



U.S. Department  
of Transportation

**Pipeline and Hazardous  
Materials Safety  
Administration**

**November 18, 2024**

1200 New Jersey Avenue, SE  
Washington, DC 20590

DOT-SP 21788

**EXPIRATION DATE: 2026-10-31**

(FOR RENEWAL, SEE 49 CFR 107.109)

1. GRANTEE: Zhejiang Dongcheng Printing Industry Co., Ltd.  
Quzhou, Zhejiang, China

US AGENT: Theodore A. Parker  
Wapole, MA

2. PURPOSE AND LIMITATIONS:

a. This special permit authorizes the manufacture, mark, sale, and use of a non-DOT specification non-refillable inside metal container conforming with all regulations applicable to a DOT specification 2P inside container, except as specified herein, for the transportation in commerce of the hazardous materials authorized by this special permit. 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.

c. In accordance with 49 CFR 107.107(a), party status may not be granted to a manufacturing special permit. These packagings may be used in accordance with 49 CFR 173.22a.

3. REGULATORY SYSTEM AFFECTED: 49 CFR Parts 106, 107 and 171-180.

Tracking Number: 2024055384

4. REGULATIONS FROM WHICH EXEMPTED: 49 CFR §§ 173.304a(a)(1) and 173.304a(d) in that a non-DOT specification non-refillable inside container is authorized, the maximum charging pressure is exceeded, and the maximum volume is exceeded, as provided herein.
5. BASIS: This special permit is based on the application of Zhejiang Dongcheng Printing Industry Co., Ltd. dated May 20, 2024, submitted in accordance with § 107.105 and the public proceeding thereon.
6. HAZARDOUS MATERIALS (49 CFR 172.101):

| Hazardous Material Description   |                        |                       |               |
|--|------------------------|-----------------------|---------------|
| Proper Shipping Name   | Hazard Class/ Division | Identification Number | Packing Group |
| Butane   | 2.1                    | UN1011                | N/A           |
| Isobutane  | 2.1                    | UN1969                | N/A           |
| Petroleum gases, liquefied <i>or</i> Liquefied petroleum gas                         | 2.1                    | UN1075                | N/A           |
| Gas cartridges, ( <i>flammable</i> ) <i>without a release device, non-refillable</i> | 2.1                    | UN2037                | N/A           |

7. SAFETY CONTROL MEASURES:

- a. PACKAGING: Prescribed packaging is a non-DOT specification, non-refillable inside metal container having a water capacity not exceeding 61.0 cubic inches (1 L) conforming to Zhejiang Dongcheng Printing Co., LTD drawings numbers ZJDC-CP-MP110-01, ZJDC-CP-MP230-01, ZJDC-CP-MP450-02, and ZJDC-CP-MP450-01, on file with the Office of Hazardous Materials Safety and meeting all DOT Specification 2P requirements specified in § 178.33, except as follows:

§ 178.33-2 Type and Size.

(a) \* \* \*

(b)

- (1) For containers conforming to drawing number ZJDC-CP-MP110-01, the maximum capacity shall not exceed 0.25 liters (15.26 cubic inches). The maximum inside diameter shall not exceed 86 millimeters (3.39 inches).
- (2) For containers conforming to drawing number ZJDC-CP-MP230-01, the maximum capacity shall not exceed 0.5 liters (30.51 cubic inches). The maximum inside diameter shall not exceed 106 millimeters (4.17 inches).
- (3) For containers conforming to drawing number ZJDC-CP-MP450-02, the maximum capacity shall not exceed 1.0 liters (61.02 cubic inches). The maximum inside diameter shall not exceed 120 millimeters (4.72 inches).
- (4) For containers conforming to drawing number ZJDC-CP-MP145-01, the maximum capacity shall not exceed 1.0 liters (61.02 cubic inches). The maximum inside diameter shall not exceed 106 millimeters (4.17 inches).

§ 178.33-7 Wall thickness.

- (a) The minimum wall thickness of the body must be 0.33 mm (0.013 inch). The minimum thickness of the bottom shall be 0.60 mm (0.024 inch).

§ 178.33-8 Tests.

- (a) Each 2,500 containers or fewer, successively produced in a day shall constitute a lot. These containers shall be complete with ends assembled. All containers constituting a lot shall be of like material, size, design, construction, finish, and quality.
- (b) Five containers out of each lot shall be pressure tested to destruction. The containers shall be complete with the ends assembled. The minimum burst pressure shall not be less than 255 psig.
- (c) If any of the test containers in a lot fail the pressure test, that lot must be rejected, or ten additional containers, selected at random may be subjected to the pressure test. Should any of the ten test containers fail the test, the entire lot must be rejected.

§ 178.33-9 Marking.

(a) \* \* \*

(1) Containers shall be marked “DOT-SP 21788” in lieu of “DOT 2P”.

(2) \* \* \*

b. TESTING: Prior to shipment, each completed container must be heated until the pressure in the container is equivalent to the equilibrium pressure of the lading at 130 °F. Lading equilibrium pressure may not exceed 51 psig at 70 °F and 138 psig at 130 °F. Acceptable containers shall show no evidence of leakage, distortion, or other defect.

c. OPERATIONAL CONTROLS: Each packaging must be prepared and shipped in accordance with the following:

(1) The container must be packed in strong wooden or fiber boxes of such design as to protect the valves from damage or accidental functioning under conditions normally incident to transportation.

(2) Each outside packaging must be marked “INSIDE CONTAINERS COMPLY WITH DOT-SP 21788”.

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 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 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 Safety 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.
  - f. Transportation of Division 2.1 hazardous materials (flammable gases) are not authorized board cargo vessel unless specifically authorized in the Hazardous Materials Table (§ 172.201).
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 Materials 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: BM