What are hazardous materials in shipping?

Hazardous materials are substances or materials capable of posing an unreasonable risk to health, safety, and property when transported in commerce. This includes:

- laboratory chemicals
- radioactive materials
- compressed gases
- biological agents
- diagnostic specimens
- refrigerants
- equipment
- instruments that contain hazardous materials

The U.S. Department of Transportation (USDOT) regulates the commercial transport of hazardous materials.

How do I know if my shipment is covered by the regulations?

Materials that are shipped to a lab for testing or analysis, sent to a colleague for collaborative research, shipped to another research facility, returned to the manufacturer, or sent to a field research site must follow all applicable shipping requirements. To comply, regulated materials are classified according to their hazards, properly packaged, labeled, documented, and handled by trained employees. Check with EH&S (515 294-5359) before shipping any chemical, biological, or radiological material.

Procedures for Preparing Hazardous Materials for Shipment

Following these procedures will help to ensure that your package will arrive at its destination on time and intact. More importantly, it will ensure that everyone involved in the transport of the material will know what it is and how to safely handle it. It is recommended that you submit your shipping request well in advance of the shipping date to avoid delays. One week prior is recommended for materials that have not been sent before. For materials that are routinely shipped, information can be submitted on the day of the shipment. Please note information received after 2:30 pm will be processed for the shipment on the next available hazardous materials shipping day.

1. Obtain required training. Hazardous Materials Shipping Awareness is available at Learn@ISU.
3. Collect hazard information on the material to be shipped. This information must include physical data, toxicological data, and other pertinent information (flammability, reactivity, etc.). For chemicals, a safety data sheet must be included with the shipment.
4. Complete the online Hazardous Materials Shipment Information Form. If all information is complete and correct EH&S will mark your shipment as approved in the online system. Based on this information, EH&S will classify the material and generate the necessary paperwork.
5. Ensure that the off-campus recipient has any necessary permits or authorizations to receive the material.
6. Obtain approved packaging based on EH&S recommendations. Suppliers of UN Performance-Oriented Packaging are listed on the next page. (Allow adequate time for delivery.)
7. Package the material according to package instructions and EH&S. Ensure that a mailing label with the name and address of the sender and the recipient is attached to the package. Do not seal the package because EH&S must inspect and approve all packages prior to shipment.
8. Once approved, appropriate markings and labels will be placed on the outside of the package by EH&S.
9. Deliver package(s) to Postal and Parcel Services when instructed by EH&S. Postal and Parcel is located in room 184 General Services Building, 700 Wallace Road.
10. Retain copies of paperwork for the duration of the shipment.
Suppliers of UN Performance-Oriented Packaging

Central Stores
Iowa State University
192 General Services Building
Phone: (515) 294-0408
Fax: (515) 294-6394

Fisher Scientific
Phone: (800) 766-7000
Fax: (800) 926-1166

Labelmaster
5724 N. Pulaski Road
Chicago, IL  60646-6797
Phone: (800) 621-5808
Fax: (800) 723-4327

Saf-T-Pak
Phone: (800) 814-7484
Fax: (888) 814-7484
Specializes in packaging for shipment of infectious substances.

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