

Purpose

The purpose of this SOP is to provide instructions for personnel who need to ship a package with dry ice.

Dry Ice Shipping Regulations

Dry ice (carbon dioxide solid, UN 1845) is considered a dangerous good/hazardous material for air transport and requires special handling. Shippers are required to have received function-specific Dangerous Goods training, as outlined in 49 CFR 172.700. Staff members of Spokane Lab Services have completed this training.

Shipping Request Form

- One day prior to the planned shipment, complete and submit the Shipping Request Form found at: https://spokane.wsu.edu/facilities/mailing-services/shipping-request-form/
- 2. Forward a copy of the shipping acknowledgment to Spokane Lab Services (olga.shiva@wsu.edu, will.clegern@wsu.edu).
- 3. Lab Services will verify that dry ice and an appropriately sized box is available. FedEx prefers that new boxes are used for dry ice shipments and may turn away reused packaging deemed inappropriate. If boxes are reused, all previous labels should be removed, and the integrity of the cardboard box must not be compromised. The insulated foam container should have a minimum wall thickness of 1 inch.

Preparation of the Shipment

- 1. Freeze the products to be shipped before packaging
- 2. If the shipment contains liquid or perishable products that can melt or thaw, bag the products or line the insulated container using a watertight plastic bag.
- 3. Lab Services will place a sufficient amount of dry ice on the bottom of the container, around the product.
- 4. Lab Services will fill void spaces with dunnage material, such as loose fill peanuts or kraft paper.
- 5. If a liner bag is used, do not completely seal the liner, as carbon dioxide gas formed during transport must be allowed to vent. Never place dry ice in an airtight container.
- 6. Lab Services will close and securely tape the box with pressure-sensitive plastic tape.
- 7. Lab Services will weigh the sealed box and calculate and report the weight of the dry ice (total weight weight of the empty box weight of the sample = weight of dry ice).

Required Paperwork (Prepared by Lab Services)

When shipping with dry ice, the correct identification, classification, markings, and labelling must be provided on the outer carton to comply with current requirements in the International Air Transport Association (IATA) dangerous goods regulations.

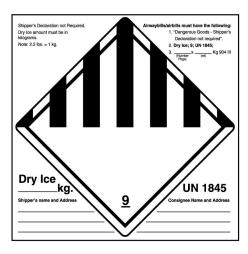


The following permanent markings are required on the outer packaging of all IATA dry ice shipments:

- 1. "Dry Ice" or "Carbon Dioxide Solid"
- 2. "UN 1845"
- 3. Net weight of dry ice in kilograms
- 4. Name and address of the shipper
- 5. Name and address of the recipient
- 6. Additional signage may be required based on contents (e.g., biohazardous material)

Considerations:

- 1. No printing is allowed within the diamond shape
- 2. The label must not fold over the edge of the box



Cost of Dry Ice Shipment (effective 7/1/2020 subject to change)

Tech Time: \$45.00/hr
Dry Ice: \$4.00/lb

3. Box (based on manufacturer cost, request a quote)