

August 01, 2018



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 11383
(TENTH 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 certain hazardous materials in non-DOT specification stainless steel cylinders conforming to all regulations applicable to DOT Specification 4BW, except as specified herein. 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. 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 § 173.40(a), 173.158(b), (g), and (h), § 173.192(a), and § 173.336 in that a non-DOT specification cylinder is not authorized, except as specified herein; § 173.40(c) in that deviation from the prescribed closures is not authorized, except as specified herein.

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5. BASIS: This special permit is based on the application of NASA dated June 20, 2018, 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
Nitric oxide and dinitrogen tetroxide mixtures (MON-1 through MON-10)	2.3	UN1975	N/A, Hazard Zone A
Dinitrogen tetroxide, liquefied	2.3	UN1067	N/A, Hazard Zone A
Nitric acid <i>other than red fuming, with more than 70 percent nitric acid</i>	8	UN2031	I
Nitric acid <i>other than red fuming, with not more than 70 percent nitric acid</i>	8	UN2031	II

7. SAFETY CONTROL MEASURES:

a. PACKAGING: Prescribed packagings are non-DOT specification 5 and 30 gallon stainless steel cylinders constructed in conformance with NASA Kennedy Space Center procurement Specification 81K05262 and with DOT Specification 4BW ('' 178.35 and 178.61) except as follows:

§ 178.35(b) *Inspection and analyses*

Inspections and verifications must be performed by a third party. The third party inspector must either be a National Board Authorized Inspector or an independent inspection agency approved in writing by the Associate Administrator for Hazardous Materials Safety, in accordance with § 107.803.

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§ 178.35(e) *Safety devices*

Cylinders may not be equipped with safety relief devices. Cylinders must be equipped with a detachable protective housing for the loading and unloading valves.

§ 178.35(f) *Markings*

Applies except each cylinder must be marked with "DOT-SP 11383" instead of "DOT-4BW".

§ 178.61(b) *Authorized steel*

Material of construction must be SA240 type 304L or type 316L stainless steel.

§ 178.61(d) *Manufacture*

* * *

(1) * * *

(2) Circumferential seam welds must be full penetration butt welds with full 100% radiograph inspection.

§ 178.61(g) *Heat treatment*

Cylinders need not be heat treated.

§ 178.61(i) *Hydrostatic test*

* * *

(1), (2), (3), and (4) * * *

(5) The first finished cylinder out of each lot of 500 or less successively produced must be hydrostatically tested to 4 times the service pressure without bursting.

§ 178.61(j) *Physical tests*

(1) Specimens must be taken from the first cylinder from each lot of 500 or less, as follows:

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b. TESTING:

(1) Cylinders must be inspected and tested as required in NASA Kennedy Space Center procurement specification 81K05262.

(2) Cylinders must be retested in accordance with the requirements of § 180.209(c) applicable to DOT 4BW cylinders.

c. OPERATIONAL CONTROLS: The transport pressure must be limited to 50 psig.

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 or its contents 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 packaging must be in conformance with ' 173.40 except as follows:

§ 173.40(c)(1) - Connections must be straight threads with controlled root radius straight threads (thread form symbol UNJ) in accordance with Military Specification MIL-S-8879. Female ports must be UNJ straight threads and must meet Military Standard MS33649. The sealing gasket must be polytetrafluoroethylene preformed packing per Military Standard MS9956. Preformed packing must be deformed in assembly only once; reassembly requires a new preformed packing.

§ 173.40(c)(2) - Valves must be quarter-turn ball valves with secondary stem containment stem seals of a NASA approved design. Prior to filling, or at a minimum frequency of once a year, a bubble leak check must be performed on all mechanical joints at a minimum of 200 psig. Prior to cylinder refill, or at a five-year frequency, whichever is greater, valves must have all softgood materials (such as seats, packing, and o-

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rings) replaced, cleaned, and leak-tested at rated pressure at all joints and across the seat.

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 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 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

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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 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: CHHOCHMAN/kah