



U.S. Department  
of Transportation

**Pipeline and  
Hazardous Materials Safety  
Administration**

400 Seventh Street, S.W.  
Washington, D.C. 20590

JUL 17 2007

Ms. Shawn K. Brown  
SAIC-Frederick, Inc.  
1050 Boyles Street  
Frederick, MD 21702

Ref. No. 07-0088

Dear Ms. Brown:

This responds to your April 26, 2007 letter requesting clarification on packaging used for shipment of "UN 3373, Biological Substance, Category B" and "UN 1845, Carbon dioxide, solid" (dry ice) using Packing Instruction 650 and 904 under the International Civil Aviation Organization (ICAO) Technical Instructions, as well as the Hazardous Materials Regulations (HMR), 49 CFR Parts 171-180. Specifically, you ask if the packaging system must be manufactured by the same vendor, or, if packaging components may be comprised of similar products manufactured by various vendors.

According to your letter, your shipment consists of infectious substances (HIV or HBV blood/serum/plasma) on dry ice refrigerant assigned to "UN 3373, Biological Substance, Category B" and "UN 1845, Carbon dioxide, solid" (dry ice), shipped under Packing Instructions 650 and 904 of the IATA Dangerous Goods Manual. The International Air Transport Association's Dangerous Goods Division advised you that there is no specific requirement that all components of a packaging system be manufactured by the same vendor under the IATA guidance book. You were further advised to contact the DOT for additional clarification under the HMR. You ask if packaging components comprised of similar various vendor products are acceptable packaging under the HMR.

The answer is yes. "Infectious Substance, Category B" and "Carbon dioxide, solid" (dry ice) must be packaged in accordance with provisions in §173.199 of the HMR. Additionally, dry ice must also meet provisions in §173.217. There is no requirement under the HMR for the packaging system for "Infectious Substance, Category B" to be manufactured by the same vendor. Therefore, packaging for this shipment is acceptable if it meets all requirements in §§ 173.199 and 173.217 of the HMR.

I hope this answers your inquiry.

Sincerely,

John A. Gale  
Chief, Standards Development  
Office of Hazardous Materials Standards



070088

173.217  
173.199  
173.476

**Drakeford, Carolyn <PHMSA>**

**From:** INFOCNTR <PHMSA>  
**Sent:** Thursday, April 26, 2007 11:46 AM  
**To:** Drakeford, Carolyn <PHMSA>  
**Subject:** FW: Information Center Comments/Questions

Boothe  
173.476  
173.217  
171.1  
173.199  
Applicability  
07-0088

Carolyn,

Could you enter this in the interps database for us? Thanks!

Erin

-----Original Message-----

From: nih-esprit-repository@niaid.nih.gov [mailto:nih-esprit-repository@niaid.nih.gov]  
Sent: Thursday, April 26, 2007 11:32 AM  
To: INFOCNTR <PHMSA>  
Subject: Information Center Comments/Questions

Below is the result of your feedback form. It was submitted by Ms. Shawn Brown (nih-esprit-repository@niaid.nih.gov) on Thursday, April 26, 2007 at 11:32:27.

Email: nih-esprit-repository@niaid.nih.gov

Name: Ms. Shawn Brown

Category: Shippers-General Requirements for Shipments and Packagings (Sections 173.1 - 173.476)

Phone: (301) 846-7457

Comments: Dear Office of Hazmat,

I am seeking written guidance regarding packaging requirements for the shipment of infectious substances (HIV or HBV blood/serum/plasma) on dry ice refrigerant that are assigned to UN 3373 (Biological Substance, Category B) and UN 1845 (Dry Ice), and will be shipped using Packing Instructions 650 and 904. Is it a requirement that the entire packaging system (secondary leakproof receptacle, absorbent, and rigid outer packaging be manufactured by the same vendor, or, can packaging components be comprised of similar various vendor products? Per a reply from the IATA DGs division, there is no specific requirement that all components of a packaging system be manufactured by the same vendor, but I was advised to consult with the US DOT on this matter. The US DOT advised me to contact you for guidance on this matter.

For example, a proposed shipping system may consist of the following:

- primary leakproof receptacles (1.8 mL leakproof cryovials) secured in 81-cell 2" cryogenic fibreboard grid boxes
- secondary leakproof packaging which is also capable of withstanding, without leakage, an internal pressure of 95 kPa in the temperature range of -40°C to 55°C (ex. manufactured by All-Pak, Exakt-Pak, or Inmark & certified by an outside company)
- enough absorbent between the primary and secondary receptacles to absorb the entire contents in the event of leakage
- polystyrene cooler (Saf-T-Pak product) which will permit the release of carbon dioxide gas
- STP-310 outer rigid box (Saf-T-Pak product) that is UN 2814 certified for PI 602
- List of itemized contents between the secondary and outer packaging
- The outer box will be appropriately labeled with applicable markings, including shipper & consignee contact information

Is the use of the individual vendor packaging components as listed above, used together as part of a complete packaging, acceptable per US DOT/HAZMAT regulations? Your guidance on

this matter is greatly appreciated. If you need additional information, please let me know.

With kind regards,

Ms. Shawn K. Brown

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Ms. Shawn K. Brown (Contractor)  
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