

December 11, 2013



U.S. Department
of Transportation

East Building, PHH-30
1200 New Jersey Avenue S.E.
Washington, D.C. 20590

**Pipeline and Hazardous
Materials Safety Administration**

DOT-SP 13359
(FOURTH REVISION)

EXPIRATION DATE: November 30, 2017

(FOR RENEWAL, SEE 49 CFR § 107.109)

1. GRANTEE: BASF Corporation
Mt. Olive, New Jersey
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.
 - b. The safety analyses performed in development of this special permit only considered the hazards and risks associated with 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 §§ 173.301(f)(6) and 173.302a in that a non-DOT specification spherical pressure vessel without a pressure relief device is not authorized, except as specified herein.
5. BASIS: This special permit is based on the application of BASF Corporation dated November 12, 2013, 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 |
| Boron trifluoride | 2.3 | UN1008 | N/A |

7. SAFETY CONTROL MEASURES:a. PACKAGING -

(1) Packagings prescribed are 205 non-DOT spherical pressure vessels made by CITERGAZ SA, designated as Model C11S000D and conforming to CITERGAZ SA Drawing 110006 dated 8-7-97 on file with the Office of Hazardous Materials Special Permits and Approvals (OHMSPA). Each pressure vessel is sequentially numbered with an owner's serial number in the range of 88 - 292. New construction is not authorized.

(2) Each pressure vessel is designed and constructed in accordance with ASME Code Section VIII, Division 1, but is not "U" stamped.

(3) Each pressure vessel conforms to the following design data:

| | |
|---------------------|----------------------------|
| Shell Material | Carbon steel alloy P355NL2 |
| Water capacity | 600 liters (160 gallons) |
| Outside Diameter | 1111 mm |
| Wall thickness | 33 mm |
| Design pressure | 150 bar (2175 psig) |
| Bottom openings | Prohibited |
| Corrosion allowance | 0.0 mm |

(4) Each pressure vessel is permanently mounted on a steel pallet with forklift pockets.

b. TESTING -

(1) Prior to first use under the terms of this special permit and every three years thereafter:

(i) Each pressure vessel must be hydrostatically tested at 300 bar (4350 psig) using: the direct expansion method specified in the Compressed Gas Association (CGA) Pamphlet C-1; the direct expansion method provided in Annex F (Volumetric expansion testing of gas cylinders) to European Standard EN 1968:2002 - the non-water jacket volumetric expansion test; or another direct expansion method approved by the Associate Administration for Hazardous Materials Safety. Permanent volumetric expansion may not be greater than 10% of the total volumetric expansion at test pressure.

(ii) A Brinell Hardness Test must be performed on each pressure vessel at 2 locations 180° opposite each other. Test locations may not be on the circumferential weld, but must be within 10 cm (4 inches) of the weld. The Brinell Hardness Number must not exceed 240.

(2) In addition, each pressure vessel must be given an external and internal examination, wall thickness measurement and leakage test in accordance with the CITERGAZ SA procedures on file with OHMSPA every three years.

c. OPERATIONAL CONTROLS -

(1) During transport each vessel must have the discharge outlet valve sealed with a leakproof, threaded cap, and a protective steel cover closed over the valve assembly.

(2) Two alternative filling limits are authorized as follows:

(i) 325 kg (716.5 pounds), or

(ii) 500 kg (1102 pounds), if refrigerated to maintain a lading temperature of 15°C (59°F) or below.

(3) Emergency response information provided with the shipment and available via an emergency response telephone number must indicate that the receptacles are not fitted with pressure relief devices and provide appropriate guidance in case receptacles are exposed 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 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.

c. Each pressure vessel must be plainly and durably marked on opposing side near the middle , in letters and numerals at least 5 cm (2 inches) high on a contrasting background, "DOT-SP 13359".

9. MODES OF TRANSPORTATION AUTHORIZED: Motor vehicle, rail freight or 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 Dr. Magdy El-Sibaie
Associate Administrator for Hazardous Materials Safety

Address all inquiries to: Associate Administrator for Hazardous Materials Safety, Research and Special Programs 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
Photo reproductions and legible reductions of this special permit are permitted. Any alteration of this special permit is prohibited.

PO: MT:dl