



U.S. Department
of Transportation

**Pipeline and Hazardous
Materials Safety
Administration**

April 03, 2025

1200 New Jersey Avenue, SE
Washington, DC 20590

DOT-SP 16377
(THIRD REVISION)

EXPIRATION DATE:2029-03-31

(FOR RENEWAL, SEE 49 CFR § 107.109)

1. GRANTEE: BASF Corporation
Florham Park, NJ
2. PURPOSE AND LIMITATION:
 - a. This special permit authorizes the transportation in commerce of certain non-DOT specification spherical pressure vessels containing boron trifluoride. 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 §§ 173.315(a)(1) and 173.315(a)(2) in that non-DOT specification packagings are not authorized, except as specified herein.
5. BASIS: This special permit is based on the application of BASF Corporation dated January 21, 2025, submitted in accordance with § 107.109.

Tracking Number: 2025014947

6. HAZARDOUS MATERIALS (49 CFR 172.101):

Hazardous Materials Description			
Proper Shipping Name	Hazard Class/ Division	Identification Number	Packing Group
Boron trifluoride	2.3	UN1008	N/A (Hazard Zone B)

7. SAFETY CONTROL MEASURES:

- a. PACKAGING: Packaging prescribed is a non-DOT specification spherical pressure vessel designed, constructed, inspected and tested in accordance with EN14208:2004 and EN13445:2009 standards and conforming to CHEMET S.A. Drawing# 0-1521-01 Rev 7 and Type Approval and Conformity Certificates on file with the Office of Hazardous Materials Safety. Each pressure vessel is permanently mounted on a steel pallet with forklift pockets and has the following design characteristics:

Design Code	EN 14208:2004; and EN 13445:2009
Material of Construction	Carbon alloy steel P355NL2, EN 10028-3:2009 (similar: ASTM A516 Gr70)
Water Capacity	600 liters (158.5 gallons)
Outside Diameter	1,120 mm (44 inches)
Minimum Wall Thickness	35 mm (1.378 inch)
Working Pressure	200 bar (2,900 psig)
Test Pressure	300 bar (4,351 psig)
Corrosion Allowance	1.5 mm (0.059")

b. OPERATIONAL CONTROLS:

- (1) Each pressure vessel shall be equipped with a special pneumatic valve for improved safety by allowing closing or opening of the valve from a distance. During transportation, each valve discharge outlet must be sealed by a leak-proof threaded cap or a threaded plug.
- (2) Each valve assembly must be equipped with a securely attached protective steel cap to protect valves from damage during transportation.
- (3) Two alternative filling limits are authorized as follows:
 - (i) 325 kg (716.5 pounds); or
 - (ii) 500 kg (1,102 pounds), if refrigerated to maintain a lading temperature of 15 °C (59 °F) or below.

In either case, the minimum outage requirements specified in § 173.24b shall be satisfied.

- (4) Emergency response information provided with the shipment and available via an emergency response telephone number must indicate that the packaging is not fitted with pressure relief devices and provide appropriate guidance in case of exposure to fire.

c. REQUALIFICATION:

- (1) At least once every 5 years each pressure vessel must be externally and internally visually inspected and hydrostatically tested at test pressure (300 bar) in accordance with the EN 14876:2007-04 standard, *Transportable gas cylinders - Periodic inspection and testing of welded steel pressure drums*.
- (2) Following successful completion of the above inspection and testing, the inspector must prepare a written record of testing, and durably mark the packaging with the month and year of the test and inspection along with the inspector's identifying symbol/mark.

- d. MARKING: Each packaging must be plainly and durably marked "DOT-SP 16377".

8. SPECIAL PROVISIONS:

- a. Under the terms of this special permit, the grantee may only offer hazardous materials (i.e., the grantee is not authorized as a carrier).

- b. 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.
 - c. 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, rail freight and cargo vessel.
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: Casey Chambers