

TIP No. 035-0824

## Shipping ThinPrep® Solutions and Samples within CONUS 1–50 Vials—Small/Excepted Quantity Shipments by Highway and Commercial Air

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### PURPOSE.

This paper details transportation requirements when shipping ThinPrep® solutions and samples (1–50 vials) within the Continental United States (CONUS) in Small/Excepted Quantity Shipments by Domestic Highway Transportation and Commercial Air. NOTE: If shipping more than 50 vials of ThinPrep per package, please refer to the Defense Centers for Public Health – Aberdeen (DCPH-A) Technical Information Paper (TIP) that relates to the number of vials being shipped (DCPH-A 2024).

### REFERENCES.

DCPH-A. 2024. TIP No. 036-0824, *Shipping ThinPrep® Solutions and Samples within CONUS 51-500 Vials – Limited Quantity Shipments*.

International Air Transport Association (IATA). 2024. *Dangerous Goods Regulations*, 65<sup>th</sup> Edition. <https://www.iata.org/en/publications/dgr/>

*Code of Federal Regulations*, “Hazardous Materials Table, Special Provisions, Hazardous Materials Communications, Emergency Response Information, Training Requirements, and Security Plans,” Title 49, Part 172.

*Code of Federal Regulations*, “Shippers—General Requirements for Shipments and Packagings,” Title 49, Part 173.

Department of Defense (DoD). 2014. Defense Transportation Regulation, 4500-9R, Part II, *Cargo Movement*. [https://www.ustranscom.mil/dtr/part-ii/dtr\\_part\\_ii\\_204.pdf](https://www.ustranscom.mil/dtr/part-ii/dtr_part_ii_204.pdf)

### BACKGROUND.

Department of Defense (DoD) medical facilities collect and process specimens to test for cervical and bladder cancer using the ThinPrep PreservCyt® solution made by Hologic Inc. PreservCyt is a reagent grade, methanol-based, buffered preservative solution and is classified as a hazardous material (HM) due to its low flashpoint (80°F/26.5°C), and it must be packaged and shipped according to regulatory requirements governing transport of HMs within the United States. A vial of ThinPrep contains 20 mL of methanol solution.

### TRAINING.

Personnel who package any quantity of ThinPrep solution must receive training within 90 days of employment per 49 CFR 172.704 and the International Air Transport Association (IATA) Dangerous Goods Regulation (DGR), Chapter 1, Section 1.5 (49 CFR 172; IATA 2024). All personnel who sign HM shipping papers for ThinPrep shipments must be formally trained per DoD Defense Transportation

**This TIP supersedes APHC Fact Sheet No. 37-038-0518**

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Regulation (DTR), 4500-9R, Part II, Chapter 204, Section D, which provides a list of DoD-approved schools ([DoD 2014](#)). Certification training can be obtained by successfully completing the Transport of Biomedical Material (TBM) Course; DCPH-A provides this course and is the authorized proponent (see DTR 4500-9R, Part II, Chapter 204, Section D(1)(d)). Registration for the TBM Course is available at <http://ph.health.mil/Pages/Training.aspx>. This TIP does not preclude the requirement for specialized training at an approved course for personnel signing HM shipping papers.

### HAZARD CLASSIFICATION.

New vials of PreservCyt solution, as well as those containing a specimen, are classified as a Hazard Class 3, flammable liquid, based on the manufacturer's Safety Data Sheet. Although PreservCyt solution contains a biological specimen being sent for purposes of diagnosis, the sample IS NOT classified as a diagnostic specimen. PreservCyt solution contains chemicals that neutralize any infectious agents that might be present; therefore, the specimen is excepted from being classified as a Division 6.2 infectious substance (material) based on 49 CFR Section 173.134(b)(4) and the IATA DGR, Chapter 3, Section 3.6.2.2.3.3.

