



U.S. Department
of Transportation

**Pipeline and Hazardous
Materials Safety
Administration**

1200 New Jersey Avenue SE
Washington, DC 20590

MAY 01 2012

Mr. Bill Briner
1324 West Bend Drive
Dardenne Prairie, MO 63368-8824

Ref. No. 10-0095

Dear Mr. Briner:

This responds to your April 26, 2010, request for clarification on the Hazardous Materials Regulations (HMR; 49 CFR Parts 171-180). We apologize for the delay in responding and for any inconvenience it has caused. Specifically, you ask for clarification on how to describe the “type of packaging” on a shipping paper for a DOT Specification 39 cylinder shipped by highway in a fiberboard box as required in § 173.301(a)(9). You also ask for clarification on the transportation of lithium batteries by aircraft.

Your questions are paraphrased and answered as follows:

Q1. When shipping a single DOT Specification 39 cylinder in a fiberboard box, how must the “type of packaging” be described on the shipping paper?

A1. The “type of packaging” may be described as “1 fiberboard box” or “1 cylinder contained in a fiberboard box.”

Q2. When shipping two DOT Specification 39 cylinders in a fiberboard box, how must the “type of packaging” be described on the shipping paper? You state that carrier software provides three options for describing two DOT Specification 39 cylinders within a single fiberboard box (see below). Based on the carrier options, you ask if Option A complies with the International Civil Aviation Organization (ICAO) Technical Instructions (TI).

Option A

1 fiberboard box x 1kg
1 fiberboard box x 1kg
All packed in one fiberboard box

Option B

1 kg

1 kg

All packed in one fiberboard box

Option C

1 cylinder x 1kg

1 cylinder x 1kg

Overpack used

A2. Describing the “type of packaging” in accordance with Option A would satisfy regulatory requirements under the HMR and ICAO TI.

Q3. For an air shipment of lithium ion batteries, if the watt-hour rating of cells is not more than 20 Wh and the watt-hour rating of batteries is not more than 100 Wh and the gross weight of the package exceeds 10 kg gross, must the package be shipped in accordance with Section I of ICAO Packing Instruction (PI) 965, including UN standard packaging, Class 9 label and Shipper’s Declaration for Dangerous Goods?

A3. Yes. It must be shipped in accordance with Section I of the ICAO Technical Instruction PI 965.

Q4. If both DOT Specification 39 cylinders and lithium batteries that meet the requirements of Section II of ICAO Packing Instruction 965 are contained in a single fiberboard box, and the weight of the cylinders caused the packages to exceed 10 kg gross or 2.5 kg gross in the case of PI 968, must these packages meet the requirements of Section I requirements of ICAO Packing Instructions 965 and 968, including UN standard packaging, Class 9 label and shipper’s declaration for dangerous goods.

A4. Yes. The package quantity limits specified in Section II of ICAO TI Packing Instructions 965 and 968 apply to the weight of the entire package, including the cylinders.

Q5. It is your understanding that a Class 9 label is required for a package containing lithium batteries prepared in accordance with Section I of ICAO TI packing instructions 965 through 970 and a lithium battery handling label is required as a condition in Section II of ICAO packing instructions 965-970. You ask if it is permissible to display both a lithium battery handling label and the Class 9 label on a package containing lithium batteries prepared in accordance with Section I of ICAO packing instructions 965-970.

A5. Yes. It is permissible to display the lithium battery handling label and the Class 9 label on packages prepared in accordance with Section I of ICAO TI packing instructions 965-970.

Q6. Section II of ICAO TI packing instruction 967 only requires the lithium battery handling label if the package contains more than 4 lithium cells or 2 lithium batteries. Is it permissible to display a lithium battery handling label even if the package does not contain more than 4 cells or 2 batteries?

A6. Yes. It is permissible to display a lithium battery handling label even if the package does not contain more than 4 cells or 2 batteries.

Q7. You ask for confirmation that lithium metal batteries, shipped in accordance with either Section I or Section II of ICAO TI packing instruction 968, are prohibited from passenger aircraft.

