

SHIPPING PROCEDURES - GENERAL

1. Check if the chemicals you are shipping or offering for shipment are listed in the Hazmat Table 49 CFR Subpart B, 172.101.
 - Hazardous materials (49 CFR 171.8) "A substance or material that the Secretary of Transportation has determined is capable of posing an unreasonable risk to health, safety, and property when transported in commerce, and has designated as hazardous under section 5103 of the Federal Hazardous Materials Transportation law (49 U.S.C. 5103)".
 - Information you can find in hazardous materials table
 - Column 1: mode of transportation restrictions/conditions, using symbols (+, A, D, G, I, W)
 - Column 2: Hazardous materials descriptions and proper shipping names
 - Column 3: Hazard class or division
 - Column 4: UN/NA Identification number
 - Column 5: Packing group [X = PGI, II and III; Y = PG II and III, Z = PG III Only]
 - Column 6: Labels
 - Column 7: Special provisions
 - Column 8: Packaging requirements
 - Column 9: Air transportation
 - Column 10: Vessel transportation
2. Are you going to ship HazMat in small quantity or materials of trade? The exceptions described below apply to your shipment of hazardous material.
 - Small Quantity Exceptions (173.4)
 - 30 mL for liquids, 30 g for solids or 1 g for 6.1, PGI material of a hazardous material.
 - Materials of Trade Exceptions (173.6)
 - Meet definition in 171.8, 0.5 kg or 0.5 L for PGI material or 30 kg or 30 L for other material
 - Please note that if you have material that is listed in the Hazmat table and it doesn't fit into any available exceptions then the material must be shipped in compliance with this instruction.
3. Packaging (49 CFR 173)
 - UN stamped hazardous materials packaging systems are approved by the United Nations Transportation Board for the transport of hazardous materials and are obligatory for hazardous materials shipping. UN packaging systems are designed and constructed to prevent a release of hazardous material during transportation.
 - To obtain UN stamped hazardous material packaging systems you can contact the following vendors: ULINE www.uline.com PHONE 1-800-295-5510 Shipping Supply Specialists, Lab Safety Supply and/or BALCO www.labelmaster.com, www.labsafety.com, www.bostontag.com
 - In some cases the shipper may provide the packaging system. Ensure that it is UN stamped. Packaging system requirements are specific to the type of hazardous material offered for shipping.
4. Markings (49 CFR 172.300) and Labels (49 CFR 172.400)
 - Proper markings and labeling on shipment containers are mandatory for shipping a hazardous material. Realize -packages with improper or incomplete information will typically not be delivered to their destination. This could subject you to fines or imprisonment by the US DOT. In addition, such hazardous material packages that are involved in a spill or personal injury during transport can make you personally liable for the incident.
 - Labels and markings must be attached to or printed on the package, and durable and printed in English.
 - Any package containing a hazardous material must have the following:
 - Name and address of shipper
 - Name and address of receiver
 - Proper shipping name - column 2 hazmat table
 - Numeric hazard class and division - column 3 hazmat table

- UN/NA ID number (obscured and away from other markings) - column 4 hazmat table
 - Packing Group - Column 5
 - Choose proper label(s) from - Column 6 in hazmat table (Packages may have more than 1 label)
 - Additional info if required (limited quantity, RQ)
5. Shipping Papers (49 CFR 172.200)
- The accurate completion of appropriate shipping papers is required for all hazardous materials shipments and MUST contain the following:
 - Appropriate DOT shipping description including proper shipping name, hazard class, UN/NA ID number and packing group -hazmat table
 - Total Quantity
 - Emergency Response Information (24 hour telephone number)
 - Shipper name and address
6. Shipping Requirements for Dry Ice (solid carbon dioxide)
- Dry ice (solid carbon dioxide), refrigerated solid, UN 1845, Hazard class 9 (miscellaneous).
 - Dry ice is classified by DOT and IATA as a "miscellaneous" hazard, which means it is a material that presents a hazard during transportation. Dry ice is characterized as explosion hazard (releases large volumes of carbon dioxide gas), suffocation hazard (carbon dioxide can create an oxygen deficient atmosphere); and contact hazard (as a cryogen, dry ice causes severe frostbite if contacts with skin).