



U.S. Department
of Transportation
**Research and
Special Programs
Administration**

400 Seventh St., S.W.
Washington, D.C. 20590

FEB 7 2005

Ms. Amy Vollmer
Product Manager – Missiles Team
Carleton Technologies, Inc.
10 Cobham Drive
Orchard Park, NY 14127-4195

Reference No.: 04-0277

Dear Ms. Vollmer:

This is in response to your letter requesting clarification of the limited quantity exception for "Helium, compressed, 2.2, UN 1046" under the Hazardous Materials Regulations (HMR; 49 CFR parts 171-180). Your letter states that the helium is in cylinders with a capacity of 6.9 cubic inches, at a pressure of 9,200 psig.

When transported by highway, § 173.306(a)(1) excepts limited quantities of certain compressed gases, including compressed helium, from labeling (except when intended for further transportation by air) and the specification packaging requirements when packaged in containers of not more than 4 fluid ounces capacity (7.22 cubic inches or less). Each package must conform to the general requirements in §§ 173.24 and 173.24a, and may not exceed 30 kg (66 pounds) gross weight. In addition, limited quantity shipments of compressed helium must meet all other requirements in the HMR from which they have not been excepted.

There are no restrictions on the internal pressure when the container has a capacity of 4 ounces or less. However, as a guideline, it is recommended that the container has a ratio of burst pressure to normal operating pressure comparable to the most similar DOT specification packaging. For packagings not comparable to a DOT specification packaging, a ratio of burst pressure to normal operating pressure of five is recommended.

Finally, if part number B45625-1 contains a hazardous material, the material must be properly packaged, marked and described in accordance with the applicable HMR requirements. I am returning your drawings marked proprietary which were submitted to this office for review.

I hope this satisfies your request.

Sincerely,

Hattie L. Mitchell
Chief, Regulatory Review and Reinvention
Office of Hazardous Materials Standards

Enclosures



040277

173-306(a)(1)

CARLETON

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December 1, 2004

U.S. Department of Transportation
400 7th street SW
Washington, DC 20590-0001

Attention: Edward Mazzullo
Director, Office of Hazardous Material Standards
USDOT/RSPA, DHM-10

Reference: Request for Letter of Interpretation

Dear Mr Mazzullo:

Carleton Aerosystems requests a letter of interpretation on p/n B45625-1 (final assembly and shipped level) and B45749-1 (filled bottle assembly level) to ship under CFR 49 section 173.306 limited quantities of compressed gas.

The part number in question is B45749-1 a welded cylinder 6.9 cubic inches in volume and will be filled with compressed Helium, UN1046, at 9200 psi. Helium has a Hazard class of 2.2.

For a product previously shipped from Carleton, John Szymanski our design/development engineer had discussed this interpretation with Transportation Regulation Specialist Helen Engrum and Mechanical Engineer Mark Toughiry (reference letter dated Feb 27, 2003, reference number 03-0029 from Hattie Mitchell). This letter confirmed that our part number B44637-1 fell under section 176.306 Limited Quantities of compressed gases section (a)(1). Section (a)(1) provides exception to most regulations "when in containers of not more than 4 fluid ounces capacity (7.22 cubic inches or less)...

Our request is to have a letter of interpretation for our files for our new part number B45625-1. This assembly also contains a pressurized reservoir which is less than 7.22 cubic inches in volume and we want to confirmation that this part falls under section 176.306 section (a)(1). Enclosed are the drawings for both the top level shippable item and for the filled gas reservoir. If you require any additional information please let me know. (716) 667-6482

Regards,



Amy Vollmer
Product Manager- Missiles Team
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encl.

Belts
§173.306(a)(1)
Compressed Gases in
Cylinders
04-0277