### BASIC SHIPPING DESCRIPTION.

The basic shipping description for 1–50 vials of ThinPrep solution when shipped domestically by highway or commercial air includes the United Nations (UN) Identification Number (ID), proper shipping name (followed by technical name), hazard class, and packing group designation, i.e., **UN1993, Flammable liquids, n.o.s. (contains methanol), 3, III.**

### SMALL/EXCEPTED QUANTITY (HIGHWAY OR COMMERCIAL AIR).

New vials of PreservCyt solution or specimens collected in PreservCyt may be shipped as a small/excepted quantity shipment as defined in 49 CFR 173.4 and the IATA DGR, Chapter 2, Section 2.6 when there are NO MORE THAN 50 vials per outer package, provided each inner receptacle (vial) does not contain more than 30 mL of solution and the total quantity per outer package does not contain more than 1000 mL (1 L) total solution (49 CFR 173; IATA 2024).

### SHIPPING SPECIFICATIONS.

#### Domestic Highway Transportation

Small quantities of Class 3 flammable liquids can be shipped via highway using the **Small Quantity** exception described in 49 CFR 173.4 when the following provisions are met:

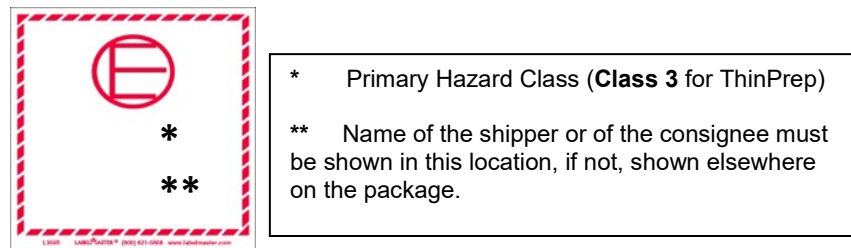
- **Packaging:** Each inner receptacle must be secured with wire, tape, or other positive means to prevent leakage. Outer packaging must be capable of sustaining multiple test drops from a height of 1.8 meters (5.9 feet) as described in 49 CFR 173.4(a)(6). The total outer packaging weight cannot exceed 29 kg (64 pounds).
- **Cushioning and Absorbance:** The inner receptacles must be securely packed in cushioning and absorbent material. Sufficient, compatible (non-reactive) absorbent material must be used to absorb the entire contents of the inner receptacles in the event of leakage.

- **Marking and Labeling:** By ground transport (highway), the outer package must be marked with the statement, “This package conforms to 49 CFR 173.4 for domestic highway or rail transport only.” Hazard labels are not required.
- **Shipping Papers:** Shipping papers are not required.

### Commercial Air Transportation

New vials of PreservCyt solution or specimens collected in PreservCyt solution may be shipped as an **Excepted Quantity**, as defined in the IATA DGR Chapter 2, Section 2.6, when the following provisions are met:

- **Packaging:** Each inner receptacle must be secured with wire, tape, or some other positive means to prevent leakage. Outer packaging must be capable of sustaining the drops and stacking tests described in the IATA DGR, Chapter 2, Section 2.6.6.
- **Cushioning and Absorbance:** The inner receptacles must be securely packed in cushioning and absorbent material. Sufficient, compatible (non-reactive) absorbent material must be used to absorb the entire contents of the inner receptacles in the event of leakage.
- **Marking and Labeling:** Each package must be marked with the Excepted Quantity Package Mark (shown in Figure 1), properly filled out, and have dimensions of 100 mm x 100 mm, which conforms in shape, color, and format to the marking described in the IATA DGR, Chapter 2, Section 2.6.7 and as shown in Figure 1 (IATA 2024).



**Figure 1. Excepted Quantity Package Mark**

- **Shipping Papers:** A “Shipper’s Declaration for Dangerous Goods” is not required when shipped as an excepted quantity.
- **Air Waybill:** If an Air Waybill is used, the “Nature and Quantity of Goods” box must be marked with the statement, “Dangerous Goods in Excepted Quantities” and indicate the number of packages.

Note: Federal Express requests the placement of the UN ID Number and the proper shipping name in the “Nature and Quantity of Goods” box of the Air Waybill.

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