



U.S. Department  
of Transportation

**Pipeline and Hazardous  
Materials Safety  
Administration**

1200 New Jersey Avenue, SE  
Washington, DC 20590

December 16, 2021

Shawn Melson  
Manager, DOT  
Imperative Chemical Partners  
5014 Ashton Audrey  
San Antonio, TX. 78249

Reference No. 21-0096

Dear Mr. Melson:

This letter is in response to your September 16, 2021, email and subsequent phone conversation requesting clarification of the Hazardous Materials Regulations (HMR; 49 CFR Parts 171-180) applicable to the orientation of intermediate bulk containers (IBCs) loaded on a motor vehicle and to the hazard label visibility. Specifically, you describe loading IBCs containing flammable, combustible, or corrosive material onto a highway motor vehicle. The vehicle bears the required placards and ID number markings for the commodity in the IBCs on each side and each end of the vehicle. The IBCs themselves are labeled on two opposing sides, rather than bearing placards, and are marked in accordance with § 172.301(a), as authorized in § 172.514(c)(4).

Further, you describe and provide diagrams for two loading orientations. In both orientations, the valve of each IBC faces the valve of an adjacent IBC and one label on each IBC and the UN identification (ID) number and proper shipping name marking required by § 172.301(a) directly faces the side of another IBC.

We have paraphrased and answered your questions as follows:

- Q1. You ask if the HMR prohibits IBCs from being loaded into a transport vehicle with their valves facing “inwards,” toward other IBC valves.
- A1. The answer is no. In accordance with § 177.834(a), packages having valves or other fittings must be loaded in a manner to minimize the likelihood of damage during transportation.
- Q2. You ask if it is permissible for the UN ID number and proper shipping name markings required by § 172.301(a) to face “inwards,” toward another IBC in the same direction as the IBC valves.
- A2. The answer is yes. Provided the marking is unobscured by labels or attachments, the HMR do not prohibit the UN ID number and proper shipping name markings required by § 172.301(a) from facing other packages when loaded onto a motor vehicle.

Q3. You ask if it is permissible for the hazard label to face “inwards,” toward another IBC in the same direction as the IBC valves.

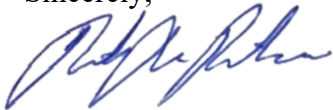
A3. The answer is yes. Provided the label is unobscured by markings or attachments, the HMR do not prohibit the hazard label from facing other packages when loaded onto a motor vehicle.

Q4. You ask if the HMR prohibit the IBC specification markings required by § 178.703 from being loaded in an orientation that is not visible from the outside of the motor vehicle.

A4. The answer is no. The HMR do not require packages to be loaded onto or into a motor vehicle and oriented in a manner such that the packaging specification marking(s) are visible from outside of a motor vehicle.

I hope this information is helpful. Please contact us if we can be of further assistance.

Sincerely,

A handwritten signature in blue ink, appearing to read "Dirk Der Kinderen".

Dirk Der Kinderen  
Chief, Standards Development Branch  
Standards and Rulemaking Division

**From:** [INFOCNTR \(PHMSA\)](#)  
**To:** [Hazmat Interps](#)  
**Subject:** FW: Imperative Chemical Partners-Formal Interpretation Request  
**Date:** Tuesday, September 21, 2021 2:00:10 PM  
**Attachments:** [image429366.png](#)  
[IBC INTERPRETATION.pdf](#)

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Attached is a request for letter of interpretation.

Mailing address is:

Shawn Melson, DOT Manager  
c/o Imperative Chemical Partners  
5014 Ashton Audrey  
San Antonio, TX. 78249

Thanks,

Jonathon, HMIC

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**From:** Shawn Melson <ShawnMelson@imperativechemicals.com>  
**Sent:** Thursday, September 16, 2021 2:48 PM  
**To:** INFOCNTR (PHMSA) <INFOCNTR.INFOCNTR@dot.gov>  
**Subject:** Imperative Chemical Partners-Formal Interpretation Request

**CAUTION:** This email originated from outside of the Department of Transportation (DOT). Do not click on links or open attachments unless you recognize the sender and know the content is safe.

Formal Interpretation Request,

“I do not believe PHMSA has issued any guidance or a formal interpretation related to my request therefor, I am requesting a new formal letter of interpretation to be issued regarding the attached scenario.”

**IMPERATIVE**  
CHEMICAL PARTNERS

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**SHAWN MELSON**  
MANAGER, DOT

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U.S. DOT  
PHMSA Office of Hazardous Materials Standards & Rulemaking Division  
Attn: PHH-10  
1200 New Jersey Ave, SE Bldg.  
Washington, D.C. 20590

Dear Office of Hazardous Material Standards,

Most of our bulk transportation occurs in composite Intermediate Bulk Container (IBC's) that are UN31HA1's. The products transported consist of Class 3 Flammable liquids, Class 8 Corrosive liquids, and Combustible liquids. As allowed by 172.400, we label the two opposing sides of the IBC's except for Combustible liquids which we placard for.

My first question addresses the positioning of the IBC's on the transport vehicles and the valve location once loaded. I've included two diagrams with the first showing the IBC's loaded in a single row and the valves facing one another. The second diagram shows the IBC's loaded in a double-row configuration with the valves facing inboard. The "X's" show the valve locations along with the labels on the two opposing sides and the transport vehicle placarded on all 4 sides.

HMR 177.834(a) states, "Packages having valves or other fittings must be loaded in a manner to minimize the likelihood of damage during transportation." The first question is this. Is there anywhere within the HMR's that would prohibit IBC valves from facing inward towards one another. By facing inward, they valves are offered protection from accidents, either vehicular or during loading/unloading. Also, they're protected from tampering.

Question #1: Is there a prohibition against the valves from facing inward?

If there is not a prohibition against the valves from facing inward, I then present 3 additional questions.

Question #2: 172.304(a)(3) states, "The markings required in this subpart-must be unobscured by labels or attachments. Being that we are labeling our IBC's, we are also marking them in accordance with 172.301(a). If the valves are facing towards one another in the single row example, would we be in violation of 172.304(a)(3)?

Question #3: 172.406(f) states, "Visibility. A label must be clearly visible and may not be obscured by markings or attachments. If the valves are facing one another in the single row example, would we be in violation of 172.406(f), even though the IBC body isn't a marking or attachment?

Question #4: Is there anything within 178.700, Subpart N that would prohibit the required IBC markings found in 178.703 from being visible from the outside?

Sincerely  
Shawn Melson, DOT Manager

