

JOB AID

HAZMAT Transportation Part 1:
The Hazardous Materials
Table

HAZMAT Transportation Part 1: The Hazardous Materials Table

Symbols	Hazardous materials descriptions and proper shipping names	Hazard Class or Division	Identification Numbers	PG	Label Codes	Special provisions (§ 172.102)	(8) Packaging			(9) Quantity Limitations		(10) Vessel Storage	
							Exceptions	Non- bulk	Bulk	Passenger aircraft/rail	Cargo aircraft only	Location	Other
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8A)	(8B)	(8C)	(9A)	(9B)	(10A)	(10B)
	Argon, refrigerated liquid (<i>cryogenic liquid</i>)	2.2	UN1951		2 • 2	T75, TP5	320	316	318	50kg	500kg	D	
	Arsenic	6.1	UN1558	II	6 • 1	IB8, IP2, IP4, T3, TP33	153	212	242	25kg	100kg	A	
	Arsenic acid, liquid	6.1	UN1553	I	6 • 1	T20, TP2, TP7, TP13, W31	None	201	243	1L	30L	B	46
	Arsenic acid, solid	6.1	UN1554	II	6 • 1	IB8, IP2, IP4, T3, TP33	153	212	242	25kg	100kg	A	
	Arsenic bromide	6.1	UN1555	II	6 • 1	IB8, IP2, IP4, T3, TP33	153	212	242	25kg	100kg	A	12, 25, 40
	<i>Arsenic chloride, see Arsenic trichloride</i>												

Proper Shipping Names

Proper shipping names are listed in Column 2 of the HMT. Remember that italicized words are never part of the proper shipping name.

When writing proper shipping names, you may use:

- Uppercase or lowercase lettering
- Singular or plural forms
- "n.o.s." (not otherwise specified) as a generic proper shipping name for materials, mixtures or solutions
 - Find a list of applicable materials in italics after the name
 - Enter technical names of the most predominant hazardous materials in parentheses after the generic name
 - Interchange "n.o.s." with "n.o.i." (not otherwise indexed) or "n.o.i.b.n." (not otherwise indexed by name), as needed

- At times, it's acceptable and even necessary for you to modify the proper shipping name. You can:
 - Drop the prefix "mono" from the proper shipping name (e.g., "Iodine monochloride" becomes "Iodine chloride")
 - Change the sequence of qualifying words, that is, placing them before the proper shipping name (e.g., changing "Insecticide gases, toxic, n.o.s." to "Toxic insecticide gases, n.o.s.")
- Usually, we list **qualifying words** at the end or after the proper shipping name. Common qualifying words include solid, liquid, gas, compressed, powder, oxidizing, and poisonous.
- There are even situations where it's necessary for you to add qualifying words to further identify and describe HAZMAT shipments.
 - Solution
 - Mixture
 - Hazardous waste
 - Add "waste" before the proper shipping name
 - Concentration ranges

Codes in the HMT

Column 1 – Symbols

- **+** = Fixes entries in columns 2, 3, 5
- **A** = Regulated by air transportation
- **D** = Domestic requirements
- **I** = International requirements
- **G** = Generic/n.o.s. shipping name
- **W** = Regulated by water transportation

Column 3 – Hazard Class and Division

- **Numeric codes** represent the U.S. Department of Transportation hazardous material class and division
- The word **forbidden** indicates that no one is allowed to ship/transport the material in its natural state
- When consumer commodities that contain hazardous materials – such as small arms cartridges, nail polish, aerosols and paints – pose little to no hazardous threat during transport, we classify the commodity as Class 9 miscellaneous hazardous material

Column 4 – Identification (ID) Numbers

- **UN** stands for "United Nations" and is recognized internationally
- **NA** stands for "North America" and is only recognized domestically within the U.S. and Canada

Column 5 – Packing Groups (PGs)

- **PG I** = great danger
- **PG II** = medium danger
- **PG III** = minor danger

Column 6 – Label Codes

- Correspond with hazard class and division codes in Column 3
- Refer to column 1 to determine if labels are required for domestic or international shipping
- Exceptions – any materials transported under "consumer commodities" and "combustible liquids" generic shipping names do not require labels

Column 7 – Special Provisions

- Refer to the special provisions list in 49 CFR 172.102
- **Number-only codes** pertain to a material regardless of how we package and transport it
- **Alphanumeric codes** stipulate detailed packaging requirements based on:
 - Package or container type, including bulk and non-bulk packaging
 - Mode of transport
 - For example:
 - "3" provisions requires us to describe the packaged material as an inhalation hazard.
 - "B" provisions apply to bulk packaging other than intermediate bulk containers (IBC)
 - "N" provisions stipulate special provisions for non-bulk packaging requirements
 - "IB" and "IP" codes include provisions for transporting materials in IBC
 - "T" and "TP" codes provide specific instructions for packaging compressed gas in a portable tank

Column 8 – Packaging

- Subdivided into 3 columns
 - 8A, Exceptions
 - 8B, Non-bulk
 - 8C, Bulk
- Columns contain **three-digit codes** that direct you where to look for the requirements in 49 CFR 173

Column 9 – Quantity Limitations

- Subdivided into 2 columns
 - 9A, Passenger aircraft and rail
 - 9B, Cargo aircraft only
- Indicate whether materials are "forbidden" or how much is acceptable

Column 10 – Vessel Stowage

- Addresses where and how hazardous materials should be stored on ships
- Subdivided into 2 columns
 - 10A, Location
 - 10B, Other
 - Numeric and alphanumeric codes
 - Additional stowage requirements

Appendices A and B – Identifying Hazardous Substances and Marine Pollutants

To determine if a material is a **hazardous substance**, you must:

- Identify it on one of the two tables in Appendix A
- Decide if the packaged amount meets or exceeds the reportable quantity (RQ) in Appendix A

Appendix B lists **marine pollutants**. Once you identify the material as a marine pollutant in Appendix B:

- Verify the pollutant name against the proper shipping names in the HMT
- If the marine pollutant isn't listed in the HMT, use one of the following proper shipping names:
 - "Environmentally hazardous substance, liquid, n.o.s."
 - "Environmentally hazardous substance, solid, n.o.s."