



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

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

MAR 20 2012

Mr. Paul J. Dambek
12 Kimball Hill Road
Hudson, NH 03051-3915

Reference No.: 11-0299

Dear Mr. Dambek:

This responds to your letter requesting clarification of Hazardous Materials Regulations (HMR; 49 CFR Parts 171-180) applicable to the packaging and overpacking of Department of Transportation (DOT) specification 39 cylinders. In your incoming letter, you describe a scenario in which four DOT specification 39 cylinders containing "UN 1956, Compressed gas, n.o.s." are placed in a plastic "suitcase" with padded foam inserts. This "suitcase" also contains other non-regulated items and is further placed into a strong outer fibreboard box. Based on this scenario, your questions are paraphrased and answered as follows:

- Q1. Is the "suitcase" in which the four DOT specification 39 cylinders are placed considered an overpack or a combination package?
- A1. Provided the "suitcase" meets the definition of a strong outer packaging and the general requirements for packagings under §§ 173.24 and 173.24a, it may be considered the outer packaging of the combination packaging specified in § 173.301(a)(9). In accordance with § 173.301(a)(9), DOT specification 39 cylinders must be packed in strong non-bulk outer packagings. A "strong outer packaging" is defined in § 171.8 and means the outermost enclosure which provides protection against the unintentional release of its contents under conditions normally incident to transportation.
- Q2. Must the "suitcase" in which the four DOT specification 39 cylinders are placed be built to a United Nations (UN) specification?
- A2. The answer is no. A "strong outer packaging" is not required to meet a specific package specification; however it must meet the definition of a strong outer packaging and the general requirements for packagings under §§ 173.24 and 173.24a.

- Q3. Must the fibreboard box in which the "suitcase" containing the four DOT specification 39 cylinders are placed be built to a UN specification?
- A3. The answer is no. In the scenario you describe, the fibreboard box acts as an overpack and therefore must meet the requirements specified in § 173.25. An overpack is not required to be built to a UN specification.
- Q4. Must each of the four DOT specification 39 cylinders be marked with the proper shipping name and UN number and bear the Division 2.2 label?
- A4. The answer is no. Under § 173.301(a)(9), DOT 39 cylinders must be placed in a strong outside packaging. The cylinder and the strong outer packaging together constitute the package. Therefore, the hazard markings and labels must be affixed to the outside packaging. The cylinders are not required to be marked with the proper shipping name and UN number and bear the Division 2.2 label. However, the cylinders must be marked in accordance with § 178.65(i) with the cylinder specification marking (e.g., DOT 39 NRC494/618 M0123).
- Q5. Must the "suitcase" in which the four DOT specification 39 cylinders are placed be marked with the proper shipping name and UN number and bear the Division 2.2 label?
- A5. The answer is yes. Under § 173.301(a)(9), DOT 39 cylinders must be placed in a strong outside packaging. The cylinder and the strong outer packaging together constitute the package therefore, the hazard markings and labels must be affixed to the outside packaging, in this case the "suitcase." In addition, the outside of the combination packaging must be marked with an indication that the inner packagings conform to the prescribed specifications.
- Q6. Must the fibreboard box in which the "suitcase" containing the four DOT specification 39 cylinders are placed be marked with the proper shipping name and UN number and bear the Division 2.2 label?
- A6. The answer is yes. As specified in 173.25(a)(2) an overpack must be marked with the proper shipping name and identification number, when applicable, and labeled as required by the HMR for each hazardous material contained therein, unless marking and labels representative of each hazardous material in the overpack are visible.

I hope this satisfies your inquiry. Please contact us if we can be of further assistance.

Sincerely,



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



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Benedict
\$173.25
\$172.312
\$171.8
Overpacks
11-0299

December 2, 2011

Mr. Charles Betts
Office of Hazardous Materials Standards
Pipeline and Hazardous Materials Safety Administration
Attn: PHH-10
U.S. Department of Transportation
1200 New Jersey Avenue, SE.
East Building, 2nd Floor
Washington, DC 20590-0001

Dear Mr. Betts:

I am requesting a letter of interpretation on shipping different DOT Specification 39 cylinders in a fibreboard box. Please consider the following package: 4 DOT Specification 39 cylinders are placed in a plastic "suitcase" which is padded with foam. Other non-regulated items are in the suitcase, as well. Included with this correspondence are photos of this "suitcase" arrangement. The suitcase is then placed into a strong outer fibreboard box.

Each cylinder contains 1 KG of a non-flammable gas, "UN 1956, Compressed Gas, N.O.S.". Each of the four cylinders contains a different mixture of gases (i.e, different technical names for each cylinder).

Questions:

- 1) Is the "suitcase" considered an overpack or a combination package? For air transport, shipping papers must have the appropriate statement: "Overpack Used" or "All packed into one...".
- 2) Must the "suitcase" be UN specification packaging?
- 3) Must the fibreboard box be a UN specification packaging?
- 4) Must each of the cylinders be marked with Proper shipping name and UN number and have the Division 2.2. label affixed?

- 5) Must the "suitcase" be marked with each proper shipping name, UN number, the word "OVERPACK" and affixed with a Division 2.2 label?
- 6) Must the fibreboard box be marked with each proper shipping name, UN number, the word "OVERPACK" and affixed with a Division 2.2 label?

If you have questions, do not hesitate to send e-mail to paul@hazmateam.com or call 401-595-8395. Your assistance is greatly appreciated.

Sincerely,

A handwritten signature in black ink, appearing to read "Paul J. Dambek", followed by a long horizontal line extending to the right.

Paul J. Dambek, CIT

Hazardous Materials Trainer and Consultant