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

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

DOT-E 9978

MAY 27 1988

1. Air Products and Chemicals, Inc. (Air Products), Allentown, Pennsylvania, is hereby granted an emergency exemption from certain provisions of this Department's Hazardous Materials Regulations to offer for transportation packages prescribed herein of the hazardous materials described in paragraph 3 below in commerce, subject to the limitations and special requirements specified herein. This exemption authorizes one time shipment of certain hazardous materials in non-DOT specification steel seamless cylinders meeting Japanese standards, and provides no relief from any regulation other than as specifically stated.

2. BASIS. This exemption is based on Air Products' application dated April 14 1988, submitted in accordance with 49 CFR 107.103 and 107.113 based on a serious economic loss and supporting letter from Motorola, Incorporated dated May 11, 1988.

3. HAZARDOUS MATERIALS (Descriptor and class). Anhydrous ammonia, Chlorine and Dichlorosilane classed as poison gases (IMO); Hexafluoroethane classed as a nonflammable gas.

4. PROPER SHIPPING NAME (49 CFR 172.101). The specific chemical name or generic description as appropriate.

5. REGULATIONS AFFECTED. 49 CFR 172.101, 173.3a, 173.304(a), 173.119(m).

6. MODES OF TRANSPORTATION AUTHORIZED. Motor vehicle, cargo vessel.

7. SAFETY CONTROL MEASURES. Packagings authorized are ten (10) non-DOT specification seamless, steel cylinders designed and constructed in accordance with the Japanese national standard for high pressure cylinders and conforming with the following:

a.

Product	Cylinder Size LITERS	Test Pressure (PSIG)	Service Pressure (PSIG)
Ammonia	47.5	3555	2133
Ammonia	10.3	3555	2133
Chlorine	10.4	3555	2133
Hexafluoroethane	10.4	3555	2133
Dichlorosilane	41.1	426	256

b. Each cylinder must be equipped with valves conforming with all DOT requirements.

c. Each cylinder used for the transportation of dichlorosilane must be marked "INHALATION HAZARD" near the required poison gas label and conform with the requirements contained in 49 CFR 173.327(a) through (e).

8. SPECIAL PROVISIONS.

a. A copy of this exemption must be carried aboard each motor vehicle and cargo vessel used to transport packages covered by this exemption.

b. Drivers must have been instructed as to necessary safeguards and proper procedures in the event of unusual delay, fire or accident.

c. The following additional requirements apply to the transportation of dichlorosilane:

1. This exemption serves as a special packaging approval under the provisions of 49 CFR 173.3a(a)(3).

2. May only be transported by motor vehicle and cargo vessel.

3. For highway transportation, each motor carrier used to transport packagings authorized under this exemption must have a safety rating, as assigned by the Office of Motor Carrier Safety Field Operations (OMCSFO), Federal Highway Administration, of "Satisfactory".

4. For water transportation, the packagings must be stowed "on deck" only, as far from crew's quarters, other normally manned spaces and air intakes as reasonably practical.

5. In addition to the requirements of 49 CFR 171.15 and 171.16, the Exemptions Branch, Office of Hazardous Materials Transportation (OHMT) must be notified of any incident involving damage to the packaging or loss of contents of material shipped under this exemption.

6. The Exemptions Branch, OHMT shall be advised of the causes and any remedial action taken, as a result of thee incident as soon as practical after its occurrence.

7. The Exemptions Branch, OHMT must be advised within 30 days after the expiration of this exemption of the shipping experience of material covered by this exemption.

9. REPORTING REQUIREMENTS. Any incident involving loss of contents of the package or damage to the packaging must be reported to the OHMT as soon as practicable.

10. EXPIRATION DATE. July 31, 1988 or upon completion of shipment of the 10 cylinders.

Issued at Washington, D.C.:

MAY 27 1988

(DATE)

Alan I. Roberts
Director
Office of Hazardous Materials
Transportation

Address all inquiries to: Director, Office of Hazardous Materials Transportation, Research and Special Programs Administration, U.S. Department of Transportation, Washington, D.C. 20590.
Attention: Exemptions Branch.

Dist: FHWA, USCG