A7. Lithium metal batteries are forbidden for transport aboard passenger aircraft (see § 172.102(c), Special Provision A100). This prohibition applies regardless of whether the battery is packaged in accordance with PI 968 Section I or Section II (See US Variation 2).

I hope this answers your inquiry. If you require additional assistance, please contact this Office.

Sincerely,

A handwritten signature in black ink, appearing to read 'Ben Supko', with a long horizontal flourish extending to the right.

Ben Supko
Acting Chief, Standards Development
Standards and Rulemaking Division

Boothe
§ 173.185
§ 173.301(a)(9)
Batteries
10-0095

Hi Shane,

I'm Bill Briner, formerly of Monsanto Company in St. Louis and still an ad-hoc member of the Ag Chem Industry T&D Committee. Sorry I missed the meeting at CropLife America April 6th.

I have a comment concerning the upcoming NPRM on combustible liquids plus several questions concerning the shipment of DOT 39 cylinders and lithium batteries by air.

Thanks in advance for your guidance.

Best regards,

Bill Briner
(636) 300-1731

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I called the DOT Hazardous Materials Information Center this morning with several questions concerning the shipment of (a) a 1-2 liter DOT 39 cylinder in a fiberboard box; and (b) lithium batteries by air. They referred me to the International Standards Office.

Question 1:

Andrew in the DOT Hazardous Materials Information Center provided an opinion on the "type of packaging" for a DOT 39 cylinder shipped by highway. Since a fiberboard box is part of the 173.301(a)(9) requirements, Andrew's interpretation (which I liked) was that the shipment could either be described "1 box" or "1 cylinder contained in a fiberboard box." FedEx wants my client to list this as "1 fiberboard box", which I am inclined to endorse unless there is a regulatory reason not to.

Question 2:

FedEx wants my client to describe two DOT 39 cylinders within a **single** fiberboard box as follows:

Option A -

..... 1 Fibreboard box x 1 kg

..... 1 Fibreboard box x 1 kg

..... All packed in one fibreboard box

The FedEx software prevents them from listing this in either of the following manners:

Option B -

..... 1 kg

..... 1 kg

..... All packed in one fibreboard box

or

Option C -

..... 1 cylinder x 1 kg

..... 1 cylinder x 1 kg

..... Overpack used

Personally, it seems to me that Option C is the best choice, but please provide an opinion as to whether Option A complies with the ICAO Technical Instructions.

Question 3:

For an air shipment of lithium ion batteries in accordance with PI 965, if the Watt-hour rating of cells is not more than 20Wh and the Watt-hour rating of batteries is not more than 100Wh, **but** the gross weight of the package exceeds 10 kg G, please confirm that this package must be shipped in accordance with the PI 965 Section I requirements, including UN Standard packaging, CLASS 9 label and Shipper's Declaration for Dangerous Goods.

If both DOT 39 cylinders and Section II lithium batteries are contained in a single fiberboard box, and the weight of the cylinders causes the packages to exceed 10 kg G in the case of PI 965 or 2.5 kg G in the case of PI 968, please confirm that these packages must be shipped in accordance with the Section I requirements, including UN Standard packaging, CLASS 9 label and Shipper's Declaration for Dangerous Goods.

Question 4:

As I understand it, one or the other label is required -- CLASS 9 label for a Section I shipment; Lithium Battery label for a Section II shipment -- but both labels are never required. Even if that is correct, is it **permissible** to display a Lithium Battery label in addition to the CLASS 9 label for a Section I shipment?

Question 5:

PI 967 Section II only requires the Lithium Battery label if more than 4 cells or 2 batteries are contained in the package. Even if not required, is it *permissible* to display a Lithium Battery label if not more than 4 cells or 2 batteries are contained in the package?

Question 6:

Please confirm that lithium metal batteries, shipped in accordance with PI 968, either Section I or Section II, are prohibited from passenger aircraft

Thanks Shane.

Best regards,

Bill Briner
(636) 300-1731