

January 20, 2004



U.S. Department  
of Transportation

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

**Research and  
Special Programs  
Administration**

DOT-E 13237

EXPIRATION DATE: December 31, 2005
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(FOR RENEWAL, SEE 49 CFR § 107.109)

1. GRANTEE: Praxair, Incorporated  
Danbury, Connecticut
2. PURPOSE AND LIMITATION:
  - a. This exemption authorizes the transportation in commerce of certain non-DOT specification foreign cylinders which are charged for export only. This exemption provides no relief from the Hazardous Materials Regulations (HMR) 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. The safety analyses did not consider the hazards and risks associated with consumer use, use as a component of a transport vehicle or other device, or other uses not associated with transportation in commerce.
3. REGULATORY SYSTEM AFFECTED: 49 CFR Parts 106, 107 and 171-180.
4. REGULATIONS FROM WHICH EXEMPTED: 49 CFR §§ 173.202, 173.304, 173.304a, 173.323, and 173.338 in that welded, stainless steel, non-DOT specification cylinders are not authorized, except as provided herein.
5. BASIS: This exemption is based on the application of Praxair, Inc. dated April 19, 2003 submitted in accordance with § 107.105 and the public proceeding thereon.

6. HAZARDOUS MATERIALS (49 CFR § 172.101):

<b>Hazardous Materials Description</b>			
<b>Proper Shipping Name</b>	<b>Hazard Class/ Division</b>	<b>Identification Number</b>	<b>Packing Group</b>
Boron Trichloride	2.3	UN1741	N/A
Chlorine trifluoride	2.3	UN1749	N/A
Dichlorosilane	2.3	UN2189	N/A
Ethylene oxide	2.3	UN1040	N/A
Liquefied and non-liquefied compressed gases authorized for DOT specification 4BW cylinders	2.1 or 2.2	As appropriate	N/A
Silicon tetrachloride	8	UN1818	II
Trichlorosilane	4.3	UN2195	I
Tungsten hexafluoride	2.3	UN2196	N/A

7. SAFETY CONTROL MEASURES:

a. PACKAGING - Packagings prescribed are non-DOT specification foreign, welded, stainless steel cylinders. The cylinders are designed and manufactured in accordance with Graeven Metalltechnik GmbH drawings 00-10-07/0 and 98-12-03/2 on file with the Office of Hazardous Materials Exemptions and Approvals (OHMEA). Cylinders must be fitted with pressure relief devices in accordance with CGA Pamphlet S-1.1. Cylinders must be in conformance with the following:

Material:	316L stainless steel
Capacity:	10 Liters or 50 Liters
Maximum service pressure:	290 psig (20 bar)
Minimum test pressure:	435 psig (30 bar)
Minimum design burst pressure:	1595 psig (110 bar)

b. TESTING - Cylinders must meet the cylinder requalification requirements of the HMR outlined in Subpart C of Part 180.

c. OPERATIONAL CONTROLS -

- (1) Cylinders must be shipped solely for export.
- (2) Cylinders containing Division 2.3 materials in Hazard Zone A or B must be shipped in strong outside packagings complying with the provisions of §173.40(d).
- (3) Cylinders must meet the filling density and service pressure requirements of 49 CFR Part 173.
- (4) The shipping paper must identify the cylinders with the exemption number "DOT-E 13237" and must carry the following certification: "This cylinder has [These cylinders have] been retested and refilled in accordance with DOT requirements for export."
- (5) Cylinders must be transported by dedicated truck from the filling location to the port of debarkation. An intermediate stop at a Praxair location is authorized for the purposes of labeling and preparing the cylinders for shipment.

d. MARKING -

- (1) Each cylinder must be plainly and durably marked "DOT-E 13237" and "For Export Only".
- (2) The outside of each package must be plainly and durably marked "DOT-E 13237" and "For Export Only".

8. SPECIAL PROVISIONS:

- a. A person who is not a holder of this exemption who receives a package covered by this exemption may reoffer it for transportation provided no modification or change is made to the package or its contents and it is reoffered for transportation in conformance with this exemption and the HMR.
- b. A current copy of this exemption must be maintained at each facility where the package is offered or reoffered for transportation.
- c. Transportation of Division 2.3 materials (gases which are poisonous by inhalation) are not authorized aboard cargo vessel unless specifically authorized in the Hazardous Materials Table (§ 172.101).

9. MODES OF TRANSPORTATION AUTHORIZED: Motor vehicle and cargo vessel. (See restriction in paragraph 8.c.)
  
10. MODAL REQUIREMENTS:
  - a. A current copy of this exemption must be carried aboard each cargo vessel or motor vehicle used to transport packages covered by this exemption.
  - b. Transportation of Division 2.3 materials aboard cargo vessel must meet the vessel stowage requirements of the Hazardous Materials Table (§ 172.101).
  
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:
  - o All terms and conditions prescribed in this exemption and the Hazardous Materials Regulations, 49 CFR Parts 171-180.
  - o 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 this exemption has expired or is otherwise no longer in effect.

12. REPORTING REQUIREMENTS: The carrier is required to report any incident involving loss of packaging contents or packaging failure to the Associate Administrator for Hazardous Materials Safety (AAHMS) as soon as practicable. (Sections 171.15 and 171.16 apply to any activity undertaken under the authority of this exemption.) In addition, the holder(s) of this exemption must inform the AAHMS, in writing, of any incident involving the package and shipments made under the terms of this exemption.

Issued in Washington, D.C.:



for Robert A. McGuire  
Associate Administrator for  
Hazardous Materials Safety

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: cwf