

Guidance on the Transportation of Marine Pollutants
Issued Jointly by the United States Coast Guard and the Pipeline and Hazardous
Materials Safety Administration

The following guidance on the requirements of the U.S. Hazardous Materials Regulations (49 CFR Parts 100-180) and the International Maritime Dangerous Goods Code is based on the regulations in effect on January 1, 2011.

How are Marine Pollutants Classified?

Criteria

49 CFR Criteria (see definition in Sec. 171.8):

Marine pollutant (MP) means a material which is listed in appendix B to Sec. 172.101 of this subchapter (also see Sec. 171.4) and, when in a solution or mixture of one or more marine pollutants, is packaged in a concentration which equals or exceeds:

- (1) Ten percent by weight of the solution or mixture for materials listed in the appendix; or
- (2) One percent by weight of the solution or mixture for materials that are identified as severe marine pollutants in the appendix.

IMDG Code Criteria:

- A substance that is identified as a MP in Column 4 of the Dangerous Goods List, or the IMDG Code Index, or that meets the criteria for classification as an “Environmentally Hazardous Substance (aquatic environment)” in 2.9.3.3.
- **Section 2.9.3.3:** A substance is classified as a Marine Pollutant, if they satisfy the criteria for Acute 1, Chronic 1, or Chronic 2 within the following tables:

Acute toxicity

Category: Acute 1	
96 hr LC ₅₀ (for fish)	≤1 mg/l and/or
48 hr EC ₅₀ (for crustacean)	≤1 mg/l and/or
72 or 96 hr ErC ₅₀ (for algae or other aquatic plants)	≤1 mg/l

Chronic toxicity

Category: Chronic 1	
96 hr LC ₅₀ (for fish)	≤1 mg/l and/or
48 hr EC ₅₀ (for crustacean)	≤1 mg/l and/or
72 or 96 hr ErC ₅₀ (for algae or other aquatic plants)	≤1 mg/l
and the substance is not rapidly degradable and/or the log K _{ow} ≥ 4 (unless the experimentally determined BCF < 500)	

Category: Chronic 2	
96 hr LC ₅₀ (for fish)	>1 to ≤10 mg/l and/or
48 hr EC ₅₀ (for crustacean)	>1 to ≤10 mg/l and/or
72 or 96 hr ErC ₅₀ (for algae or other aquatic plants)	>1 to ≤10 mg/l
and the substance is not rapidly degradable and/or the log K _{ow} ≥ 4 (unless the experimentally determined BCF < 500), unless the chronic toxicity NOECs are >1 mg/l	

Mixture or Solution Classification Guidance

- When classifying a mixture or solution as a MP in the U.S. it is permitted to use either the 49 CFR criteria or the IMDG Code criteria for classification, not both or a combination thereof.
- If a constituent of a mixture or solution is not listed as a MP in appendix B to Sec. 172.101, then, when applying 49 CFR criteria, that constituent does not need to be considered.
- The classification of mixtures or solutions does not require approval by PHMSA or USCG. It is the shipper's responsibility to correctly classify hazardous materials.

How are Marine Pollutants declared?

- A substance, material, or article that is a marine pollutant and meets the classification criteria for inclusion in another hazard class(es) shall be declared under the most appropriate UN number and proper shipping name relevant for that hazard(s).
- A substance, materials, or article that is a marine pollutant and does not meet the classification criteria for inclusion in any other hazard class shall be declared under either UN 3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, n.o.s. or UN 3082 ENVIRONMENTALLY HAZARODUS SUBSTANCE, LIQUID, n.o.s. as appropriate.

Who is responsible for compliance?

Shipper's Responsibility

- The person who offers a hazardous material for transportation in commerce (i.e. shipper) is responsible for performing a "pre-transportation function". Part of the "pre-transportation function" includes determining the hazard class of a hazardous material, marking a package to indicate it contains a hazardous material or MP, and verifying compliance with the HMR or authorized international standard (i.e. IMDG Code). [49 CFR 171.1 (b)]

When is a Marine Pollutant mark appropriate?

Hazard Materials Regulations (HMR)

- If a substance, material, or article is listed as a MP in the List of Marine Pollutants in appendix B to 172.101 or meets the definition of MP as contained in 49 CFR 171.8, it is considered a Marine Pollutant and shall be marked accordingly. [Paragraph 3 of appendix B to 49 CFR 172.101]
- If a substance, material, or article is not listed in the List of Marine Pollutants and meets the MP criteria found in section 2.9.3 of the IMDG Code, it may be transported as a MP and the package, tank, and freight container may be marked accordingly. [Paragraph 4 of appendix B to 49 CFR 172.101]

International Maritime Dangerous Goods (IMDG) Code

- If a substance, material, or article is identified as a MP in column 4 of the Dangerous Goods List or the IMDG Code Index, it is considered a MP and the package, tank, and freight container shall be marked accordingly. [paragraph 2.10.2.2 of the IMDG Code]
- If a substance, material, or article meets the Environmentally Hazardous Substance classification criteria found in section 2.9.3 of the IMDG Code it is also considered a MP and the package, tank, and freight container shall be marked accordingly. [paragraph 2.10.2.5 of the IMDG Code]

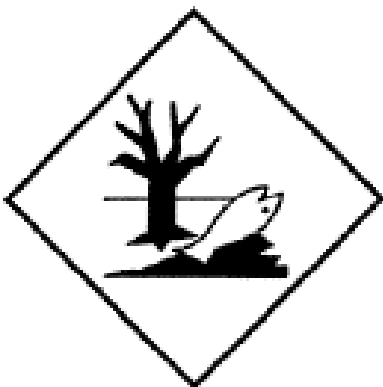
Permissive Marking

- A substance, material, or article that is classified and declared as a MP under the IMDG Code, under other national regulations, or by a foreign competent authority may be marked as a MP on the outside of the package, tank, or freight container and transported within the U.S. by all modes of transport. [49 CFR 172.102(a)(146)]

Exceptions to the rule

- If the substance, material, or article is in a single package or a combination packaging containing inner packaging with contents of 5 liters or less for liquids or 5kg or less for solids, the package does not need to be marked; however, the transport vehicle or freight container, containing the packages, must be marked. [49 CFR 172.322(c), 49 CFR 172.322(d) and paragraphs 5.2.1.6.1 and 5.3.2.3 of the IMDG Code]
- If a substance, material, or article is listed as a MP in the appendix B to 49 CFR 172.101 or the IMDG Code but does not meet the MP criteria found in section 2.9.3 of the IMDG Code, the material may be excepted from the marking and shipping paper requirements by the Associate Administrator. [Paragraph 5 of appendix B to 49 CFR 172.101]
- A MP mark is not required on non-bulk packages as defined in 49 CFR 171.8 if the substance, material or article is only transported by road, rail, or aircraft. [49 CFR 171.4 and 49 CFR 172.322(a)]
- A MP mark is not required on a bulk packaging, freight container or transport vehicle if it is already labeled or placarded in accordance with 49 CFR 172 subpart E or F and is only transported by road, rail, or aircraft. [49 CFR 172.322(d)(3)]

Markings:



Vs.



Authorized

Not Authorized

- **Dimensions for non-bulk packages:** at least 100mm x 100mm, except when the package can only accommodate a smaller size.
- **Dimensions for bulk packages, tanks, and freight containers:** at least 250mm x 250mm.