U.S. Department
of Transportation

**Research and
Special Programs
Administration**

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

FEB 16 2005

DOT-E 9634
(SIXTH REVISION)

EXPIRATION DATE: January 31, 2007

(FOR RENEWAL, SEE 49 CFR § 107.109)

1. GRANTEE: Luxfer Gas Cylinders
Riverside, CA

2. PURPOSE AND LIMITATIONS:

a. This exemption authorizes the manufacture, marking and sale of a non-DOT specification cylinder conforming with all regulations applicable to a DOT FRP-1 cylinder, except as specified herein to be used for the transportation in commerce of certain Division 2.1 or 2.2 materials. This exemption provides no relief from the Hazardous Materials Regulations other than as specifically stated herein.

b. The safety analyses performed in development of this exemption only considered the hazards and risks associated with transportation in commerce.

3. REGULATORY SYSTEM AFFECTED: 49 CFR Parts 106, 107 and 171-180.

4. REGULATIONS FROM WHICH EXEMPTED: 49 CFR §§ 173.302a(a)(1), 173.304a(a)(1), 173.304a(a)(4)(ii) and 175.3 in that the use of a non-DOT specification package is not authorized, except as specified herein.

5. BASIS: This exemption is based on the application of Luxfer Gas Cylinders dated January 24, 2005, submitted in accordance with § 107.109.

FEB 16 2005

6. HAZARDOUS MATERIALS (49 CFR § 172.101):

Hazardous Material Description			
Proper Shipping Name	**Hazard Class/ Division**	**Identi-fication Number**	**Packing Group**
Hydrogen and methane mixture, compressed	2.1	UN2034	N/A
Methane, compressed *or* Natural gas, compressed (*with high methane content*)	2.1	UN1971	N/A
Other Division 2.2 gases under specific commodity names (air, compressed, carbon dioxide, helium, compressed, nitrogen, compressed, nitrous oxide, oxygen and oxygen-nitrogen mixture, containing not over 39% oxygen classified as nonflammable gases).	2.2	As appro-priate	N/A

7. PACKAGING(S) and SAFETY CONTROL MEASURES:

a. PACKAGING - Packaging prescribed is a non-DOT specification fiber reinforced plastic (FRP) full composite (FC) cylinder in full conformance with Luxfer drawing L45T45-6 Rev. 0 on file with the Office of Hazardous Materials Exemptions and Approvals (OHMEA), and in conformance with the requirements of DOT FRP-1 Standard, Revision 2 dated February 15, 1987 (Basic Requirements for Fiber Reinforced Plastic (FRP) Type 3FC Composite Cylinders) except as follows:

§ 178.AA-5 *Authorized material and identification of material.*

(a) Aluminum liner must be 6061 and T6 temper. Cylinders constructed with aluminum liner 6351 before January 1, 1990 can remain in service if requalified in accordance with paragraph 8(j) of this exemption.

§ 178.AA-6 *Manufacture*.

(a) Add to end of the paragraph: Each cylinder must be a seamless cylinder and may be produced by cold or hot backward extrusion, cold drawing, or from an extruded tube with swaged or spun ends.

b. TESTING - Each cylinder must be reinspected and hydrostatically retested every three years in accordance with § 180.209 as prescribed for DOT 3HT cylinders, except that the rejection elastic expansion criteria does not apply, permanent volumetric expansion must not exceed 5 percent of total volumetric expansion at test pressure and retest dates must be steel stamped on the outer exposed metallic surface of the cylinder neck, or marked on a label securely affixed to the cylinder and over coated with epoxy. Reheat treatment or repair of rejected cylinders is not authorized.

c. OPERATIONAL CONTROLS -

(1) Cylinders manufactured under this exemption are not authorized for use fifteen (15) years after the date of manufacture.

(2) Use of these cylinders for underwater breathing is not authorized.

(3) Cylinders used in oxygen service must be in compliance with § 173.302a(b)(5)(1) through (4).

(4) Cylinders must be packaged in accordance with § 173.301(a)(9).

(5) Cylinders used in nitrous oxide service must conform with § 173.304(a)(4).

8. SPECIAL PROVISIONS:

a. In accordance with the provisions of Paragraph (b) of § 173.22a, persons may use the packaging authorized by this exemption for the transportation of the hazardous materials specified in paragraph 6, only in conformance with the terms of this exemption.

b. A person who is not a holder of this exemption, but receives a package covered by this exemption, may reoffer it for transportation provided no modifications or changes are made to the package and it is offered for transportation in conformance with this exemption and the HMR.

c. A current copy of this exemption must be maintained at each facility where the package is offered or reoffered for transportation.

d. Each cylinder manufactured under the authority of this exemption must be marked with a registration symbol designated by the Office of Hazardous Materials Exemptions and Approvals for a specific manufacturing facility.

e. A current copy of this exemption must be maintained at each facility where the package is manufactured under this exemption. It must be made available to a DOT representative upon request.

f. Transportation of flammable gas is not authorized aboard cargo vessel or passenger-carrying aircraft.

g. Transportation of oxygen is only authorized when in accordance with § 172.102(c)(2) Special Provision A52 and §§ 175.85(h) and (i).

9. MODES OF TRANSPORTATION AUTHORIZED: Motor vehicle, rail freight, cargo vessel, cargo aircraft only and passenger-carrying aircraft (see paragraphs 8(f) and (g) for restriction).

10. MODAL REQUIREMENTS: A current copy of this exemption must be carried aboard each cargo vessel and aircraft used to transport packages covered by this exemption. The shipper must furnish a current copy of this exemption to the air carrier before or at the time the shipment is tendered.

11. COMPLIANCE: Failure by a person to comply with any of the following may result in suspension or revocation of this exemption and penalties prescribed by the Federal hazardous materials transportation law, 49 U.S.C. 5101 et seq:

- All terms and conditions prescribed in this exemption and the Hazardous Materials Regulations, Parts 171-180.

- Persons operating under the terms of this exemption must comply with the security plan requirement in Subpart I of Part 172 of the HMR, when applicable.

- Registration required by § 107.601 et seq., when applicable.

Each "Hazmat employee", as defined in § 171.8, who performs a function subject to this exemption must receive training on the requirements and conditions of this exemption in addition to the training required by §§ 172.700 through 172.704.

No person may use or apply this exemption, including display of its number, when the exemption has expired or is otherwise no longer in effect.

12. REPORTING REQUIREMENTS: Shipments or operations conducted under this exemption are subject to the Hazardous Materials Incident Reporting requirements specified in 49 CFR §§ 171.15 - Immediate notice of certain hazardous materials incidents, and 171.16 - Detailed hazardous materials incident reports. In addition, the grantee(s) of this exemption must notify the Associate Administrator for Hazardous Materials Safety -- OHMEA, in writing, of any incident involving a package, shipment or operation conducted under terms of this exemption.

Issued in Washington, D.C.:

Robert A. McGuire
Associate Administrator for
Hazardous Materials Safety

FEB 16 2005
(DATE)

for

Address all inquiries to: Associate Administrator for Hazardous Materials Safety, Research and Special Programs Administration, Department of Transportation, Washington, D.C. 20590. Attention: DHM-31.

Copies of this exemption may be obtained by accessing the Hazardous Materials Safety Homepage at http://hazmat.dot.gov/exemptions Photo reproductions and legible reductions of this exemption are permitted. Any alteration of this exemption is prohibited.

PO: KFW/sln