



U.S. Department  
of Transportation  
**Pipeline and Hazardous  
Materials Safety  
Administration**

1200 New Jersey Ave., S.E.  
Washington, DC 20590

DEC 21 2011

Mr. Joe DiGirolamo  
Dangerous Goods Specialist  
Air Products & Chemicals, Inc.  
7201 Hamilton Blvd.  
Allentown, PA 18195

Ref. No.: 11-0197

Dear Mr. DiGirolamo:

This responds to your August 15, 2011 email seeking clarification of the placarding requirements of the Hazardous Materials Regulations (HMR; 49 CFR Parts 171-180). Specifically you ask what markings and placards are required for certain shipments of materials that are poisonous by inhalation that are loaded at one facility and prepared in accordance with the International Maritime Dangerous Goods (IMDG) Code and DOT SP-7835. You provided two examples of common shipments, which I have paraphrased in the following two scenarios:

Scenario 1:

What are the marking and placarding requirements for a motor vehicle containing 3,000 pounds of a Division 2.3, PIH Hazard Zone A material with a subsidiary Division 2.1 hazard; 8,000 pounds of a Division 6.1, PIH Hazard Zone B material with a subsidiary Class 8 hazard; and 500 pounds of a Class 8 material with a subsidiary Class 6.1, PIH Hazard Zone B hazard? You indicated that under the IMDG Code, the Class 8 material does not have a subsidiary hazard.

Scenario 2:

What are the marking and placarding requirements for a motor vehicle containing 1,000 pounds of a Division 2.3, PIH Hazard Zone A material with a subsidiary Division 2.1 hazard; 3,000 pounds of a Division 6.1, PIH Hazard Zone B material with a subsidiary Class 8 hazard; and 500 pounds of a Class 8 material with a subsidiary Class 6.1, PIH Hazard Zone B hazard? You indicated that under the IMDG Code, the Class 8 material does not have a subsidiary hazard.

Section 171.23(b)(10)(iv)(A) specifies the marking, labeling, and placarding requirements for materials poisonous by inhalation transported in accordance with the IMDG Code in a closed transport vehicle or freight container. The section states that a label or placard conforming to the IMDG Code specifications for a "Class 2.3" or "Class 6.1" label or placard may be substituted for the POISON GAS or POISON INHALATION HAZARD label or placard, as appropriate. It further states that a freight container must be marked with the ID number, regardless of the total

quantity in the freight container, as specified in § 172.313(c) and placarded as required by subpart F of part 172 of the HMR.

With respect to placarding in both scenarios, the transport vehicle or freight container must be placarded with the POISON GAS, FLAMABLE GAS, POISON INHALATION HAZARD and CORROSIVE placards in accordance with subpart F of part 172. However, a “Class 2.3” or “Class 6.1” placard may be substituted for the POISON GAS or POISON INHALATION HAZARD placard, as appropriate. Also, for domestic transportation, it should be noted, in accordance with §172.504(f)(8), a POISON INHALATION HAZARD placard is not required on a transport vehicle or freight container that is already placarded with a POISON GAS placard.

With respect to marking for non-bulk packagings, § 171.23(b)(10)(iv)(A) requires that the transport vehicle or freight container in both scenarios must be marked on each side and each end as stated in §172.332 or §172.336, with the identification number specified for the hazardous material in the §172.101 table for all three hazardous materials in the shipment, despite the provisions and limitations stated in § 172.313(c).

I hope this answers your inquiry. If you need additional assistance, please contact the Standards and Rulemaking Division at (202) 366-8553.

Sincerely,

A handwritten signature in black ink, appearing to read "Ben Supko". The signature is fluid and cursive, with a long horizontal stroke extending to the right.

Ben Supko  
Acting Chief, Standards Development  
Standards and Rulemaking Division

**Drakeford, Carolyn (PHMSA)**

Winter  
§ 171.1  
§ 172.313

**From:** INFOCNTR (PHMSA)  
**Sent:** Wednesday, August 17, 2011 4:23 PM  
**To:** Drakeford, Carolyn (PHMSA)  
**Subject:** FW: Hazmat Information Center Feedback: General Information, Regulations, and Definitions (Sections 171.1 & 171.26)

Marking  
11-0197

Hi Carolyn,

Ms. Sandler requested the following e-mail be submitted as a formal letter of interpretation in her 8/17/11 phone call with the Info Center.

Thanks,  
Victoria

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

**From:** PHMSA-Feedback [mailto:PHMSA-Feedback]  
**Sent:** Monday, August 15, 2011 3:22 PM  
**To:** PHMSA HM InfoCenter; PHMSA Webmaster  
**Subject:** Hazmat Information Center Feedback: General Information, Regulations, and Definitions (Sections 171.1 & 171.26)

To whom it may concern.

RE: 49CFR 171.23 & 172.313

Air Products and Chemicals, Inc ships several combinations of PIH substances. It is common for us to ship similar loads via road domestically and also as a preliminary road leg for an ocean shipment. Our practice is to prepare ocean shipments in accordance with the IMDG code as outlined in 49CFR part 171 subpart C. We have encountered numerous occasions where there is confusion and disagreement over the marking and placarding requirements of the transport vehicle or freight container.

Our shipments may include a combination of PIH gases and liquids. Domestic shipments of these combinations are transported under the terms and conditions of DOT SP-7835. These consignments would be loaded at one facility and shipped in closed freight containers.

Two examples of common shipments are outlined below.

Load A

- 3,000 lbs Division 2.3 (2.1) PIH Hazard Zone A / One UN number
- 8,000 lbs Division 6.1 (8) PIH Hazard Zone B / One UN number
- 500 lbs Class 8 (6.1) PIH Hazard Zone B / One UN number

&#61607; Note: Material 3 has no subrisk per IMDG

Load B

- 1000 lbs Division 2.3 (2.1) PIH Hazard Zone A / Two UN numbers
- o One UN number 800 lbs, the other 200 lbs
- 3000 lbs Division 6.1 (8) PIH Hazard Zone B / Two UN numbers
- o One UN number 2000 lbs, the other 1000 lbs
- 500 lbs Class 8 (6.1) PIH Hazard Zone B / One UN number

&#61607; Note: Material 3 has no subrisk per IMDG

We respectfully request PHMSA's input and guidance on the minimum marking and placarding requirements for each of these scenarios, both domestic road and preliminary road for ocean shipment.

Most Sincerely

Air Products & Chemicals Inc.

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Name: Hope Sandler

Organization: Air Products & Chemicals Inc

Email: [Sandleh@airproducts.com](mailto:Sandleh@airproducts.com)

Address: 7201 Hamilton Blvd

City: Allentown

Zip Code: 18195

Phone: 610 481 7713