



U.S. Department  
of Transportation

**Research and  
Special Programs  
Administration**

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

**JUN 1 2004**

DOT-E 10110  
(FIFTH REVISION)

EXPIRATION DATE: April 30, 2006

(FOR RENEWAL, SEE 49 CFR § 107.109)

1. GRANTEE: Cylinder Laboratories, Inc.  
Romulus, MI
2. PURPOSE AND LIMITATION:
  - a. This exemption authorizes the use of a non-DOT specification, steel, full opening head, "salvage" cylinder for overpacking damaged or leaking packages of pressurized or 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), 173.201, 173.202, 173.203, 173.302, and 173.304 in that the use of non-DOT specification packages is not authorized, except as specified herein.
5. BASIS: This exemption is based on the application of Cylinder Laboratories, Inc., dated March 9, 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
Those flammable liquids, flammable gases (except acetylene), non-flammable gases, and toxic materials authorized in DOT Specification cylinders	As appropriate	As appropriate	As appropriate

7. SAFETY CONTROL MEASURES:

a. Prescribed packagings are assemblies consisting of a stainless steel (SA 312 Type 304), non-DOT specification, full opening head, "salvage cylinder of welded construction connected to a 60 cubic foot, DOT-3AA2015 steel cylinder to disperse and/or dilute the contents of a damaged or leaking cylinder enclosed with a modular frame. The "salvage" cylinder must be designed, constructed and stamped in accordance with Section VIII, Division I of the ASME Code and must conform with Cylinder Laboratories, Inc.'s sketches and descriptions on file with the Office of Hazardous Materials Exemptions and Approvals (OHMEA) as follows:

	<u>TYPE A</u>	<u>TYPE B</u>
Maximum volume.....	5.7 gallons	3.7 gallons
Material.....	SA 312 Type 304	SA 312 Type 304
Outside diameter, (nom)	5 inches	3 inches
Length, (nom).....	24 inches	24 inches
Sidewall thickness, min.	0.258 inch	0.216 inch
Maximum Allowable working Pressure (MAWP).....	700 psig	300 psig
Test pressure.....	1050 psig	450 psi

Openings, fitted with 3000 psi screwed-on couplings

Sidewall, top.....	0.750 inch	0.750 inch
Sidewall, bottom....	0.250 inch	0.250 inch

b. The ball valve on the piping between the salvage cylinder and the DOT 3AA2015 cylinder must be closed in transportation.

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 is limited to motor vehicles owned or leased by Cylinder Laboratories, Inc. or owned or leased to contract carriers employed by Cylinder Laboratories, Inc.

d. Drivers must have been instructed as to necessary safeguards and proper procedures in the event of unusual delay, fire or accident. The loaded salvage cylinder must be delivered to the consignor or the consignee as soon as practicable. Drivers and other persons who load/unload or transport the salvage cylinder must be trained in handling and loading/unloading the "salvage" cylinder.

e. Each salvage cylinder must be cleaned and purged after each use. Each salvage cylinder must be visually inspected (internally and externally) and hydrostatically tested at 1.5 times MAWP at least once every 2 years. The retest and inspection must be made by an employee who 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.

f. Each assembly must be securely lashed in an upright position to the motor vehicle by a securement system that conforms with the requirements contained in 49 CFR §§ 393.100 through 393.106.

g. Each salvage cylinder must be plainly marked on the cylinder sidewall, 180 degrees apart, in letters at least 2 inches high on a contrasting background "DOT-E 10110" and the words "SALVAGE CYLINDER".

h. Each salvage cylinder must be labeled as prescribed for the material in the damaged or leaking cylinder.

i. Damaged cylinders containing liquefied gases with a vapor pressure exceeding the MAWP of the salvage cylinder at 70°F are not authorized.

j. The 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°F will not exceed the MAWP of the salvage cylinder.

9. MODES OF TRANSPORTATION AUTHORIZED: Motor vehicle.
10. MODAL REQUIREMENTS: A current copy of this exemption must be carried aboard each motor vehicle used to transport packages covered by this exemption.
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 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.

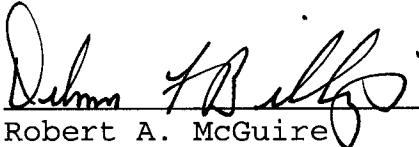
Each "Hazmat employee", as defined in § 171.8, who performs a function subject to this exemption must receive training on the requirements and conditions of this exemption in addition to the training required by §§ 172.700 through 172.704.

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 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*  
  
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Robert A. McGuire  
Associate Administrator for  
Hazardous Materials Safety

**JUN 1 2004**

(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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