

April 26, 2006



U.S. Department  
of Transportation

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

**Pipeline and  
Hazardous Materials  
Safety Administration**

DOT-SP 12753  
(SECOND REVISION)

(FOR RENEWAL, SEE 49 CFR § 107.109)

1. GRANTEE: (See individual authorization letter)
2. PURPOSE AND LIMITATION:
  - a. This special permit authorizes the transportation in commerce of dichlorosilane in certain DOT specification seamless steel cylinder that have a water capacity exceeding 1000 pounds. This special permit provides no relief from any Hazardous Materials Regulation (HMR) other than as specifically stated herein.
  - b. The safety analyses performed in development of this special permit only considered the hazards and risks associated with transportation in commerce. The safety analyses did not consider the hazards and risks associated with consumer use or other uses not associated with transportation in commerce.
  - c. Unless otherwise stated herein, this special permit consists of the special permit authorization letter issued to the grantee together with this document.
3. REGULATORY SYSTEM AFFECTED: 49 CFR Parts 106, 107 and 171-180.
4. REGULATIONS FROM WHICH EXEMPTED: 49 CFR § 173.304a(a) in that a DOT specification having a water capacity greater than 1,000 pounds is not authorized, except as specified herein.
5. BASIS: This special permit is based on the application of Praxair dated March 30, 2006 submitted in accordance with § 107.109.

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6. HAZARDOUS MATERIALS (49 CFR § 172.101):

| Hazardous Material Description |                           |                       |                    |
|--------------------------------|---------------------------|-----------------------|--------------------|
| Proper Shipping Name           | Hazard Class/<br>Division | Identification Number | Packing Group      |
| Dichlorosilane                 | 2.3                       | UN2189                | N/A, Hazard Zone B |

7. SAFETY CONTROL MEASURES:

a. PACKAGING -Prescribed packaging is a DOT Specification 3AX or 3AAX cylinder with a minimum service pressure of 2400 psig. Cylinders are not fitted with pressure relief devices.

(1) The cylinders (tubes) must be mounted to and shipped in an ISO frame.

(2) Manifolding of cylinders is not authorized. Each cylinder must be equipped with an individual shutoff valve that is closed during transit. Valves must meet all requirement of § 173.40.

b. TESTING - Each cylinder must be retested and inspected as specified in § 180.205 for DOT Specifications 3AX and 3AAX cylinders.

c. OPERATIONAL CONTROLS -

(1) Maximum permitted filling density of dichlorosilane is calculated to meet the following conditions:

(i) Maximum permitted filling density is 95 percent. (**Note:** Filling density is defined as the percent ratio of the weight of the gas in a cylinder to the weight of the water that the cylinder will hold at 16°C (60°F).)

(ii) The pressure in the cylinder may not exceed 95 percent of the cylinders test pressure at 65°C (149°F).

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(iii) Maximum tolerance of the scale must be +/- 0.5%.

(iv) Prior to the first shipment, Praxair will take a minimum of one representative cylinder for the purposes of pressure/temperature monitoring test. The representative cylinder must be selected from the cylinder population that are filled and completed for shipment. The representative cylinder must have the same fill density as the rest of the population. The temperature of the gas in each selected cylinder will be uniformly raised while the pressure is being recorded every 5°C or 10°F until the gas temperature has reached 65°C (149°F). The data collected shall be summarized and presented to the OHMSPA prior to renewal of the special permit.

(2) Emergency response information provided with the shipment and available via an emergency response telephone number must indicate that the cylinders are not fitted with pressure relief devices and provide appropriate guidance for exposure to fire.

8. SPECIAL PROVISIONS:

a. A person who is not a holder of this special permit who receives a package covered by this special permit may reoffer it for transportation provided no modification or change is made to the cylinder or its content and it is reoffered for transportation in conformance with this special permit and the HMR.

b. A current copy of this special permit must be maintained at each facility where the package is offered or reoffered for transportation.

c. Each cylinder must be plainly and durably marked "DOT-SP 12753" as specified in §§ 172.302(b) and (c).

d. Packages permanently marked 'DOT-E 12753', prior to October 1, 2007 may continue to be used under this special permit for the remaining service life the package or until the special permit is no longer valid. Packages marked on or after October 1, 2007 must be marked 'DOT-SP 12753'.

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- e. Shipping papers displaying 'DOT-E 12753' may continue to be used until October 1, 2007, provided the special permit remains valid.
9. MODES OF TRANSPORTATION AUTHORIZED: Motor vehicle.
10. MODAL REQUIREMENTS: A current copy of this special permit must be carried aboard each motor vehicle used to transport packages covered by this special permit.
11. COMPLIANCE: Failure by a person to comply with any of the following may result in suspension or revocation of this special permit 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 special permit and the Hazardous Materials Regulations, 49 CFR Parts 171-180.
  - o Persons operating under the terms of this special permit 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., when applicable.

Each "Hazmat employee", as defined in § 171.8, who performs a function subject to this special permit must receive training on the requirements and conditions of this special permit in addition to the training required by §§ 172.700 through 172.704.

No person may use or apply this special permit, including display of its number, when this special permit has expired or is otherwise no longer in effect.

Under Title VII of the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU)- 'The Hazardous Materials Safety and Security Reauthorization Act of 2005' (Pub. L. 109-59), 119 Stat. 1144 (August 10, 2005), amended the Federal hazardous materials transportation law by changing the term 'exemption' to 'special permit' and authorizes a special permit to be granted up to two years for new special permits and up to four years for renewals.

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12. REPORTING REQUIREMENTS: Shipments or operations conducted under this special permit are subject to the Hazardous Materials Incident Reporting requirements specified in 49 CFR §§ 171.15 - Immediate notice of certain hazardous materials incidents, and 171.16 - Detailed hazardous materials incident reports. In addition, the grantee(s) of this special permit must notify the Associate Administrator for Hazardous Materials Safety, in writing, of any incident involving a package, shipment or operation conducted under terms of this special permit.

Issued in Washington, D.C.:



for Robert A. McGuire  
Associate Administrator  
for Hazardous Materials Safety

Address all inquiries to: Associate Administrator for Hazardous Materials Safety, Pipeline and Hazardous Materials Safety Administration, Department of Transportation, Washington, D.C. 20590. Attention: PHH-31.

Copies of this special permit may be obtained by accessing the Hazardous Materials Safety Homepage at [http://hazmat.dot.gov/sp\\_app/special\\_permits/spec\\_perm\\_index.htm](http://hazmat.dot.gov/sp_app/special_permits/spec_perm_index.htm) Photo reproductions and legible reductions of this special permit are permitted. Any alteration of this special permit is prohibited.

PO: MMT/kah