Checklist for Marking and Labelling of Packages, IBCs and Large Packagings

IMDG Code Chapters 5.1 and 5.2, Amendment 42-24, 2024 Edition

This checklist covers the requirements for marking (UN number, proper shipping name, special marks) and labelling (hazard labels) of packages, IBCs and large packagings containing dangerous goods, based on Chapters 5.1 (general provisions) and 5.2 (marking and labelling). It includes provisions for overpacks, unit loads, empty uncleaned packagings, mixed packing and class-specific requirements. Always cross-reference the full IMDG Code, as exemptions or special provisions may apply by substance, class or competent authority approval. Marks and labels must be durable, visible, legible and identifiable on packages surviving at least three months' immersion in the sea (5.2.1.2.2, 5.2.2.2.1.7).

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 application and compliance (5.1.1)

Requirement	Description	Yes	No	N/A
Offer for transport (5.1.1.2)	Goods properly marked, labelled, placarded, described and certified on a transport document, and otherwise in condition for transport.	☐	☐	☐
No GHS pictograms (Note to 5.1.1.2)	A GHS pictogram not required by the Code appears only as part of a complete GHS label, never independently of the IMDG labels.	☐	☐	☐
Carrier acceptance (5.1.1.3–5.1.1.5)	Dangerous goods transport document or information provided (paper, or electronic and producible as a paper document without delay); information accompanies the goods to final destination.	☐	☐	☐
Identification purpose (5.1.1.6)	PSN, UN number and, for marine pollutants, the words "marine pollutant" allow ready identification during transport, including for emergency response and MARPOL reporting.	☐	☐	☐
Packages in CTUs (5.1.6)	Each package is marked and labelled per Chapter 5.2 regardless of the placarding and marking of the CTU.	☐	☐	☐

2. Overpacks and unit loads (5.1.2)

Requirement	Description	Yes	No	N/A
Marking and labelling (5.1.2.1)	Overpack or unit load marked with PSN and UN number, and marked and labelled as for packages (Chapter 5.2) for each item of dangerous goods, unless representative marks and labels are visible.	☐	☐	☐
"OVERPACK" mark (5.1.2.1)	Overpack marked "OVERPACK", lettering at least 12 mm high, unless marks and labels representative of all contents are visible. Overpacks of radioactive material are labelled per 5.2.2.1.12.	☐	☐	☐
Individual packages (5.1.2.2)	Each package inside complies with Chapter 5.2 and every applicable provision of the Code; the overpack or unit load does not impair the function of any package.	☐	☐	☐

Requirement	Description	Yes	No	N/A
Orientation (5.1.2.3)	A package bearing orientation arrows (5.2.1.7.1) that is overpacked, placed in a unit load, or used as an inner packaging in a large packaging is oriented in accordance with those marks.	☐	☐	☐

3. Empty uncleaned packagings and units (5.1.3)

Requirement	Description	Yes	No	N/A
Other than class 7 (5.1.3.1)	Packaging, including IBCs, that previously contained dangerous goods is identified, marked, labelled and placarded as for those goods, unless cleaning, purging of vapours or refilling with a non-dangerous substance has nullified the hazard.	☐	☐	☐
Class 7 (5.1.3.2)	Freight containers, tanks, IBCs, other packagings and overpacks used for radioactive material are not used for other goods unless decontaminated below 0.4 Bq/cm² (beta, gamma and low-toxicity alpha emitters) and 0.04 Bq/cm² (all other alpha emitters).	☐	☐	☐
CTUs with residues or empty uncleaned items (5.1.3.3)	CTUs still containing residues, or loaded with empty uncleaned packages or bulk containers, comply with the provisions for the goods last contained.	☐	☐	☐

4. Mixed packing (5.1.4)

Requirement	Description	Yes	No	N/A
Marking and labelling (5.1.4)	Package is marked and labelled as required for each substance packed in it. A subsidiary hazard label is not needed where that hazard is already shown by a primary hazard label.	☐	☐	☐

5. General marking provisions (5.2.1)

Requirement	Description	Yes	No	N/A
PSN and UN number (5.2.1.1)	PSN and the UN number preceded by "UN" displayed on each package, unless otherwise provided in the Code.	☐	☐	☐
Character height (5.2.1.1)	UN number and the letters "UN" at least 12 mm high; at least 6 mm for packages of 30 L or 30 kg maximum net mass or less and for cylinders of 60 L water capacity or less; appropriate size for packages of 5 L or 5 kg or less.	☐	☐	☐
Division 1.4S (5.2.1.1)	Division and compatibility group letter also marked, unless the 1.4S label is displayed.	☐	☐	☐
Unpackaged articles (5.2.1.1)	Mark displayed on the article, its cradle, or its handling, storage or launching device.	☐	☐	☐
General requirements (5.2.1.2)	Package marks are readily visible and legible, identifiable on packages surviving at least three months' immersion in the sea, on a contrasting background, and not located with other marks that substantially reduce their effectiveness.	☐	☐	☐

