



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

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

**OCT 16 2003**

DOT-E 10695  
(ELEVENTH REVISION)

**EXPIRATION DATE: September 30, 2005**

(FOR RENEWAL, SEE 49 CFR § 107.109)

1. GRANTEE: 3M Company  
St. Paul, MN

(See Appendix A to this exemption for a list of additional grantees)

2. PURPOSE AND LIMITATION:

a. This exemption authorizes the transportation in commerce of ethylene oxide packaged in aluminum cartridges within a UN4G fiberboard box. For domestic transportation only, this exemption also authorizes packages to be transported with a flammable gas (Division 2.1) label instead of both poison gas (Division 2.3) and flammable gas labels. 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. The safety analyses did not consider the hazards and risks associated with other 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 §§ 172.101, 172.505(a), 173.323, 174.81, 176.84, 177.848 and 172.504 in that the placarding requirements are modified in paragraph 8.d. of this exemption, except as specified herein.
5. BASIS: This exemption is based on the application of 3M Company dated October 1, 2003, submitted in accordance with § 107.109.

6. HAZARDOUS MATERIALS (49 CFR 172.101):

Hazardous Materials Description			
Proper Shipping Name	Hazard Class/ Division	Identification Number	Packing Group
Ethylene oxide	2.3	UN1040	n/a

7. SAFETY CONTROL MEASURES:

a. PACKAGING - Prescribed packaging is an aluminum cartridge that contains no more than 200g (7.05 ounces) of ethylene oxide as described in the application on file with the Office of Hazardous Materials Exemptions and Approvals (OHMEA).

b. TESTING:

(1) As filled, each aluminum cartridge has a burst pressure no less than 1.86 Mpa (270 psig) and 10 times its charged pressure at 21.1°C. (70°F.); and

(2) After filling, is leak tested in a hot water bath at a temperature and for a period sufficient to achieve the vapor pressure of ethylene oxide at 55°C (130°F).

c. OPERATIONAL CONTROLS -

(1) Cartridges containing ethylene oxide are packed in groups of twelve (12) in UN4G fiberboard boxes, marked as meeting Packaging Group I performance requirements, that are fitted with styrofoam units at each end to rigidly hold and separate the cartridges from each other and box sidewalls.

(2) Return shipments must be prepared and offered by a recognized 3M Service Representative, using a 3M designated motor carrier in accordance with the 3M Steri-Gas Cartridge Return Procedures on file with OHMEA.

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

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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. For domestic transportation only, packages need not be labeled Division 2.3 (poison gas) but must be marked "INHALATION HAZARD" in association with the Division 2.1 (flammable gas) label.
  - d. For domestic transportation only, transportation of authorized packages may conform to segregation and placarding requirements for Division 2.1 (flammable gas) materials. Otherwise, transportation of authorized packages must conform to segregation and placarding requirements for Division 2.3 (poison gas) and Division 2.1 (flammable gas) materials. (See §§ 174.81, 176.83, 176.84, 177.848 and 172.504, Table 2).
9. MODES OF TRANSPORTATION AUTHORIZED: Motor vehicle, rail freight and cargo vessel.
10. MODAL REQUIREMENTS: A current copy of this exemption must be carried aboard each cargo vessel and 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. Section 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.:



*fa* 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 <http://hazmat.dot.gov/exemptions> Photo reproductions and legible reductions of this exemption are permitted. Any alternation of this exemption is prohibited.

PO: SS/AM

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
Balchem Corporation Greenpond, SC	10/1/2003	<del>OCT 16 2003</del>	9/30/2005



*fa* Robert A. McGuire  
Associate Administrator for  
Hazardous Materials Safety