

November 27, 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 11598
(ELEVENTH REVISION)

EXPIRATION DATE: October 31, 2017

(FOR RENEWAL, SEE 49 CFR § 107.109)

1. GRANTEE: Metalcraft, Inc.
Baltimore, MD
2. PURPOSE AND LIMITATIONS:
 - a. This special permit authorizes the manufacture, marking, sale and use of DOT Specification cylinders equipped with pressure relief device systems other than as prescribed to be used for the transportation in commerce of certain Division 2.2 materials. 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 development of this special permit only considered the hazards and risks associated with transportation in commerce.
3. REGULATORY SYSTEM AFFECTED: 49 CFR Parts 106, 107 and 171-180.
4. REGULATIONS FROM WHICH EXEMPTED: 49 CFR § 173.301(f), and § 173.304a(a)(2) in that DOT Specification cylinders with pressure relief devices other than as prescribed are not authorized, except as specified herein.
5. BASIS: This special permit is based on the application of Metalcraft Inc. dated January 28, 2010, submitted in accordance with § 107.105 and the public proceeding thereon and additional information dated April 15, April 22, and May 10, 2010.

6. HAZARDOUS MATERIALS (49 CFR § 172.101):

Hazardous Materials Description			
Proper Shipping Name	Hazard Class/ Division	Identification Number	Packing Group
Bromotrifluoromethane or Refrigerant gas, R 13B1	2.2	UN1009	N/A
1-Chloro-1,2,2,2-tetrafluoroethane or Refrigerant gas R 124	2.2	UN1021	N/A
Heptafluoropropane or Refrigerant gas R 227	2.2	UN3296	N/A
Compressed gas, n.o.s.	2.2	UN1956	N/A

7. SAFETY CONTROL MEASURES:

- a. PACKAGING - Prescribed packagings are DOT Specification 39, 3AL1000, 4B360, and 4BW360 cylinders equipped with a pressure relief system in accordance with Metalcraft, Inc.'s drawings and specifications on file with the Office of Hazardous Materials Special Permits and Approvals (OHMSPA). The pressure relief system is actuated by a fusible link or a heat actuated glass bulb. The pressure relief system must function: (a) at a temperature no greater than 212°F; and (b) at a pressure no greater than 80 percent of the cylinder's minimum burst pressure. Each cylinder must meet the following criteria:

Cylinder	Service Pressure (psig)	Minimum Test Pressure (psig)	Minimum burst pressure (psig)	Maximum relief pressure (psig)
DOT 3AL	1000	1666	3000	2,400
DOT 39	500	625	1250	1,000

November 27, 2013

Cylinder	Service Pressure (psig)	Minimum Test Pressure (psig)	Minimum burst pressure (psig)	Maximum relief pressure (psig)
DOT 4B	360	720	1440	1,150
DOT 4BW	360	720	1440	1,150

- b. TESTING - Each cylinder must be tested as required in the specification under which it is manufactured and each DOT Specification 3AL, 4B and 4BW cylinder must be retested as specified in § 180.205(c).
- c. OPERATIONAL CONTROLS -
- (1) The maximum permitted filling density is 70 pounds/cubic foot for Bromotrifluoromethane and 72 pounds/cubic foot for Heptafluoropropane. The maximum charge pressure may not exceed that specified in §173.301(a) (8).
 - (2) Bromotrifluoromethane may not be transported in DOT 4B or 4BW cylinders. Only DOT Specification 39 and 3AL cylinders prescribed in Paragraph 7.a. of this special permit are authorized.

8. SPECIAL PROVISIONS:

- a. In accordance with the provisions of Paragraph (b) of § 173.22a, persons may use the packaging authorized by this special permit for the transportation of the hazardous materials specified in paragraph 6, only in conformance with the terms of this special permit.
- b. A person who is not a holder of this special permit, but 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 offered for transportation in conformance with this special permit and the HMR.

- c. Each packaging manufactured under the authority of this special permit must be either marked with a registration symbol designated by the Office of Hazardous Materials Special Permits and Approvals for a specific manufacturing facility.
- d. A current copy of this special permit must be maintained at each facility where the package is offered or reoffered for transportation.
- e. A current copy of this special permit must be maintained at each facility where the package is manufactured under this special permit. It must be made available to a DOT representative upon request.
- f. MARKING - Each cylinder must be plainly and durably marked DOT-SP "11598".
9. MODES OF TRANSPORTATION AUTHORIZED: Motor vehicle, cargo vessel, cargo aircraft only and passenger-carrying aircraft.
10. MODAL REQUIREMENTS: A current copy of this special permit must be carried aboard each cargo vessel and aircraft used to transport packages covered by this special permit. The shipper must furnish a current copy of this special permit to the air carrier before or at the time the shipment is tendered.
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, 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 the 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, 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

Photo reproductions and legible reductions of this special permit are permitted. Any alteration of this special permit is prohibited.

PO: cwf/sln