



U.S. Department
of Transportation

Research and
Special Programs
Administration

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

SEP 14 2004

DOT-E 970
(TWELFTH REVISION)

EXPIRATION DATE: August 31, 2005

(FOR RENEWAL, SEE 49 CFR § 107.109)

1. GRANTEE: BASF Corporation
Mount Olive, NJ
Former Grantee: Callery Chemical Company

(See Appendix A to this document for a list of additional grantees)
2. PURPOSE AND LIMITATION:
 - a. This exemption authorizes the transportation in commerce of diborane in DOT Specification 3AA cylinders overpacked in certain insulated drums or wooden boxes subject to the limitations and special requirements specified herein. 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 § 173.302a(d) in that a maximum authorized filling density of greater than 7 percent is not authorized, except as specified herein.

5. BASIS: This exemption is based on the application of BASF Corporation dated September 20, 2003, submitted in accordance with § 107.109 and a supplemental letter dated August 23, 2004, submitted in accordance with § 107.105.
6. HAZARDOUS MATERIALS (49 CFR § 172.101):

Hazardous Material Description			
Proper Shipping Name	Hazard Class/ Division	Identification Number	Packing Group
Diborane, compressed	2.3	UN1911	N/A

7. SAFETY CONTROL MEASURES:

- a. PACKAGING - Prescribed packaging is as follows:

(1) DOT Specification 3AA2015 or 3AA2400 cylinders with valves shown in Callery Chemical Company drawings 3233-D, Revision 4, dated July 30, 1996 and 5232 with a filling density of 7% must be overpacked in an insulated drum with dry ice as per Callery Chemical Company's drawing 3252A, or with a filling density of 14% overpacked in an insulated drum or case with dry ice as per Callery Chemical Company's drawings 3410A and 3272A. Drawings are on file with the Office of Hazardous Materials Exemptions and Approvals (OHMEA).

(2) DOT Specification 3AA2400 cylinders (Drawing 3025C) packaged in accordance with details included in Callery Chemical Company's Drawing No. 3219-A or in DOT Specification 3AA2015 and 3AA2400 cylinders packaged in accordance with details included in Callery Chemical Company drawing No. 3272A on file with the OHMEA. Filling density may not exceed 28%. The outside packing case must be constructed of 3/4 inch outdoor plywood or equivalent with metal corners and have a five-inch insulation throughout of polyurethane foam and a plywood or equivalent liner. The outside packing case must be equipped with steel frame centers to hold the cylinder in place and the surrounding area must be filled with dry ice.

3) DOT Specification 3AA2015 or 3AA2400 cylinders with valves installed as per Callery Chemical Company drawings 3233-D, Revision 4, dated July 30, 1996 and 5232, with a filling density of up to 28%, must be overpacked in an insulated drum with dry ice as per Callery Chemical Company's drawing D4061, on file with the OHMEA. The area surrounding the cylinder inside the outer packaging must be filled with dry ice.

(4) Cylinders authorized under this exemption may be overpacked non-DOT specification metal drums, insulated, and filled with dry ice for refrigeration purposes. Insulated metal drums containing dry ice must have perforated top heads to allow venting of carbon dioxide. All drums used as overpacks, purchased after March 1, 1998, must meet the performance requirements for UN 1A2 steel drums for PG I solids (See § 178.504 and §§ 178.601-608) prior to installation of the insulation. If the drums are marked as a UN1A2 drums prior to modification by installation of insulation and perforation of the top head, the markings must be obliterated prior to use.

(5) The cylinders authorized under this exemption must comply with the requirements prescribed in § 173.40, except paragraph (d). The cylinders must be equipped with a single valve or the double valve arrangement detailed in Callery Chemical Company drawing No. 3233D, Revision 4, dated July 30, 1996 on file with OHMEA.

(6) Where this exemption prescribes the use of outside shipping containers designed for inclusion of dry ice, sufficient dry ice must be packed therein to provide refrigeration for a period of at least 14 days. Normal time in transportation must not exceed 10 (ten) days.

(7) Cylinders containing residual diborane must be kept in the outer packaging packed with sufficient amounts of dry ice to provide adequate refrigeration for a period of at least 14 days. The shipper then must notify BASF Corporation in Evan's City, PA in writing via telegram or Facsimile (FAX) at (724) 538-1266 of the intent to return the above cylinders and must obtain confirmation from BASF of the shipment due date.

b. TESTING - Each cylinder must be reinspected and hydrostatically retested every five years in accordance with § 180.205, prescribed for DOT 3AA Specification cylinders as applicable.

c. OPERATIONAL CONTROLS:

(1) The shipper must require acknowledgment of receipt of shipment in writing by means of a telegram or Facsimile (FAX), and must promptly notify the OHMEA of any such shipment not received at destination within two days after shipment is due.

(2) Drivers must have been instructed as to necessary safeguards and proper procedure in event of unusual delay, fire, or accident.

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. MARKING - In addition to the POISON GAS label and the FLAMMABLE GAS label, each outside shipping container must bear a conspicuous label reading as follows: "IF NOT DELIVERED BEFORE _____, CARRIER MUST ADVISE THE (Name of Shipper, City and State), ALSO THE OFFICE OF HAZARDOUS MATERIALS SAFETY, WASHINGTON, D.C., BY FAX 202-366-3308." The date inserted in the blank space on this label must not be in excess of the number of days prescribed herein for each type of packaging, from the date shipment is first offered for transportation.

9. MODES OF TRANSPORTATION AUTHORIZED: Motor vehicle and rail freight.

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., where 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
Robert A. McGuire
Associate Administrator for
Hazardous Materials Safety

SEP 14 2004

(DATE)

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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.

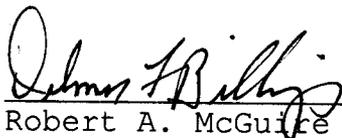
Copies of this exemption may be obtained by accessing the Hazardous Materials Safety Homepage at <http://hazmat.dot.gov/exemptions> Photo reproductions and legible reductions of this exemption are permitted. Any alteration of this exemption is prohibited.

PO: BD/RRP/alb

OCT 19 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
Air Products and Chemicals, Inc. Allentown, PA	Oct 5, 2004	OCT 19 2004	Aug 31, 2005
U.S. Department of Defense Fort Eutis, VA	Sep 30, 2003	Oct 03, 2003	Aug 31, 2005
Voltaix, Inc. North Branch, NJ	Sep 16, 2003	Sep 25, 2003	Aug 31, 2005



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Robert A. McGuire
Associate Administrator for
Hazardous Materials Safety