

DEC 1 7 2003

# DOT-E 10504 (TENTH REVISION)

EXPIRATION DATE: June 30, 2005

(FOR RENEWAL, SEE 49 CFR § 107.109)

1. GRANTEE: Air Products and Chemicals, Inc. (FORMER GRANTEE: Solkatronic Chemicals, Inc.) Allentown, PA

#### 2. PURPOSE AND LIMITATIONS:

- a. This exemption authorizes the manufacture, mark, sale and use of non-DOT specification, full removable head salvage cylinders of 33 gallon capacity, for over-packaging damaged or leaking packages of pressurized and non-pressurized hazardous materials. 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 §\$ 173.301(f), 173.192, 173.201, 173.202, 173.203, 173.226, 173.227, 173.302a(a) and 173.304a(a)(2) in that non-DOT specification cylinders are not authorized, except as specified herein.
- 5. <u>BASIS</u>: This exemption is based on the application of Air Products and Chemicals, Inc. dated September 19, 2003, submitted in accordance with § 107.105 and public proceeding thereon.

### 6. HAZARDOUS MATERIALS (49 CFR § 172.101):

Proper Shipping Name/ Hazardous Material Description	Hazard Class/ Division	Identi- fication Number	Packing Group
Division 2.1 (except acetylene), 2.2, 2.3, Class 3, 6.1 and 8 materials authorized in DOT Specification cylinders*	2.1, 2.2, 2.3, 3, 6.1 and 8	As appro- priate	As appro- priate

<sup>\*</sup> The specific chemical name or generic commodity description as appropriate.

## 7. <u>SAFETY CONTROL MEASURES</u>:

- a. <u>PACKAGING</u> Prescribed packaging is a non-DOT specification carbon steel, full removable head salvage cylinder of welded construction, with provisions for securely positioning the damaged cylinder contained within. The "salvage" cylinder must be designed, constructed and stamped in accordance with Section VIII of the ASME Code for a maximum allowable working pressure (MAWP) of 1100 psig.
  - (1) "Salvage" cylinders manufactured prior to June 1, 2003 must be in accordance with Fluitron Inc. Drawing D-1552, dated June 26, 1990 and D-1543, dated May 24, 1990 and the following:

Volume	33 gallon water capacity	
Material	SA106 Grade C	
Design stress	Per ASME Code	
Outside diameter	12.75 inches	
Length	78.75 inches	
Sidewall thickness	0.50-inch minimum	
Service pressure (MAWP)	1100 psi	
Test pressure	1680 psi	
Openings sidewall	Four-1/2" NPT for	
•	pressure gauge, and	
	valves	
Openings removable head	None	
Welded attachments	2 - lifting brackets	
Pressure relief devices	None	

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(2) "Salvage" cylinders manufactured after June 1, 2003 must be in accordance with Fluitron Inc. Drawing DC-2818, dated June 3, 2003 and the following:

Volume

Material Design stress Outside diameter Length Sidewall thickness Service pressure (MAWP)

Test pressure Openings sidewall

Openings removable head Welded attachments Pressure relief devices 33 gallon water capacity SA106 Grade C Per ASME Code 12.75 inches 78.75 inches 0.50-inch minimum 1100 psi

1680 psi

Two -3/4" NPT for valves and one 1/4" NPT for pressure

gauge None

2 - lifting brackets

None

- TESTING Each salvage cylinder must be cleaned and purged after each use and must be visually inspected (internally and externally) and hydrostatically retested once every 2 years at a test pressure of at least 1680 psig. The visual inspections must be performed in accordance with the Compressed Gas Association's Pamphlet C-6. The retest and inspection must be made by an employee that is familiar with the salvage cylinder and is trained and experienced in the use of the inspection and testing equipment. Records of retest must be made available to a DOT representative upon request.
- OPERATIONAL CONTROLS Motor vehicle transport is limited to motor vehicles owned or leased by Air Products and Chemicals, Inc. or its customers or vehicles owned or leased to contract carriers employed by Air Products and Chemicals, Inc. or its customers.

#### 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 modification or change is made to the package or its contents 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. Damaged cylinders containing liquefied gases with vapor pressure exceeding 1100 psig at 70° F are not authorized.
- g. Non-liquefied gases in damaged cylinders to be transported must be limited in pressure and volume so that if totally discharged into the salvage cylinder the pressure at 70° will not exceed 1100 psig.
- h. Each salvage cylinder must be plainly marked on the cylinder sidewall, 180° apart, near the middle, in letters at least two (2) inches high on a contrasting background "DOT-E 10504" and the words "SALVAGE CYLINDER".
- i. Each salvage cylinder must be labeled as prescribed for the material in the damaged cylinder.
- j. Each salvage cylinder must be secured to the motor vehicle by a securement system that conforms to the requirements in 49 CFR 393.100 through 393.106.

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- k. Drivers and other persons who load/unload, unload or transport these salvage cylinders must be trained in the handling, loading and unloading of the salvage cylinder. The loaded salvage cylinder must be delivered to the consignor or the consignee as soon as possible.
- 9. MODES OF TRANSPORTATION AUTHORIZED: Motor vehicle or cargo vessel.
- 10. <u>MODAL REQUIREMENTS</u>: A current copy of this exemption must be carried aboard each motor vehicle or cargo vessel used to transport packages covered by this exemption.
- 11. <u>COMPLIANCE</u>: 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 <u>et seq</u>:
  - 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 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 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)

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 <a href="http://hazmat.dot.gov/exemptions">http://hazmat.dot.gov/exemptions</a> Photo reproductions and legible reductions of this exemption are permitted. Any alteration of this exemption is prohibited.

PO: DB