

January 26, 2016



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 15873
(FIRST REVISION)

EXPIRATION DATE: December 31, 2019

(FOR RENEWAL, SEE 49 CFR § 107.109)

1. GRANTEE: JiangXi Oxygen Plant Co., Ltd.
Jiangxi Province, China

US AGENT: Chlorine Service Company
Kingwood, TX

2. PURPOSE AND LIMITATIONS:

a. This special permit authorizes the manufacture, mark, sale and use of UN portable tanks conforming to portable tank code T50 that have been designed, constructed and stamped in accordance with Section VIII, Division 2 of the ASME Code for the transportation in commerce of Division 2.1 and 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. The safety analyses did not consider the hazards and risks associated with consumer use, use as a component of a transport vehicle or other device, or other uses not associated with transportation in commerce.

3. REGULATORY SYSTEM AFFECTED: 49 CFR Parts 106, 107 and 171-180.
4. REGULATIONS FROM WHICH EXEMPTED: 49 CFR §§ 178.274(b) and 178.276(b)(1) in that alternative packaging is authorized.

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5. BASIS: This special permit is based on the application of JiangXi Oxygen Plant Co., Ltd. dated December 3, 2015, and submitted in accordance with § 107.109.
6. HAZARDOUS MATERIALS (49 CFR § 172.101):

Hazardous Material Description			
Proper Shipping Name	Hazard Class/ Division	Identification Number	Packing Group
Division 2.1 and 2.2 materials authorized for UN portable tanks (see PORTABLE TANK CODE T50).	2.1 or 2.2	As appropriate	N/A

7. SAFETY CONTROL MEASURES:

Packagings prescribed are UN portable tanks conforming to the requirements of § 172.102(c)(7) PORTABLE TANK CODE T50 which are designed, constructed, certified and stamped "U2" in accordance with Section VIII, Division 2 of the ASME Code, including all applicable ASME Code Cases with a design margin of 3.0:1. Each portable tank must be constructed in accordance with the manufacturer's drawings, specifications and calculations on file with the Office of Hazardous Materials Safety Approvals and Permits Division (OHMSAPD) and in accordance with the following requirements:

- (1) Code: Tanks must conform to all the requirements for UN portable tanks in §§ 178.274 and 178.276 and with PORTABLE TANK CODE T50 in all respects except for the design code and design reference temperature. This special permit authorizes the use of Section VIII, Div. 2 of the ASME Code as the design code.
- (2) Design pressure: The design pressure must be not less than the vapor pressure of the lading, including any gas padding, at a design reference temperature of 46.1 °C (115 °F).
- (3) Material: P460NL1 or any permitted by Section VIII, Div. 2 or by Code Case.

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(4) Tank capacity and pressure: The following range of designs is authorized:

Design pressure (see Note 1)	232 psig (16 bar) min.; 500 psig (34.45 bar) max.
Water capacity	4490 USWG (17,000 liters) min.; 6551 USWG (24,800 liters) max.

Note 1: The design pressure means the "Maximum Allowable Working Pressure" as used in the ASME Code.

(5) Maximum Gross Weight: 34,000 kg (74,957 lbs.).

(6) Design Temperature Range: -40/55 °C (-40/131 °F).

(7) G-Loadings: Vertical down - 2; Vertical up - 2;
Longitudinal - 2; Transverse - 2.

(8) Insulation: None. However, each tank must be provided with a sunshield.

(9) Baffles: 2 Baffles if capacity is less than 22,500 L (5,943 US Gallons) or 3 Baffles if capacity is greater than 22,500 liters (5,943 US Gallons).

(10) External Design Pressure: Full vacuum.

(11) Test Pressure: 1.3 times design pressure at 55 °C.

(12) Service equipment*: Liquid line: internal stop/excess flow valve** + external ball valve + blind flange with 3¼" screwed ACME cap;

Vapor line: internal stop/excess flow valve** + external ball valve + blind flange with 1¾" screwed ACME cap; Pressure gauge: 0 - 60 bar pressure gauge with isolation valve; and

Temperature gauge: - 60 to 100 °C gauge with no connection to pressure.

* all service equipment located within valve cabinet at rear of tank.

** internal valve machined with shear section and

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operated with remote cable tripped mechanically and thermally.

(13) NDE: 100% RT of all butt welds, MT or PT all fillet welds.

(14) Pressure Relief Device: Fort Vale 006***5 3" flanged pressure relief valve set at 110% design pressure at 46.1 °C preceded by an (optional) rupture disc.

b. TESTING -

(1) Hydrostatic test certificates for each tank must be maintained by the owner and made available upon request to any representative of DOT.

(2) A test report documenting a satisfactory ISO prototype test for each tank design must be on file with OHMSAPD prior to the first shipment to persons using the packagings.

(3) Each tank must be inspected, tested, and repaired as specified in § 180.605 for UN portable tanks.

c. OPERATIONAL CONTROLS -

(1) The pressure produced by the lading and any gas padding at 46.1 °C (115 °F) may not exceed the design pressure of the portable tank.

(2) Each portable tank must be filled by weight.

(3) Each tank must be visually inspected prior to shipment to ensure that it has not been damaged during loading. Any unsafe condition must be corrected prior to the tank's use.

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

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receives a packaging covered by this special permit, may reoffer it for transportation provided no modification or change is made to the packaging and it is offered 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.

d. Each packaging manufactured under the authority of this special permit must be either (1) marked with the name of the manufacturer and location (city and state) of the facility at which it is manufactured or (2) marked with a registration symbol designated by the Office of Hazardous Materials Special Permits and Approvals for a specific manufacturing facility.

e. A current copy of this special permit must be maintained at each facility where the packaging is manufactured under this special permit. It must be made available to a DOT representative upon request.

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.

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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, Pipeline and Hazardous Material Safety Administration, U.S. Department of Transportation, East Building PHH-30, 1200 New Jersey Avenue, Southeast, Washington, D.C. 20590.

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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: LAVALLE