Requirement	Description	Yes	No	N/A
Salvage packagings (5.2.1.3)	Salvage packagings, large salvage packagings and salvage pressure receptacles additionally marked "SALVAGE", lettering at least 12 mm high.	☐	☐	☐
IBCs (> 450 L) and large packagings (5.2.1.4)	Marked on two opposing sides.	☐	☐	☐
Marine pollutants (5.2.1.6)	Except as provided in 2.10.2.7, packages containing marine pollutants meeting the 2.9.3 criteria bear the marine pollutant mark (5.2.1.6.3), durably applied and adjacent to the marks required by 5.2.1.1.	☐	☐	☐
Orientation arrows (5.2.1.7)	Unless excepted by 5.2.1.7.2: combination packagings with inner packagings of liquids, single packagings fitted with vents, cryogenic receptacles, and machinery or apparatus where the liquid must stay in its intended orientation (SP 301). Arrows on two opposite vertical sides, pointing upright.	☐	☐	☐
Excepted quantities mark (5.2.1.8)	Marked per 3.5.4.	☐	☐	☐
Limited quantities mark (5.2.1.9)	Marked per 3.4.5.	☐	☐	☐
Lithium / sodium ion battery mark (5.2.1.10)	Packages prepared under SP 188 bear the mark, with the UN number(s) preceded by "UN" (5.2.1.10.2). Rectangle or square, at least 100 × 100 mm, red hatching at least 5 mm wide; may reduce to 100 × 70 mm if package size requires. The Amendment 40-20 mark (with telephone number) may still be applied until 31 December 2026.	☐	☐	☐

6. Class 7 (radioactive) marking (5.1.5 and 5.2.1.5)

Requirement	Description	Yes	No	N/A
General (5.2.1.5.1)	Consignor and/or consignee identification legibly and durably marked on each package, and on each overpack unless the marks of all packages inside are clearly visible.	☐	☐	☐
Excepted packages (5.2.1.5.2)	Marked as required by 5.1.5.4.1.	☐	☐	☐
Gross mass (5.2.1.5.3)	Package over 50 kg: permissible gross mass legibly and durably marked on the outside.	☐	☐	☐
Package type (5.2.1.5.4)	"TYPE IP-1", "TYPE IP-2", "TYPE IP-3" or "TYPE A" as appropriate. IP-2, IP-3 and Type A packages also carry the VRI code of the country of origin of design and the manufacturer's name or other identification specified by the competent authority.	☐	☐	☐
Approved designs (5.2.1.5.5)	Competent authority identification mark, unique serial number, and "Type B(U)", "Type B(M)" or "Type C" as applicable.	☐	☐	☐

Requirement	Description	Yes	No	N/A
Fire- and water-resistant marking (5.2.1.5.6)	Type B(U), B(M) and C packages: trefoil (radius X at least 4 mm) embossed, stamped or otherwise marked on the outside of the outermost fire- and water-resistant receptacle.	☐	☐	☐
LSA-I / SCO-I (5.2.1.5.7)	Under exclusive use (4.1.9.2.4), outer surface of receptacles or wrappings may bear "RADIOACTIVE LSA-I" or "RADIOACTIVE SCO-I".	☐	☐	☐
International approvals (5.2.1.5.8)	Where different approval types apply in the countries concerned, marking follows the certificate of the country of origin of design.	☐	☐	☐
TI / CSI (5.1.5.3)	Transport index and criticality safety index determined per 5.1.5.3 and entered on the labels (5.2.2.1.12).	☐	☐	☐

7. General labelling provisions (5.2.2.1)

Requirement	Description	Yes	No	N/A
Primary and subsidiary hazards (5.2.2.1.1–5.2.2.1.3)	Labels conform to models 1 to 9. Primary label per column 3 of the DGL, subsidiary per column 4; special provisions in column 6 may add or waive a subsidiary label. A low-danger exemption applies only where an SP says so (5.2.2.1.2.1). Class 8 need not bear 6.1 if toxicity is solely tissue destruction; class 4.2 need not bear 4.1 (5.2.2.1.3.1).	☐	☐	☐
Class 2 with subsidiary hazards (5.2.2.1.4–5.2.2.1.5)	Labels applied per the table in 5.2.2.1.4 (for example 2.3 with 5.1 and/or 8).	☐	☐	☐
Placement (5.2.2.1.6)	Label on the same surface near the PSN mark where dimensions allow; not covered or obscured; primary and subsidiary labels next to each other. Irregular or small packages: label on a securely attached tag.	☐	☐	☐
IBCs (> 450 L) and large packagings (5.2.2.1.7)	Labels on two opposing sides.	☐	☐	☐
Background (5.2.2.1.8)	Labels affixed on a surface of contrasting colour.	☐	☐	☐
Self-reactive substances (5.2.2.1.9)	Type B: "EXPLOSIVE" subsidiary label (model 1) unless the competent authority has dispensed with it for the specific packaging.	☐	☐	☐
Organic peroxides (5.2.2.1.10)	Class 5.2 label for types B, C, D, E and F (no flammable liquid label needed). Type B: explosive subsidiary label unless dispensed with. Corrosive subsidiary label when class 8 packing group I or II criteria are met.	☐	☐	☐
Infectious substances (5.2.2.1.11)	Model 6.2 plus any other label required by the contents.	☐	☐	☐
Radioactive material (5.2.2.1.12)	Model 7A, 7B or 7C by category, on two opposite sides of a package or overpack, or all four sides of a freight container or tank; model 7E beside it for fissile material (other than excepted); labels completed with contents, activity, TI and CSI.	☐	☐	☐

Requirement	Description	Yes	No	N/A
Articles UN 3537–3548 (5.2.2.1.13)	Labels per 5.2.2.1.2 for the hazards found under 2.0.6. Battery mark (5.2.1.10.2) if lithium metal content is 2 g or less / lithium or sodium ion 100 Wh or less; battery label model 9A above those limits. Orientation arrows on two opposite vertical sides where liquids must stay oriented.	☐	☐	☐