model 9A is not used for placarding.	☐	☐	☐
Background (5.3.1.1.2)	Placard on a contrasting background, or with a dotted or solid outer boundary line.	☐	☐	☐

2. Placarding by CTU type (5.3.1.1.4.1)

Requirement	Description	Yes	No	N/A
Freight container, semi-trailer, closed or sheeted bulk container, portable tank	One placard on each side and one on each end.	☐	☐	☐
Portable tank of 3,000 L or less	May be placarded or, alternatively, labelled, on two opposite sides only.	☐	☐	☐

Requirement	Description	Yes	No	N/A
Railway wagon	At least on each side.	☐	☐	☐
Multiple-compartment tank with more than one substance	Along each side at the positions of the relevant compartments; if all compartments need the same placards, display once along each side.	☐	☐	☐
Flexible bulk container	In at least two opposing positions.	☐	☐	☐
Any other CTU (for example vehicles)	At least on both sides and on the back.	☐	☐	☐

3. Special provisions for class 7 (5.3.1.1.5)

Requirement	Description	Yes	No	N/A
Large freight containers and tanks (5.3.1.1.5.1)	Unpackaged LSA-I, SCO-I or SCO-III, or packages other than excepted packages: four model 7D placards, vertical, on each side wall and each end wall. Placards that do not relate to the contents removed.	☐	☐	☐
Enlarged labels instead (5.3.1.1.5.1)	Instead of labels plus placards, enlarged labels only (models 7A, 7B, 7C) at the minimum size shown under 5.3.1.2.2.	☐	☐	☐
Rail and road vehicles (5.3.1.1.5.2)	Vehicles carrying packages, overpacks or freight containers labelled 7A, 7B, 7C or 7E, or exclusive-use consignments: model 7D on both external lateral walls (rail), or both lateral walls and the rear wall (road).	☐	☐	☐
Vehicles without sides; large tanks and freight containers (5.3.1.1.5.2)	Placards may go directly on the cargo-carrying unit if readily visible; where the tank or freight container is itself placarded, those placards suffice.	☐	☐	☐
Insufficient area (5.3.1.1.5.2)	Placard dimensions may be reduced to 100 mm.	☐	☐	☐
Irrelevant placards (5.3.1.1.5.1, 5.3.1.1.5.2)	Placards that do not relate to the contents removed.	☐	☐	☐

4. Specifications for placards (5.3.1.2)

Requirement	Description	Yes	No	N/A
General placard (5.3.1.2.1)	Square set at 45°, at least 250 × 250 mm, inner line 12.5 mm from the edge, colour and symbol as the label for the class or division, class or division digits at least 25 mm high.	☐	☐	☐
Proportions	All features in approximate proportion to the figures in the Code.	☐	☐	☐

5. Marking requirements (5.3.2)

Requirement	Description	Yes	No	N/A
Proper shipping name (5.3.2.0.1, 5.3.2.0.2)	PSN durably marked on at least both sides of: (1) tank CTUs; (2) bulk containers; (3) other CTUs with packaged dangerous goods of a single commodity for which no placard, UN number or marine pollutant mark is required (the UN number may be displayed instead). Characters at least 65 mm high, contrasting colour; may reduce to 12 mm on portable tanks of 3,000 L or less.	☐	☐	☐
UN number: when required (5.3.2.1.1)	Not applicable to class 1. Display the UN number on consignments of: (1) solids, liquids or gases in tank CTUs, including each compartment of a multi-compartment tank; (2) packaged goods over 4,000 kg gross mass with a single UN number that are the only dangerous goods in the CTU; (3) unpackaged LSA-I, SCO-I or SCO-III in or on a vehicle, freight container or tank; (4) packaged radioactive material with a single UN number under exclusive use in or on a vehicle or freight container; (5) solid dangerous goods in bulk containers.	☐	☐	☐
UN number: how (5.3.2.1.2)	Black digits at least 65 mm high, either (1) on a white background below the symbol and above the class number and compatibility group letter of the placard, or (2) on an orange panel at least 120 mm high × 300 mm wide with a 10 mm black border, immediately beside each placard or marine pollutant mark. Portable tank of 3,000 L or less: reduced orange panel, characters at least 25 mm.	☐	☐	☐
No placard or marine pollutant mark required (5.3.2.1.2)	UN number displayed immediately adjacent to the proper shipping name.	☐	☐	☐

6. Elevated temperature and marine pollutants

Requirement	Description	Yes	No	N/A
Elevated temperature mark (5.3.2.2.1)	Liquid at 100 °C or above, or solid at 240 °C or above: red equilateral triangle, sides at least 250 mm (100 mm on portable tanks of 3,000 L or less), on each side and each end.	☐	☐	☐
Maximum temperature (5.3.2.2.2)	Maximum expected temperature durably marked on both sides of the portable tank or insulation jacket, next to the elevated temperature mark, characters at least 100 mm high.	☐	☐	☐
Marine pollutant mark (5.3.2.3)	Except as provided in 2.10.2.7, displayed at the locations in 5.3.1.1.4.1; design per 5.2.1.6.3, at least 250 × 250 mm (100 × 100 mm on portable tanks of 3,000 L or less).	☐	☐	☐

7. Dangerous goods in limited quantities (3.4.5.5, 5.3.2.4)

Requirement	Description	Yes	No	N/A
CTU with limited quantities only (3.4.5.5.1)	No class placards and no marking under 5.3.2.0 and 5.3.2.1. Marked on the exterior with the LQ mark (3.4.5.5.4): top, bottom and surrounding line black, centre white or contrasting, at least 250 × 250 mm, at the locations in 5.3.1.1.4.1, identifiable after three months' immersion in the sea.	☐	☐	☐
CTU with limited quantities and other dangerous goods (3.4.5.5.2)	Placarded and marked for the goods not in limited quantities. The LQ mark is added only if no placard or mark is otherwise required.	☐	☐	☐

8. Dangerous goods in excepted quantities (3.5)

Requirement	Description	Yes	No	N/A
CTU with excepted quantities only	No placard or mark on the CTU for those goods. No more than 1,000 packages of excepted quantities per CTU (3.5.5.1).	☐	☐	☐