

## Function Specific Training for Shipping Radioactive Material, Excepted Packages

Radioactive material is a class 7 Hazardous Material/Dangerous Goods as defined by DOT 49 CFR Part 173 and IATA 10.0 respectively. Any researcher preparing, packaging, labeling, or offering material for transport must take the following DRS online Training; *Awareness Training for the Transport of Hazardous Materials* which must be repeated every two years if you continue to ship materials.

### Pre-shipment Instructions

1. Researchers who wish to ship radioactive materials/instrumentation must contact DRS and provide the following information;
  - UIUC permit number
  - Radioactive material/equipment including isotope to be shipped
  - Form of material (e.g. solid or liquid) and approximate mass/volume
  - Isotope activity
  - Temperature requirements (ambient, frozen, refrigerated) during transport
  - Recipient contact information (name, Institution, address, phone number)
2. DRS will confirm that the recipient has the proper license to receive the material as well as verify that the radioactive material/instrumentation to be shipped does not exceed the excepted package activity limits outlined the IATA Dangerous Goods Regulations manual, table 10.3D.
3. Complete or repeat the DRS online training; [Awareness Training for the Transport of Hazardous Materials](#) if not taken within the last 2 years

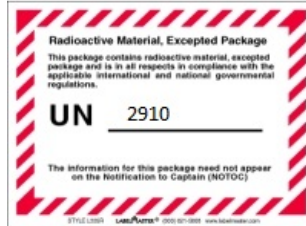
### Packaging and Labeling Instructions

1. Radioactive material being shipped as an excepted package requires a combination package to include tertiary containment. Each combination package must include the following components
  - a. Primary receptacle(s)
    - Must be leak-proof (liquids) or sift-proof (solids)
    - Screw caps must be secured with tape or Parafilm to prevent closures from opening due to vibration during transport
    - Fragile receptacles must be wrapped individually with bubble wrap or other appropriate cushioning to avoid breakage
  - b. Secondary containers
    - Leak-proof
    - Capable of withstanding an internal pressure of 95 pKa (14 psi)
    - For liquids, enough absorbent material should be added to contain the contents of the primary receptacles
    - Label with a radioactive symbol

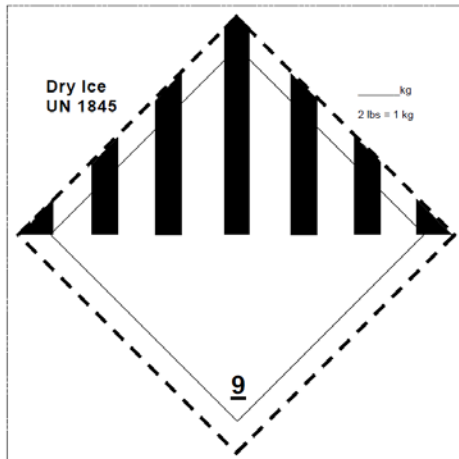


c. Rigid outer container

- Place a contents list between secondary and outer container
- Mark package with Sender contact information
- Mark package with Recipient contact information
- Affix the UN 2910 Radioactive Material, Excepted Package label



- If shipping on dry ice, affix the class 9 misc. label, which must include the shipping name and UN number; "Dry Ice" and "UN 1845" and wt. in kg of dry ice in package



- When shipping materials on dry ice, the outer container must be an insulated box. Never place dry ice in a sealed container
- If shipping multiple packages, mark each package with the package number and total number of packages in shipment, e.g. 1 of 2, and 2 of 2

**Documentation**

1. A shipper's declaration is **not** required when shipping Radioactive Materials, Excepted Packages or for dry ice when it is used as a refrigerant for the material being shipped.
2. Indicate the number of packages in the consignment (unless there is only one) on the Air Waybill
3. Mark the "Nature of Quantity of Goods" box on the Air Waybill and indicate the UN number followed by the proper shipping name of the hazardous material(s) being shipped. e.g. UN2910, Radioactive Materials, Excepted package, and UN1845, Dry Ice.
4. Print a copy of the Air Waybill with the corresponding tracking number for the shipment and send to DRS for their records. DRS must be able to verify that the shipment arrives at its intended destination.

**Shipper**

I have completed all DRS pre-shipment requirements and I have read and understand the function specific training describing how to properly package excepted radioactive materials for shipment.

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

**DRS Authorization**

Signature: \_\_\_\_\_ Date: \_\_\_\_\_