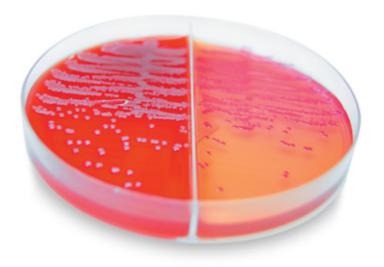


Packaging UN 3373 Shipments

Follow these instructions for packaging, marking, and labelling Biological Substance, Category B (UN 3373) shipments for FedEx Express® services.



Requirements for Biological Substance, Category B (UN 3373) Shipments

This guide outlines the requirements for shipping Biological Substance Category B (UN 3373) with FedEx Express. In addition, all shipments must comply with all applicable local, provincial, state, and federal laws governing packing, marking, and labelling. Blood, urine, fluids, and other specimens containing or suspected of containing infectious substances must be shipped according to applicable government, International Air Transport Association (IATA) and International Civil Aviation Organization (ICAO) regulations.

Customers who ship Biological Substance, Category B (UN 3373) shipments must comply with local, provincial, and federal laws governing identification, classification, packaging, and package markings (which may be in label form). FedEx Express strictly adheres to the IATA, ICAO and local country regulations for materials categorized as Biological Substance, Category B (UN 3373).

General Packaging Requirements

For Biological Substance, Category B (UN 3373) shipments, cushioning material is required for both liquid and dried specimens. You must include four layers of packaging:

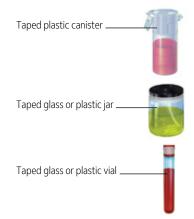
- 1. Primary watertight inner receptacle. Use primary receptacles made of glass, metal, or plastic with a positive means of ensuring a leakproof seal; skirted stopper or metal crimp seal must be provided; screw caps must be reinforced with adhesive tape. For liquid specimens, the primary receptacle must not contain more than 1 L. For dried specimens, the primary receptacle must not exceed the outer packaging weight limit.
- 2. Absorbent material. Place absorbent material between the primary and secondary receptacles, using enough material to absorb the entire contents of all primary receptacles. Absorbent material is required for Biological Substance, Category B (UN 3373) shipments containing liquids. Acceptable absorbent materials include cellulose wadding, cotton balls, super-absorbent packets, and paper towels.
- **3. Secondary watertight inner receptacle.** Use a secondary container that is leakproof for liquid specimens or siftproof for dried specimens. Choose only secondary containers certified by the manufacturer for Biological Substance, Category B (UN 3373) prior to use. Either

your primary or secondary receptacle must be able to withstand, without leakage, an internal pressure differential of not less than 95 kPa in the range of -40°C to 55°C (-40°F to 130°F). To prevent contact between multiple fragile primary receptacles, individually wrap or separate them inside the secondary container.

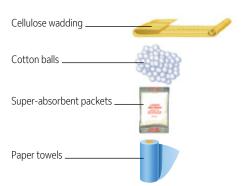
4. Sturdy outer packaging. Use rigid outer packaging constructed of corrugated fibreboard, wood, metal, or plastic, or other equally strong material, including cylinders made of such materials and appropriately sized for the contents. Chipboard or paperboard boxes are unacceptable outer packaging. The completed packaging must be of good quality, strong enough to withstand the normal rigors of transportation without loss of contents as a result of vibration, changes in temperature, humidity, or pressure. Limit the total volume for liquid samples to 4 L and the total weight of dried samples to 4 kg per outer container. At least one surface of the outer packaging must have a minimum dimension of 100 mm x 100 mm (4" x 4").

Completed packages must be able to withstand a 4' (1.2-m) impact test. Before sealing the outer packaging, you must make an itemized list of the contents of the package and enclose the list between the secondary packaging and outer packaging.

