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

JUL 10 2002

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

DOT-E 6974
(SIXTH REVISION)

EXPIRATION DATE: June 30, 2004

(FOR RENEWAL, SEE 49 CFR § 107.109)

1. GRANTEE: Tavco, Inc.
Chatsworth, CA

2. PURPOSE AND LIMITATION:

a. This exemption authorizes the transportation in commerce of oxygen in non-DOT specification cylinders and 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 §§ 173.302(a)(1) and 175.3 in that a non-DOT specification cylinder is not authorized except as specified herein.

5. BASIS: This exemption is based on the application of Tavco, Inc. dated June 20, 2002, submitted in accordance with § 107.109.

6. HAZARDOUS MATERIALS (49 CFR § 172.101):

Proper Shipping Name/ Hazardous Materials Description	Hazard Class/ Division	Identi-fication Number	Packing Group
Oxygen, compressed	2.2	UN1072	N/A

7. SAFETY CONTROL MEASURES:

a. PACKAGING - Prescribed packaging is steel cylinders made in compliance with Tavco Inc., drawing 23111301, Rev. D. or 23111368, and DOT Specification 3E (§§ 178.42 and 178.35), except as follows:

§ 178.42(a) *Type, size and service pressure.*

Welded steel cylinder not over 25 cubic inches water capacity. Longitudinal seams and welded tubing are prohibited. Outside diameter must not exceed 2.56 inches nominal with a service pressure 2,500 psig.

§ 178.42(b) *Steel.* AISI 4130 steel.

§ 178.42(d) *Manufacture.*

* * *

Add:

(1) All seams must be of butt type and fusion welded. Means must be provided for accomplishing complete penetration of the joint.

(2) Radiographic inspection is required on all welded joints subjected to internal pressure. Evidence of any defects likely to seriously weaken the cylinders will be cause for rejection.

§ 178.42(f) *Hydrostatic test.*

* * *

(1) One cylinder from each lot of 200 or less must be hydrostatically tested to destruction. Burst pressure must be at least 7,500 psig.

(2) Does not apply.

(3) Each cylinder must be examined under pressure of at least 4,500 psig and not to exceed 5,000 psig and show no defect.

§ 178.42(g) *Flattening test.*

One cylinder out of each lot of 200 or less to be subjected to a flattening test without cracking to six times wall thickness by placing the cylinder between wedge shaped knife edges having a 60 degree angle rounded to 1/2-inch radius.

§ 178.42(i) *Marking.*

Applies except cylinders must be marked "DOT-E 6974." instead of "DOT-3E"

b. OPERATIONAL CONTROL - Cylinders must be shipped in strong outside packagings in accordance with § 173.301(k).

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. Packages specified herein that were marked "DOT SP 6974" prior to June 30, 1976, may be transported under the terms of this exemption.

d. 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, rail freight and cargo aircraft only.

10. MODAL REQUIREMENTS: A current copy of this exemption must be carried aboard each cargo aircraft used to transport packages covered by this exemption. The shipper must furnish a 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, 49 CFR Parts 171-180.

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- 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: 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.:

JUL 10 2002

Robert A. McGuire
for Associate Administrator for
Hazardous Materials Safety

(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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