



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

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

**MAR 13 2003**

DOT-E 12187  
(SECOND REVISION)

EXPIRATION DATE: February 28, 2005

(FOR RENEWAL, SEE 49 CFR § 107.109)

1. GRANTEE: Sexton Can Company, Inc.  
Cambridge, MA
2. PURPOSE AND LIMITATIONS:
  - a. This exemption authorizes the manufacture, mark, sale and use of a non-DOT specification cylinder conforming with all regulations applicable to a DOT Specification 39 cylinder, except as specified herein, for the transportation in commerce of the materials authorized by this exemption. 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 §§ 173.304a(a) 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 Sexton Can Company, Inc. dated February 21, 2003, submitted in accordance with § 107.109.

6. HAZARDOUS MATERIALS (49 CFR § 172.101):

Proper Shipping Name/ Hazardous Material Description	Hazard Class/ Division	Identi- fication Number	Packing Group
Compressed gas, n.o.s./ Refrigerant 407C (a ternary blend of HFC-32, HFC-125 and HFC-134a)	2.2	UN1956	N/A
Compressed gas, n.o.s./ Refrigerant 404A (an azeotropic blend of R-125, R-143a, and R- 134a)	2.2	UN1956	N/A

**NOTE:** See paragraph 7.b(3) for commodity pressure limitations.

7. SAFETY CONTROL MEASURES:

a. PACKAGING - Prescribed packaging is a non-DOT specification steel cylinder consisting of a seamless shell with the bottom attached by a mechanical seam. Construction must be in conformance with applicant's drawings numbers 995D0002 Rev. D dated September 3, 1998 and 995D0003 Rev. A dated September 14, 1998 on file with the Office of Hazardous Materials Exemptions and Approvals (OHMEA), and in conformance with the requirements of a DOT Specification 39 cylinder (§§ 178.35 and 178.65) except as follows:

§ 178.35(e) Safety Devices. The pressure relief system consists of a localized area of the bottom designed to fail at a minimum pressure of 357 psig and a maximum pressure of 571 psig. One cylinder must be taken from the beginning of production of each lot and pressurized until the relief system functions. If the system fails to function between 357 and 571 psig the lot represented by the test must be rejected.

§ 178.65(a) Type, size, service pressure and test pressure.

Each cylinder must be made from steel and have a seamless cylindrical body with the bottom attached by means of a circumferential mechanical joint.

(1) Water capacity may not exceed 32.5 cubic inches. Maximum service pressure is 264 psig.

(2) Minimum test pressure is 357 psig.

\* \* \* \* \*

§ 178.65(c) Manufacture.

(1) \* \* \*

(2) \* \* \*

(i) Mechanical joints must have strength equal to or greater than the minimum strength of the shell material in the finished cylinder.

\* \* \* \* \*

§ 178.65(d) Wall thickness.

\* \* \*. Wall thickness less than 0.0085 inch is not authorized.

\* \* \* \* \*

§ 178.65(f) Pressure tests.

(1) Each cylinder must be tested to bring the internal temperature to 130° F or the pressure to 357 psig, whichever is higher.

\* \* \* \* \*

(2)(ii) A failure initiates in a mechanical joint.

\* \* \* \* \*

§ 178.65(i) Markings.

(2) \* \* \*

(i) The cylinder must be marked "DOT-E 12187" instead of "DOT-39".

\* \* \* \* \*

(3) \* \* \*. DOT-E 12817 NRC 264/357 M \* \* \* \*.

b. OPERATIONAL CONTROLS:

(1) Filling density may not exceed 85 percent.

(2) The cylinder must be shipped in strong outside packagings in accordance with § 173.301(a)(9).

(3) The pressure of the lading at 70°F may not exceed 264 psig; and at 130°F, may not exceed 357 psig.

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 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.
9. MODES OF TRANSPORTATION AUTHORIZED: Motor vehicle, rail freight, cargo vessel, and cargo aircraft only.
10. MODAL REQUIREMENTS: A current copy of this exemption must be carried aboard each cargo vessel or 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 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.



*for* Robert A. McGuire  
Associate Administrator  
for Hazardous Materials Safety

**MAR 13 2003**

(DATE)

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.

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