Acceptable Primary Receptacles



Acceptable Absorbent Materials



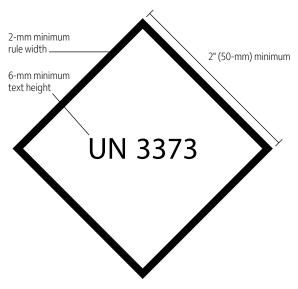
Acceptable Secondary Receptacles



Biological Substance, Category B (UN 3373) Marking Requirements

- Clearly mark "Biological Substance, Category B" in 6-mm-high text on the outer package adjacent to a properly sized UN 3373 diamond-shaped marking. If you prefer, package markings may be in the form of a label.
- If you use the FedEx® UN 3373 Pak, duplicate all required dangerous goods markings on each package inside the overpak. Do not place dry ice inside the pak.
- The name and telephone number of a person responsible must be marked on the package or provided on the air waybill.
- The name and address of the shipper and recipient must be marked on the package.

Biological Substance, Category B (UN 3373) Marking Requirements



"Biological Substance, Category B" must appear in 6-mm-high text on the outer package adjacent to a diamond-shaped mark like the one shown here. The UN 3373 marking must be in the form of a square set at an angle of 45 degrees. Each side of the UN 3373 diamond should measure a minimum of 2" (50 mm). The width of the diamond rule line must be a minimum of 2 mm, and the letters and numbers must be at least 6 mm high.

FedEx UN 3373 Pak

For your convenience, we offer the FedEx UN 3373 Pak for your Biological Substance, Category B (UN 3373) shipments. We recommend the FedEx UN 3373 Pak for use when the sturdy outer packaging of your properly packaged shipment is smaller than $7" \times 4" \times 2"$ (18 cm x 10 cm x 5 cm) (minimum acceptable size).

To help increase your operational efficiencies and clearly identify this type of shipment, the FedEx UN 3373 Pak is preprinted with the required IATA UN 3373 marking, the proper shipping name, and the OVERPACK marking.

The FedEx UN 3373 Pak can only be used to ship Biological Substance, Category B (UN 3373) shipments. If you need an overwrap for exempt clinical and environmental test sample shipments, use the FedEx® Clinical Pak.

To order the FedEx UN 3373 Pak, visit **fedex.ca** or call 1.800.GoFedEx 1.800.463.3339.

FedEx UN 3373 Pak



Packaging Restrictions

- Plastic bags and paper envelopes are unacceptable outer containers.
- The FedEx® Envelope, FedEx® Tube, FedEx® Pak, FedEx® Padded Pak, and FedEx boxes are not acceptable as outer containers for Biological Substance, Category B (UN 3373) shipments.
- The FedEx Clinical Pak cannot be used to ship Biological Substance, Category B (UN 3373) shipments.
- Only shipments classified as Biological Substance, Category B (UN 3373) can be shipped in the FedEx UN 3373 Pak.
- Biological Substance, Category B (UN 3373) shipments that are shipped refrigerated, frozen, on dry ice, or in liquid nitrogen must comply with current IATA and ICAO regulations.

If you are uncertain about whether your shipments require a biohazard label, consult all relevant authorities for the applicable regulations.

NOTE: Biological Substance, Category B (UN 3373) shipments are accepted at FedEx Drop Boxes across Canada. See the Terms and Conditions (Dangerous Goods section) in the FedEx Service Guide at **fedex.ca** for current limitations, and locations that do not accept UN 3373 shipments.

FedEx Packaging Services

The FedEx Packaging Services lab does not test packaging containing Biological Substance, Category B (UN3373) materials.

Contacts and Resources

- How to Pack guidelines at fedex.ca/packaging.
- FedEx Dangerous Goods Hotline, 1.800.GoFedEx
 1.800.463.3339; press "81" or say "dangerous goods."

NOTICE:

FedEx Express will refuse to accept packages that do not meet FedEx Express, government, or IATA and ICAO requirements. This brochure is in no way intended to replace requirements mandated by the Canadian Transportation of Dangerous Goods Regulations and IATA. This is for informational purposes only.