



U.S. Department
of Transportation

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

**Research and
Special Programs
Administration**

SEP 8 2004

DOT-E 12334
(FOURTH REVISION)

EXPIRATION DATE: August 31, 2006

(FOR RENEWAL, SEE 49 CFR § 107.109)

1. GRANTEE: Autoclave Engineers
Division of Snap-tite, Inc.
Erie, PA
2. PURPOSE AND LIMITATIONS:
 - a. This exemption authorizes the manufacture, mark, sale and use of a non-DOT specification stainless steel cylinder conforming with all regulations applicable to a DOT Specification 3A cylinder, except as specified herein, for the transportation in commerce of the compressed gases listed in paragraph 6 below. 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.
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) and 175.3 in that non-DOT specification cylinders are not authorized, except as specified herein.
5. BASIS: This exemption is based on the application of Autoclave Engineers dated September 2 and 3, 2004, submitted in accordance with § 107.109.

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6. HAZARDOUS MATERIALS (49 CFR § 172.101):

Proper Shipping Name/ Hazardous Materials Description	Hazard Class/ Division	Identi- fication Number	Packing Group
Liquefied or nonliquefied compressed gases, or mixtures of such compressed gases which are authorized in the HMR for transportation in DOT 3A cylinders.	2.1, 2.2, or 2.3, as appropriate	As Appropriate	N/A

7. SAFETY CONTROL MEASURES:

a. PACKAGING - Prescribed packaging is a non-DOT specification stainless steel cylinder made in accordance with Autoclave Engineers Drawings 40A-8828-0, 30A-1354-9, 20B-1626-4, 30B-0598-0, 10B-4602-4 and specifications MS11-064, MS11-053, AES-346, 62633, 62634 on file with the Office of Hazardous Materials Exemptions and Approvals (OHMEA) and in compliance with the general requirements for specification cylinders (§ 178.35) and DOT-3A specification (§ 178.36) except as follows:

§ 178.35(c) *Duties of inspector.*

(1), (2), (3) * * *

(4) In place of the test report required for DOT specification cylinders, a letter was submitted by an independent inspection agency describing the design and construction process. This letter is on file with OHMEA.

§ 178.35(f)(1)(i) *Markings.* In place of the "DOT-3A" specification mark, each cylinder must be marked

"DOT-E 12334" followed by the service pressure in bar.

§ 178.35(g) *Inspector's report.* A report containing the information listed in CGA Pamphlet C-11 is not required.

§ 178.35(h) *Report retention.* Test reports prepared for the cylinders manufactured under this exemption must be retained as long as the cylinders are in use.

§ 178.36(h) *Openings in the cylinders and connections (valves, fuse plug, etc.) for those openings.* The cylinder is closed by inserting a spring into a concentric groove in both the cylinder cap and cylinder shoulder. The groove acts as a straight thread with a pitch of zero. The attached shear strength must be 10 times the test pressure.

§ 178.36(j) *Flattening test.* Not required.

§ 178.36(k) *Physical test.* Physical testing must be performed as required for ASME SA-182 and SA-370 materials. Minimum elongation must be at least 40 percent for a 2 inch gauge length. Test data are on file with OHMEA.

b. TESTING - Each cylinder must be requalified at least every five years in accordance with § 180.205 as prescribed for a DOT-3A cylinder. Cylinders requalified after having been subjected to the action of fire must be reported to Office of Hazardous Materials Exemptions and Approvals (OHMEA) prior to being placed back in service.

c. OPERATIONAL CONTROLS -

(1) Cylinders manufactured under this exemption may not have a water capacity exceeding 600 ml (36.60 in³).

(2) Cylinders may not be filled to a pressure exceeding the marked service pressure of 56.9 bar (825 psi) at 21°C (70°F).

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.

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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 packaging manufactured under the authority of this exemption must be either (1) marked with the name of the manufacturer and location (city and state) of the facility at which it is manufactured, or (2) 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 Division 2.1 (flammable gases) and Division 2.3 materials (gases which are poisonous by inhalation) are not authorized aboard aircraft unless specifically authorized in the Hazardous Materials Table (§ 172.101).

g. The transportation of oxygen by aircraft 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 and cargo aircraft only.
10. MODAL REQUIREMENTS: A current copy of this exemption must be carried aboard each 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:

- o All terms and conditions prescribed in this exemption and the Hazardous Materials Regulations, Parts 171-180.
- o 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.
- 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 also inform the AAHMS, in writing, as soon as practicable of any incidents involving the package and shipments made under this exemption.

Issued in Washington, D.C.:



Robert A. McGuire
Associate Administrator for
Hazardous Materials Safety

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(DATE)

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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 prohibited.

PO: MToughiry/sln