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

400 Seventh St., S.W.
Washington, D.C. 20590
APR 20 2001

DOT-E 9525
(EIGHTH REVISION)

EXPIRATION DATE: August 31, 2002

(FOR RENEWAL, SEE 49 CFR § 107.109)

1. GRANTEE: Air Products & Chemicals, Inc.
Allentown, PA

(See Appendix A of this exemption for additional grantees)

2. PURPOSE AND LIMITATION: This exemption authorizes the transportation in commerce of a non-DOT specification welded stainless steel cylinder conforming in part with the DOT 3E Specification cylinder used for the transportation of certain Class 3 and Division 4.2, 4.3 or 6.1 materials. This exemption provides no relief from any regulation other than as specifically stated herein.

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

4. REGULATIONS FROM WHICH EXEMPTED: 49 CFR §§ 173.181, 173.187, 173.201, 173.202, 173.211, 173.212, 173.213, 173.226 and 173.227.

5. BASIS: This exemption is based on the application of Air Products & Chemicals, Incorporated dated September 12,2000, submitted in accordance with § 107.109, and an additional letter dated February 26, 2001.

6. HAZARDOUS MATERIALS (49 CFR § 172.101): See Appendix B of this exemption.

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7. PACKAGING AND SAFETY CONTROL MEASURES: Packaging prescribed is a stainless steel cylinder conforming with Ewal Manufacturing Co. drawing 99AC-112-01 and DOT 3E (§ 178.42) Specification, except as follows:

§ 178.42(a) Type, size and service pressure.

Cylinder must conform with Ewal Manufacturing Co. drawing 99AC-112-01. The shell must be seamless with one end butt welded in a circumferential plane on a manifold block. Maximum water capacity is 37 cubic inches nominal. Maximum diameter is 2.0 inches.

§ 178.42(b) Steel.

Material must be ASTM 240 Type 316 or equivalent stainless steel.

§ 178.42(d) Manufacture.

(1) By best appliances and methods; dirt and scale to be removed as necessary to afford proper inspection; no defect acceptable that is likely to weaken the finished cylinder appreciably; reasonably smooth and uniform finish required.

(2) Welding or brazing is prohibited except for attachment of the seamless shell to the manifold block by butt-welding in a circumferential plane using a welding process most suitable for the material and joint design.

(3) Heat treatment is not required if starting material or a prototype cylinder is subjected to the testing requirements of ASTM A262-70 procedure for "Detecting suspectibility to intergranular attack in stainless steels."

(4) One cylinder from each lot of 50 cylinders or less must be subjected to radiographic examination of the weld. Acceptability of inspection must conform to the standards set forth in CGA Pamphlet C-3. If the test cylinder shows any unacceptable weld, each cylinder of the lot represented by the test cylinder must be 100% radiographed.

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§ 178.42(g) Leakage test.

(1) Does not apply. Instead, each cylinder attached to the manifold block must be pressure tested to 3000 psig with nitrogen for at least one minute followed by a helium leak test at 30 psig for at least 3 minutes.

§ 178.42(i), § 178.35(f)(1)(i) Marking.

"DOT-E 9525 1800" in lieu of "DOT 3E-1800."

§ 178.35(g) Inspector's report.

The inspector's report must be appropriately modified to reflect conformance with this exemption.

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 modifications or changes are made to the package 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. Each cylinder must be shipped in a strong outside packaging conforming with § 173.301(k) and as proposed in the application.

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

10. MODAL REQUIREMENTS: A current copy of this exemption must be carried aboard each cargo vessel or aircraft used to transport packages covered by this exemption. The shipper must furnish a current 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 the Federal hazardous materials transportation law, 49 U.S.C. 5101 et seq:

- 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 incidents involving the package and shipments made under the terms of this exemption.

Issued in Washington, D.C.:

Suzanne Hedgepeth

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.

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.

Copies of exemptions may be obtained from the AAHMS, U.S. Department of Transportation, 400 7th Street, SW, Washington, DC 20590-0001, Attention: Records Center, 202-36605046.

PO: AM

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APPENDIX A

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 |
|---|---|---|---|
| Epichem, Inc. Haverhill, MA | 9/28/2000 | 10/24/2000 | 8/31/2002 |

J. Suzanne Hedgepeth

Robert A. McGuire
Associate Administrator for
Hazardous Materials Safety

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APPENDIX B

| Hazardous materials description -- proper shipping name | Hazard Class/ Division | Identi-fication Number | Packing Group |
|---|---|---|---|
| Aluminum alkyls | 4.2 | UN3051 | I |
| Aluminum alkyl hydrides | 4.2 | UN3076 | I |
| Carbon tetrachloride | 6.1 | UN1846 | II |
| Diethylzinc | 4.2 | UN1366 | I |
| Dimethylzinc | 4.2 | UN1370 | I |
| Flammable liquids, toxic, n.o.s. (Tetramethyltin) | 3 | UN1992 | I |
| Flammable liquids, toxic, n.o.s. (telluride, and selenide compounds) | 3 | UN1992 | II |
| Flammable liquids, toxic, n.o.s. (Tetraethyltin) | 3 | UN1992 | III |
| Pyrophoric solid, organic n.o.s. Bis(cyclopentadienyl)magnesium and Bis(methylcylopentadienyl) magnesium | 4.2 | UN2846 | I |
| Metal alkyls, water-reactive, n.o.s. (Tertiarybutylphosphine) | 4.2 | UN2003 | I (Zone B) |
| Organoarsenic compound, n.o.s. (arsine compounds) | 6.1 | UN3280 | I |
| Organometallic compound, solution, water reactive, flammable, n.o.s. (Dimethylzinc-Triethylamine adduct or Trimethylindium N,N-Dimethyldodecylamine) | 4.3 | UN3207 | I |
| Pyrophoric liquid, organic, n.o.s. (Dimethylethylamine-alane) | 4.2 | UN2845 | I |
| Pyrophoric solids, organic, n.o.s. (Trimethylamine Alane) | 4.2 | UN2846 | I |
| Tetraethyl silicate | 3 | UN1292 | III |

| Hazardous materials description -- proper shipping name | Hazard Class/ Division | Identi-fication Number | Packing Group |
|---|---|---|---|
| Toxic liquid, organic, n.o.s. *Inhalation hazard* (Tertiarybutylarsine) | 6.1 | UN2810 | I (Zone A) |
| Toxic liquid, organic, n.o.s. *Inhalation hazard4* (Dimethylgold-acetylacetonate, or Dimethylgold Hexafluoroacetyl Acetonate) | 6.1 | UN2810 | I |
| Toxic solid, flammable, organic, n.o.s. (Dimethylgold-trifluoro-acetyl acetonate, or Bis(cyclopentadienyl) Iron) | 6.1 | UN2930 | I |
| Water-reactive liquid, toxic, n.o.s. (Tri(dimethylamino)phosphorus, Tri(dimethylamino)antimony, or Tris dimethylamino arsenic) | 4.3 | UN3130 | I |