



ASU Shipment of Hazardous Materials Manual

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I. Introduction

Shipping hazardous materials is regulated by several governmental and non-governmental, consensus development organizations. Penalties for non-compliance with the rules are significant and could result in the following fines:

- Up to \$250,000 and up to a year jail sentence for individuals.
- Up to \$500,000 per incident for organizations.

Hazardous materials shipping regulations administered by the International Air Transport Association (IATA) and the US Department of Transportation (DOT) are the most comprehensive and widely applicable. Some shipping companies have developed specific rules, which are stricter than DOT and/or IATA regulations. Examples of these companies include the US Postal Service (USPS), Federal Express (FedEx) and United Postal Service (UPS).

Hazardous material regulations are extremely complex; a minimum of 24 hours of professional training, repeated every three years, is required to be certified to ship hazardous materials. EHS personnel have received this training and are available to assist University offices in their shipping needs.

II. Definition of Hazardous Material

Hazardous material is generally defined as any substance that could adversely affect the safety of the public, handlers or carriers during transportation. Hazardous material, as defined by the DOT, is any substance that appears in the 49 CFR Hazardous Materials Table. This table is searchable by clicking on the following link: [Searchable HazMat Table](#).

Hazardous material regulations may apply to commercial products, chemical mixtures, and newly synthesized compounds. Various types of batteries, fuel containers and cleaning products are examples of materials that are regulated for shipment. There are nine classes of hazardous materials (see [Appendix B](#) for more information):

1. Explosives
2. Gases
3. Flammable Liquids
4. Flammable Solids
5. Oxidizing Substances and Organic Peroxides
6. Toxic and Infectious Substances
7. Radioactive Material
8. Corrosives
9. Miscellaneous Dangerous Goods

III. Scope of Regulations

Shipments of hazardous material must comply with regulations any time they are transported by air. Shipments by ground are regulated when they are considered to be “in commerce.” Material carried by any commercial transport company such as FedEx or through U.S. Mail is considered to be “in commerce.” However, hazardous material transported in a *university vehicle* for use in a *university project* is not considered to be “in commerce.” However, this material is required to meet DOT packaging requirements. EHS will provide guidance on how to package hazardous material transported by university vehicles. Fill out an [Intent to Ship Hazardous Materials](#) form ([Appendix A](#)) whenever you wish to transport hazardous material. For shipments of biological materials or dry ice, refer to the [ASU Shipment of Biological Materials and Dry Ice Manual](#).

If you are shipping a hazardous material that is a commercially available product, it is more cost-effective in many cases to purchase the material at the location to which you wish to ship it. For example, if you are planning field-work which requires the use of hazardous chemicals, you may find it easiest to have a vendor ship the chemicals directly to (or near) the location where you will be working. If this is not an option or if you will be shipping very small quantities of hazardous materials, fill out the [Intent to Ship Hazardous Materials](#) form.

Certain hazardous materials are exempt from shipping regulations when shipped in small quantities. These excepted quantity limits vary by material. EHS will determine the regulatory status of your material, including any possible exceptions, based on information submitted in the Intent form.

IV. Planning Your Shipment

Due to the complicated nature of hazardous material shipments, you must submit an Intent form for your material at least two weeks prior to your expected shipping date. EHS will determine what regulations, if any, apply to your shipment and notify you of what shipping materials you will need to ship your material. Your department will be responsible for providing all packaging materials required for your shipment.

Appendix A – Intent to Ship Hazardous Materials

Submit this form to EHS if you plan to ship something that may be classified as a hazardous material. EHS will determine if your shipment is regulated and will assist you in properly preparing your material for shipment. For biological materials or dry ice, refer to [ASU Shipment of Biological Materials and Dry Ice Manual](#).

1. Material Name:
2. Form of Material (i.e. liquid, solid, etc):
3. Quantity of Material:
4. CAS number (if any):
5. Manufacturer (if any):
6. Product Number (if any):
7. Shipping Destination:
8. Special Shipping Requirements (i.e. cold packs, dry ice):
9. What is your preferred shipping method (i.e. US Mail, FedEx, UPS)?
10. Do you plan to transport this material in a university vehicle?

Print name:		Date:	
Signature:		Phone #:	
Campus Address:			
Return this form in campus mail to EHS, MC 5412.			

Appendix B – Hazard Classes and Associated Labels

