



U.S. Department  
of Transportation

**Pipeline and Hazardous  
Materials Safety  
Administration**

**November 13, 2023**

1200 New Jersey Avenue, SE  
Washington, DC 20590

DOT-SP 20673  
(SECOND REVISION)

**EXPIRATION DATE: 2027-09-30**

(FOR RENEWAL, SEE 49 CFR 107.109)

1. GRANTEE: Airopack International B.V.  
Waalwijk, The Netherlands

US AGENT: ShipMate, Inc.  
Sisters, OR

2. PURPOSE AND LIMITATIONS:

a. This special permit authorizes the manufacture, mark, sale, and use of non-DOT specification inside plastic containers conforming with all regulations applicable to a DOT specification 2S inside plastic nonrefillable receptacle, except as specified herein, for the transportation in commerce of the hazardous materials authorized by this special permit. The containers have been tested by an alternative to the hot water bath test. 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: 2023075315

4. REGULATIONS FROM WHICH EXEMPTED: 49 CFR § 173.306(a)(5)(vi) in that each container must be subjected to a test performed in a hot water bath, and § 178.33b in that the container must be manufactured to the requirements except as specified herein.
5. BASIS: This special permit is based on the application of Airopack International B.V. dated July 12, 2023, 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
Air, compressed	2.2	UN1002	N/A
Aerosols, non-flammable, ( <i>each not exceeding 1 L capacity</i> )	2.2	UN1950	N/A
Consumer commodity*	9	ID8000	N/A

\* Only hazardous materials permitted to be transported aboard a passenger-carrying aircraft by column (9A) of the Hazardous Materials Table in § 172.101 are authorized for transport aboard passenger-carrying aircraft; only hazardous materials permitted to be transported aboard a cargo aircraft by column (9B) of the Hazardous Materials Table in § 172.101 are authorized for transport aboard cargo-only aircraft.

7. SAFETY CONTROL MEASURES:

a. PACKAGING:

(1) Inner packaging: The prescribed packagings are non-specification polyethylene terephthalate (PET) nonrefillable inside containers that meets the requirements of the DOT 2S plastic container specification (§ 178.33b) except as described herein:

- (i) Each inside container must not exceed 200 ml (6.76 oz.) in capacity.

(ii) Each container consists of three chambers or reservoirs: the filling volume (FV) reservoir, the pressure unit (PU) and the piston reservoir (P). The PU is separated from the piston reservoir by a pressure control device (PCD).

(iii) The FV is loaded with a non-hazardous content (e.g., liquid, paste, powder, gel, or cream) above the piston in the container and shall not completely fill the container at 130 °F (54.4 °C). The PCD and lower PU are laser-welded to the container and filled through a natural butyl rubber Nicolson valve located on the bottom of the container.

(iv) The PU shall not exceed 80.2 ml (2.71 oz.) of water capacity. The maximum charge pressure in the PU shall not exceed  $8.2 \pm 0.1$  bar ( $120 \pm 1.5$  psig) at 23 °C (73 °F) or  $160 \pm 0.1$  bar at 130 °F.

(v) The containers shall conform to drawings number 4037-4000 Rev. C, Dated October 14, 2015; 4037-3900 Rev. A, dated September 30, 2015; 4037-4100 Rev. A, dated November 26, 2015; 4037-3700 Rev. D, dated July 31, 2015; 4037-3500 Rev. E, dated April 24, 2015; or 4037-1600 Rev. I, dated July 1, 2015, on file with the Office of Hazardous Materials Safety.

(2) Outer packaging: The containers shall be packaged in a strong outer packaging capable of meeting the Packing Group II performance level not exceeding 30 kg (66 lbs.) per package.

b. TESTING:

(1) Design qualification tests: Each design produced shall be successfully drop tested in accordance with § 178.33b-7 except that packaged cartons containing no more than 24 filled containers shall be dropped at a height in accordance with the Packing Group II performance level.

(2) Production tests and inspections: In lieu of § 178.33b-8, testing must be performed as follows:

(i) The welded areas on each container shall be checked with a pyrometer system during the laser weld cycle. Any container with a weld surface or material defect that results in an abnormal peak or trough in the pyrometer signal shall be rejected.

(ii) The PCD on each container produced shall be tested for functionality in line. Any container with a non-functioning PCD shall be rejected.

(iii) For each lot of 150,000 containers produced, 30 randomly selected containers (or one out of each 5,000 containers or less) must be pressure tested to destruction (at normal room temperature conditions) as specified in the requirements of the European Aerosols Federation (FEA) standard X8-647 E, European Aerosol Council Directive 75/324/EEC, and British Standards Specification BS 5597:1991. If any should burst at less than 1.75 times the static charge pressure, the entire lot shall be rejected.

(iv) For each lot of 150,000 containers produced, leakage tests shall be performed on samples selected in accordance with ISO2859-1:1999 at an Acceptance Quality Level (AQL) of 0.065 for leakage defects.

(v) Each container produced shall be subjected to a visual camera inspection of the critical sealing areas and O-rings during the assembly process to ensure proper installation. Any container failing the inspection shall be rejected.

(3) In-line tests during container filling:

(i) Each container produced shall be subjected to a visual camera inspection of the valve crimps to ensure proper installation. Any container failing the inspection shall be rejected.

(ii) Each container produced shall be subjected to a weight check after filling. Any container that falls outside of weight tolerance shall be rejected.

(iii) The pressure in each container shall be checked after filling. Any container with a pressure more than 0.1 bar outside its set pressure shall be rejected.

(iv) One container per hour of production shall be randomly selected and the static charge pressure measured. If the pressure in the sample exceeds 8.3 bar (120.38 psig), the entire lot shall be rejected.

(v) From each lot 2000 containers produced, no fewer than two shall be randomly selected and subjected to a hot water bath at 55 °C (131 °F) and checked for leakage. If any container ruptures or shows signs of leakage, the entire lot shall be rejected.

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. MARKING: Each container must be plainly and durably marked “DOT-SP 20673”. Additionally, each outside packaging must be marked “INSIDE CONTAINERS MUST COMPLY WITH DOT-SP 20673”.

g. Filled containers authorized under this special permit may be transported as limited quantities in accordance with § 173.306(i).

h. Containers filled with a hazardous material meeting the definition of a “consumer commodity” as defined in § 171.8 may be renamed “consumer commodity.” The filled containers must be shipped in accordance with § 173.167.

9. MODES OF TRANSPORTATION AUTHORIZED: Motor vehicle, cargo vessel, rail freight, cargo-only aircraft, passenger-carrying aircraft.

10. MODAL REQUIREMENTS: A current copy of this special permit must be carried aboard each cargo vessel, aircraft or motor vehicle used to transport packages covered by this special permit. The shipper must furnish a 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, 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: Jephthah Nti