



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

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

DEC 4 2003

DOT-E 8307
(EIGHTH REVISION)

EXPIRATION DATE: November 30, 2005

(FOR RENEWAL, SEE 49 CFR § 107.109)

1. GRANTEE: The U.S. Department of Defense (DOD)
Alexandria, Virginia
2. PURPOSE AND LIMITATION:
 - a. This exemption authorizes the transportation in commerce of packages described as non-pyrotechnic smoke generators containing certain Class 8 materials that may have a subsidiary poison inhalation hazard and also may contain nitrogen, compressed gas. 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 § 173.21(e), § 173.227 and § 175.3, except as specified herein.
5. BASIS: This exemption is based on the application of U.S. Department of Defense (DOD) dated November 26, 2003, submitted in accordance with § 107.109.

DEC 4 2003

6. HAZARDOUS MATERIALS (49 CFR 172.101):

Proper Shipping Name/ Hazardous Materials Description	Hazard Class/ Division	Identi- fication Number	Packing Group
Titanium tetrachloride	8	UN1838	II Zone B
<i>Ammonia solutions, relative density between 0.880 and 0.957 at 15 degrees C in water, with more than 10 percent but not more than 35 percent ammonia or Ammonium hydroxide</i>	8	UN2672	III
Nitrogen, compressed	2.2	UN1066	N/A

7. SAFETY CONTROL MEASURES:

a. Packagings prescribed for the non-pyrotechnic smoke generator are non-DOT specification containers complying with the following:

(1) Smoke Generator Drawing R45287; T-63842; S33375 or S36159 on file with the Office of Hazardous Materials Exemptions and Approvals (OHMEA) consisting of 1 DOT 3A 1800 cylinder for the ammonium hydroxide, 1 FM (FM = chemical agent symbol for titanium tetrachloride) tank or DOT 3A 1800 cylinder for the titanium tetrachloride, an empty DOT 3A 1800 cylinder (for nitrogen gas) which contains a small explosive actuating valve. The FM tank complies with the ASME Code with a design pressure of 300 psi. Maximum amount of lading is 1 liter of titanium tetrachloride and, 3 liters of ammonium hydroxide. Explosives content of the actuating valve may not be more than 200 milligrams; and

(2) Smoke Generator Drawing T63807 on file with the OHMEA consisting of 1 DOT 3A 1800 cylinder for

titanium tetrachloride, 1 DOT 3A 1800 cylinder for ammonium hydroxide, and 1 DOT 3AA 3000 cylinder for nitrogen which contains a small explosive actuating valve.

Maximum amount of lading is 285 milliliter for titanium tetrachloride, 855 milliliter for ammonium hydroxide, and 15 cubic inch for nitrogen. Explosive content of the actuating valve may not be more than 45 milligrams. The high pressure tubing from the Eager Pak to the pressure regulator must be disconnected and capped during transportation.

- b. Each cylinder is secured within a metal casing which is overpacked in a strong wooden box.
- c. Optionally any interior container or packaging may be overpacked in a heavy plastic bag, heat sealed and capable of retaining vapors or liquid in the event of leakage of the inner container or packaging.
- d. Cylinders equipped with an explosive actuating valve as described above are determined to be non-explosive.

8. SPECIAL PROVISIONS:

- a. When reused, the DOT specification cylinders must be retested and reinspected as prescribed in § 173.34 before each refill, the FM container must be retested once every 2 years and the explosive valve replaced.
- b. 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 modifications or changes are made to the package and it is reoffered 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.

9. MODES OF TRANSPORTATION AUTHORIZED: Motor vehicle, rail freight, cargo vessel.

10. MODAL REQUIREMENTS: A current copy of this exemption must be carried aboard each cargo vessel or 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 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.:



Robert A. McGuire
Associate Administrator for
Hazardous Materials Safety

DEC 4 2003
(DATE)

DEC 4 2003

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.

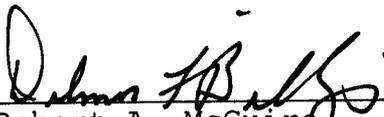
Copies of this exemption may be obtained by accessing the
Hazardous Materials Safety Homepage at
<http://hazmat.dot.gov/exemptions> Photo reproductions and
legible reductions of this exemption are permitted. Any
alteration of this exemption is prohibited.

PO: sdc

SEP 2 1 2004

The following are hereby granted party status to this exemption based on their application(s) submitted in accordance with § 107.107 or § 107.109, as appropriate:

Company Name City/State	Application Date	Issue Date	Expiration Date
Sandia National Laboratories Albuquerque, NM	Feb 17, 2004	Feb 27, 2004	Nov 30, 2005
Honeywell International Inc. Morristown, NJ	Sep 1, 2004	SEP 2 1 2004	Nov 30, 2005

dn


 Robert A. McGuire
 Associate Administrator for
 Hazardous Materials Safety

SEP 2 1 2004

 Date