



U.S. Department
of Transportation

**Pipeline and Hazardous
Materials Safety
Administration**

July 05, 2024

1200 New Jersey Avenue, SE
Washington, DC 20590

DOT-SP 16046
(THIRD REVISION)

EXPIRATION DATE:2028-06-30

(FOR RENEWAL, SEE 49 CFR 107.109)

1. GRANTEE: DuPont Electronic Materials International, LLC
North Andover, MA
2. PURPOSE AND LIMITATION:
 - a. This special permit authorizes the transportation in commerce of a damaged DOT-4B specification cylinder containing Division 4.2 or 4.3 materials in a salvage cylinder (vessel). This special permit provides no relief from the Hazardous Materials Regulations (HMR) other than as specifically stated herein. The most recent revision supersedes all previous revisions.
 - b. The safety analyses performed in the development of this special permit only considered the hazards and risks associated with the transportation in commerce.
 - c. No party status will be granted to this special permit.
3. REGULATORY SYSTEM AFFECTED: 49 CFR Parts 106, 107 and 171-180.
4. REGULATIONS FROM WHICH EXEMPTED: 49 CFR § 173.3(d) in that transportation of Class 4 materials in salvage cylinders is authorized and the design margin of the salvage cylinder is 3.5 to 1 rather than 4 to 1, and certain Division 6.1 materials are authorized, as provided herein.

Tracking Number: 2024064077

5. BASIS: This special permit is based on the application of DuPont Electronic Materials International, LLC dated June 4, 2024, and 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
Trichlorosilane	4.3	UN1295	I
Water reactive liquid, corrosive, n.o.s.	4.3	UN3129	I, II, III
Water reactive solid, corrosive, n.o.s.	4.3	UN3131	I, II, III
Pyrophoric liquid, inorganic, n.o.s.	4.2	UN3194	I
Organometallic substance, liquid, pyrophoric	4.2	UN3392	I
Organometallic substance, liquid, pyrophoric, water-reactive	4.2	UN3394	I
Organometallic substance, liquid, water-reactive	4.3	UN3398	I
Organometallic substance, liquid, water-reactive, flammable	4.3	UN3399	I, II, III

Hazardous Materials Description			
Proper Shipping Name	Hazard Class/ Division	Identification Number	Packing Group
Organometallic substance, solid, pyrophoric	4.2	UN3391	I
Organometallic substance, solid, pyrophoric, water-reactive	4.2	UN3393	I
Organometallic substance, solid, self-heating	4.2	UN3400	II, III
Organometallic substance, solid, water-reactive	4.3	UN3395	I, II, III
Organometallic substance, solid, water-reactive, flammable	4.3	UN3396	I, II, III
Organometallic substance, solid, water-reactive, self-heating	4.3	UN3397	I, II, III
Organometallic compound, toxic n.o.s.	6.1	UN3282	I, II, III
Organometallic compound, toxic, solid, n.o.s.	6.1	UN3467	I, II, III

7. SAFETY CONTROL MEASURES:

a. PACKAGING: Prescribed packaging is a stainless steel DOT-4B cylinder with a maximum water volume of 5 Liters that is overpacked in a welded stainless steel salvage cylinder described as an Emergency Response Containment Vessel (ERCV). The DOT-4B cylinder must meet all requirements of § 178.50 and is transported at a pressure that is less than atmospheric pressure. The ERCV has a Maximum Allowable Working Pressure (MAWP) of 50 psig and meets all requirements of § 173.3 except that the vessel has a design margin of 3.5. The salvage vessel has a maximum water volume of 7.8 Liters and is charged to a maximum pressure of 3 psig with an inert gas. The salvage vessel must be designed in accordance with the specifications and drawings on file with the Office of Hazardous Materials Safety.

b. OPERATIONAL CONTROLS:

- (1) The ERCV must be loaded and unloaded in an oxygen free environment.
- (2) Prior to shipment the Viton O-ring seals must be inspected for damage or excessive wear and replaced if necessary.

- (3) After sealing, the ERCV must be evacuated of air and then pressurized with an inert gas. An electronic gas detector must then be used to check for leaks.
- (4) The ERCV must be overpacked in a sturdy wooden crate or metal drum whose interior is cushioned with foam or vermiculite.
- (5) The overpack that is used to contain the ERCV must have orientation markings clearly displayed, in accordance with § 173.312.

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 package 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.

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

10. MODAL REQUIREMENTS: A current copy of this special permit must be carried aboard each cargo vessel or 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.

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 William Schoonover
Associate Administrator for Hazardous Materials Safety

Address all inquiries to: Associate Administrator for Hazardous Materials Safety, Pipeline and Hazardous Material Safety Administration, U.S. Department of Transportation, East Building PHH-13, 1200 New Jersey Avenue, Southeast, Washington, D.C. 20590.

Copies of this special permit may be obtained by accessing the Hazardous Materials Safety Homepage at <https://www.phmsa.dot.gov/approvals-and-permits/hazmat/special-permits-search>. Photo reproductions and legible reductions of this special permit are permitted. Any alteration of this special permit is prohibited.

PO: BrMoore/Casey Chambers