



U.S. Department
of Transportation

Pipeline and Hazardous
Materials Safety
Administration

1200 New Jersey Avenue, SE
Washington, D.C. 20590

AUG 19 2016

Mr. Jacky Xie
Ningbo Zhengxin Fire Fighting
Equipment Co., Ltd.
1199 Hua Shan Road, Room 15B2
Waigaoqiao, Shanghai 200137
CHINA

Reference No. 16-0059

Dear Mr. Xie:

This letter is in response to an April 6, 2016, email from Mitchell Brown (Chief Investigator, Eastern Region, Field Services Support Division, PHMSA) in which he forwarded your inquiry and requested clarification of the Hazardous Materials Regulations (HMR; 49 CFR Parts 171-180) applicable to the transport of "UN 1044, Fire extinguishers, 2.2 (non-flammable gas)" by motor vehicle in the United States. We have paraphrased and answered your questions as follows:

- Q1. Must fire extinguishers in the United States be described as "UN 1044, Fire extinguishers, 2.2"?
- A1. Only fire extinguishers that comply with the requirements prescribed in § 173.309 must be described as "UN 1044, Fire extinguishers *containing compressed or liquefied gas*, 2.2." A fire extinguisher that varies from these requirements must be described appropriately for the hazardous material(s) it contains. For example, § 173.309(a)(3) requires that UN 1044 fire extinguishers must contain 30 percent or less carbon dioxide by volume. Fire extinguishers that exceed this percentage may be described as "UN 1013, Carbon dioxide, 2.2," or may have different or additional description requirements authorized under a Department of Transportation Special Permit (DOT-SP).
- Q2. What is the correct way to transport fire extinguishers in the United States by motor vehicle?
- A2. Fire extinguishers authorized under § 173.309 must comply with that section's handling, packaging, operation, and test requirements before being offered for transportation in commerce. These requirements include relief from shipping papers, labels, and placards and from having to comply with the modal requirements in 49

CFR Parts 174 (rail) and 177 (highway). Section 173.309 fire extinguishers are also eligible for the exceptions in § 173.156. As previously stated, fire extinguishers that do not comply with § 173.309 but meet the definition of a hazardous material must comply with the HMR requirements applicable to the hazardous materials they contain. For example, these cylinders must be loaded, secured, and unloaded on a motor vehicle in conformance with 49 CFR Part 177 unless they meet the limited quantity exception. Please note that other Federal agency regulations may also apply.

- Q3. Why aren't all fire extinguishers in the United States marked and labeled with a green NON-FLAMMABLE GAS (Division 2.2) compressed gas label prescribed in § 172.415? Is this label only required when a fire extinguisher is shipped by vessel?
- A3. As previously stated, fire extinguishers that comply with § 173.309 are excepted from being labeled with a NON-FLAMMABLE GAS hazard warning label. Fire extinguishers that do not comply with § 173.309 must be marked and labeled as required under the HMR. For example, fire extinguishers required by the HMR to be placed in an outer packaging before being offered for transportation (such as a fiberboard box authorized under a DOT-SP) must be marked and labeled on the outer packaging in conformance with the HMR. Fire extinguishers that are permitted by the HMR to be placed in transportation without an outer packaging must themselves be marked and labeled as prescribed in 49 CFR Part 172, Subpart E (labeling).
- Q4. Are there special regulations in the United States for delivering Division 2.2 fire extinguishers other than those assigned identification number "UN 1044"?
- A4. As previously stated, the answer is yes. Division 2.2 fire extinguishers other than those assigned identification number "UN 1044" must be offered for transportation in commerce in conformance with the HMR for the hazardous materials they contain.
- Q5. Are only those fire extinguishers manufactured in conformance with § 173.309 required to be classified as "Division 2.2" and assigned identification number "UN 1044"?
- A5. The answer is no. Please see A4.

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

Sincerely,



T. Glenn Foster
Chief, Regulatory Review and Reinvention Branch
Standard and Rulemaking Division

Edmonson
173.309
Fire Extinguishers
16-0059

Goodall, Shante CTR (PHMSA)

From: Foster, Glenn (PHMSA)
Sent: Wednesday, April 06, 2016 11:18 AM
To: Brown, Mitchell (PHMSA)
Cc: Dodd, Alice (PHMSA); Goodall, Shante CTR (PHMSA)
Subject: INFO: Fire Extinguishers

Mitchell,

Okay, will do.

Shante / Alice,

Please have the request below checked in as a Request for a Letter of Interpretation and assigned to the next Specialist in the rotation.

Thanks,
Glenn

From: Brown, Mitchell (PHMSA)
Sent: Wednesday, April 06, 2016 11:17 AM
To: Foster, Glenn (PHMSA)
Subject: RE: INFO: Fire Extinguishers
Importance: High

Greetings Glen,

Yes please...

The company contact information is as follows:

Mr. Jacky Xie
Ningbo Zhengxin Fire Fighting Equipment Co., Ltd
Room 15B2
1199 Hua Shan Rd.
Waigaoqiao, Shanghai 200137 China
jxie@zxfire.net

Additionally, I am a bit curious as I would very much like to ensure that my investigators as well as myself understand thoroughly how we should be addressing fire extinguishers with respect to enforcement. Thank you so much for your assistance in this matter.

v/r

Mitchell F. Brown
Chief Investigator, Eastern Region
Office of Hazardous Materials Safety, Field Operations
Pipeline and Hazardous Materials Safety Administration (PHMSA)
United States Department of Transportation

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From: Foster, Glenn (PHMSA)
Sent: Wednesday, April 06, 2016 11:08 AM
To: Brown, Mitchell (PHMSA)
Subject: RE: INFO: Fire Extinguishers

Hello Mitchell,

Do you want to have these inquiries checked in as a request for a Letter of Interpretation?

Thanks
Glenn

From: Brown, Mitchell (PHMSA)
Sent: Wednesday, April 06, 2016 8:10 AM
To: Foster, Glenn (PHMSA)
Subject: INFO: Fire Extinguishers
Importance: High

Greetings Mr. Foster,

I have a several questions for you....attached please find copies of Compliance Certificates relative to Fire Extinguishers. The company specifically asked whether the extinguisher(s) must be described as UN1044, fire extinguisher, 2.2 when transporting via highway in the US. These extinguishers will contain dry chemical product that are not hazardous materials. The questions are as follows::

Do the fire extinguishers in USA need to be delivered under UN1044 class 2.2???

What is the right way to delivery fire extinguishers in USA by truck?

Why aren't all fire extinguishers in USA not marked and labeled with the Green Label UN1044 class 2.2; in Europe they are? Is this only a requirement when shipped via vessel?

Is there a special regulation of delivery fire extinguishers in USA other than UN1044 class 2.2?

Are only those extinguishers manufactured under section 173.309, required to be shipped under UN1044 class 2.2?

Any assistance that you might be able to provide on this matter would be greatly appreciated. Again, the company is looking to transport their fire extinguishers via highway.

v/r

Mitchell F. Brown

Chief Investigator, Eastern Region

Office of Hazardous Materials Safety, Field Operations

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