U.S. Department
of Transportation

**Research and
Special Programs
Administration**

FEB 26 1998

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

DOT-E 11452
(FIRST REVISION)

EXPIRATION DATE: January 31, 2000

(FOR RENEWAL, SEE 49 CFR SECTION 107.109)

1. GRANTEE: Department of the Army
Military Traffic Management Command (MTMC)
Washington, D.C.

2. PURPOSE AND LIMITATION: This exemption authorizes the transportation in commerce of certain non-DOT specification cylinders containing certain Division 2.2 materials. This exemption provides no relief from any regulation other than as specifically stated herein.

EXEMPTION SCOPE LIMITATIONS: This exemption authorization represents certification of safety for a package when it is an article of commerce in transportation. The safety analyses performed in development of this exemption only considered the hazards and risks associated with transportation in commerce. The safety analyses did not consider the hazards and risks associated with uses not associated with transportation in commerce.

3. REGULATORY SYSTEM AFFECTED: 49 CFR Parts 106, 107 and 171 180.

4. REGULATIONS FROM WHICH EXEMPTED: 49 CFR Sections 173.301(h), 173.302(a)(1), and 175.3 only in that the prescribed cylinder is not listed as an authorized packaging.

5. BASIS: This exemption is based on Department of the Army, MTMC's application dated January 12, 1998, submitted in accordance with 49 CFR 107.109.

6. HAZARDOUS MATERIALS (49 CFR 172.101):

Hazardous materials description/proper shipping name	Hazard Class/ Division	Identification number	Packing Group
Nitrogen, compressed	Division 2.2	UN1066	N/A
Tetrafluoromethane, R14	Division 2.2	UN1982	N/A

7. PACKAGING AND SAFETY CONTROL MEASURES:

a. PACKAGING - Packagings prescribed are non-DOT specification cylinders designed, constructed, and tested in accordance with Military Specification MIL-R-8573. The description of the cylinders is as follows:

(i) Cylinders must be in conformance with Applied Environments Corporation drawing B2-2 on file with the Office of Hazardous Materials Exemptions and Approvals (OHMEA.

(ii) Cylinders are of welded construction, have a volume of not over 2,640 cubic inches, and have a maximum service pressure of 3,000 psig.

(iii) Cylinders are constructed of AISI 4130 sheet per MIL-S-18729 with 160,000 psi minimum tensile strength. The wall thickness must be such that the wall stress at the minimum test pressure shall not exceed 111,790 psi.

(iv) Each circumferential weld must be full penetration and subjected to 100% radiographic inspection.

b. TESTING - Each cylinder must be retested in accordance with 49 CFR 173.34(e) as applicable to DOT 3HT specification cylinders. In addition, either prior to or following the hydrostatic testing, all welds must be examined by either 100 percent x-ray or angle beam untrasonic testing. Indication of the presence of crack(s) or crack-like defects that are 0.75 inch in length or longer will render that cylinder unsuitable for transportation under the authority of this exemption.

8. SPECIAL PROVISIONS:

a. Persons who receive the packages covered by this exemption may reoffer them for transportation provided no modifications or changes are made to the packages, all terms of this exemption are complied with and a current copy of this exemption is maintained at each facility from which such reoffering occurs.

b. Shippers using the packaging covered by this exemption must comply with all provisions of this exemption, and all other applicable requirements contained in 49 CFR Parts 171-180.

c. This exemption does not authorize new construction of the prescribed cylinders for the transportation of hazardous materials in commerce.

d. MARKING - Each cylinder must be marked "DOT-E 11452", followed by the service pressure.

9. MODES OF TRANSPORTATION AUTHORIZED: Motor vehicle, cargo aircraft only.

10. MODAL REQUIREMENTS: A copy of this exemption must be carried aboard each aircraft used to transport packages covered by this exemption. The shipper shall 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 Federal hazardous materials transportation law 49 U.S.C. Section 5101 et seq:

- All terms and conditions prescribed in this exemption and the Hazardous Materials Regulations, 49 CFR Parts 171-180.
- Registration required by 49 CFR 107.601 et seq., when applicable.

Each "Hazmat employee", as defined in 49 CFR 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 49 CFR 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. (49 CFR 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 incidents involving the package and shipments made under the terms of this exemption.

Issued at Washington, D.C.:

for Ann Mazzullo 2/26/98

Alan I. Roberts (DATE)
Associate Administrator
for Hazardous Materials Safety

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.

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The original of this exemption is on file at the above office. Photo reproductions and legible reductions of this exemption are permitted. Any alteration of this exemption is prohibited.

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