



U.S. Department
of Transportation

**Pipeline and Hazardous
Materials Safety
Administration**

1200 New Jersey Avenue, SE
Washington, DC 20590

JUL 13 2018

Sergeant Steve L. Brown
FHP-CVE West Palm Beach Office
Lake Worth Service Plaza, Bldg 9320
Milepost 94, Florida Turnpike
Lake Worth, FL 33467

Reference No. 18-0025

Dear Sergeant Brown:

This letter is in response to your February 19, 2018, email requesting clarification of the Hazardous Materials Regulations (HMR; 49 CFR Parts 171-180) applicable to exceptions for "UN1073, Oxygen, refrigerated liquid (cryogenic liquid)" under § 173.320.

We have paraphrased and answered your questions as follows:

- Q1. You ask whether the labeling and placarding requirements in Subparts E and F of Part 172 apply to "UN1073, Oxygen, refrigerated liquid" with respect to § 173.320(a)(2).
- A1. The answer is yes. All subparts of Part 172, including Subparts E and F, are applicable when shipping cryogenic liquids (i.e., refrigerated liquid oxygen) in accordance with § 173.320.
- Q2. You ask whether non-specification cylinders, cargo tanks, and portable tanks are authorized for refrigerated liquid oxygen when shipping in accordance with the exceptions for cryogenic liquids in § 173.320(a).

A2. The answer is yes, provided the requirements of § 173.320(a) are met. To use the exceptions provided in § 173.320, cryogenic liquids—such as UN1073—must be transported in Dewar flasks, insulated cylinders, insulated portable tanks, insulated cargo tanks, or insulated tank cars that are designed and constructed so that the pressure will not exceed 25.3 psig under ambient conditions. Note that shipping under this exception is restricted to transportation by rail and highway.

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

Sincerely,



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

Casey
§173.320(a)(1)
Placarding
18-0025

Dodd, Alice (PHMSA)

From: INFOCNTR (PHMSA)
Sent: Wednesday, February 21, 2018 2:21 PM
To: Hazmat Interps
Subject: FW: Request for Interpretation

Hello all,

Please see the below LOI request.

Regards,
-Breanna

From: Brown, Steve [mailto:SteveBrown@flhsmv.gov]
Sent: Monday, February 19, 2018 1:15 PM
To: PHMSA HM InfoCenter <PHMSAHMInfoCenter@dot.gov>
Subject: Request for Interpretation

To whom it may concern,

Please see the following questions to which a formal interpretation is being requested.

173.320 (a)(1), (2) & (3) provide exceptions when transporting cryogenic liquids. In particular, the carrier or shipper must comply with 173.320 (2) Subparts A, B, C, D, G and H of part 172, (§§174.24 for rail and 177.817 for highway) and in addition, part 172 in its entirety for oxygen. Subparts E (labeling) and F (placarding) of Part 172 are not listed and therefore can be interpreted as not being required.

1. Does "Part 172 in its entirety for oxygen" mean that because the shippers/carriers are offering or transporting UN1073 (oxygen), they are now subject to Subparts E and F of Part 172?
2. If not subject to Part 172 in its entirety, what placards, if any, are required for a vehicle transporting UN1073 Oxygen, refrigerated liquid (*cryogenic liquid*) in bulk packages?
3. If not subject to Part 172 in its entirety, are the 2.2 and 5.1 labels required to be displayed on non-bulk packages of UN1073 Oxygen, refrigerated liquid (*cryogenic liquid*)?
4. Are non-spec cylinders, cargo tanks and portable tanks authorized?

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