



U.S. Department
of Transportation

**Pipeline and Hazardous
Materials Safety
Administration**

October 24, 2023

1200 New Jersey Avenue, SE
Washington, DC 20590

DOT-SP 21233
(FIRST REVISION)

EXPIRATION DATE: 2027-09-30

(FOR RENEWAL, SEE 49 CFR 107.109)

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

US AGENT: ShipMate, Inc.
Sisters, OR

2. PURPOSE AND LIMITATIONS:

a. This special permit authorizes the manufacture, mark, sale and use of DOT specification 2S inner receptacles that use recycled plastic material rather than production residues or regrind from the same manufacturing process for the transportation in commerce of the materials authorized by this special permit. This special permit provides no relief from the Hazardous Materials Regulations (HMR) or the International Civil Aviation Organization's Technical Instructions for the Safe Transport of Dangerous Goods by Air (ICAO TI) 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 permit. These packagings may be used in accordance with 49 CFR 173.22a.

d. This special permit serves as an "exemption" as defined in 1;3.1.1 of the ICAO TI and as a "Competent Authority Approval" as defined under 49 CFR § 107.1.

Tracking Number: 2023074127

3. REGULATORY SYSTEM AFFECTED: 49 CFR Parts 106, 107 and 171- 180 and the ICAO TI.
4. REGULATIONS FROM WHICH EXEMPTED: 49 CFR § 178.33b-6(a) and 6;3.2.8.1.1 of the ICAO TI in that DOT specification 2S inner receptacles are authorized to be constructed with recycled plastic materials.
5. BASIS: This special permit is based on the application of Airopack International B.V. dated July 6, 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
Aerosols, <i>non-flammable, (each not exceeding 1 L capacity)</i>	2.2	UN1950	N/A
Consumer commodity	9	ID8000	N/A

7. SAFETY CONTROL MEASURES:

a. PACKAGING:

- (1) Prescribed packagings are DOT specification 2S plastic inner receptacles meeting the requirements of 49 CFR 178.33b, except that the receptacles are authorized to be manufactured using recycled materials.
- (2) Prescribed packagings shall conform to the drawings and specifications described in the application dated April 29, 2021. Packagings shall not have a brim-fill volume exceeding 213.0 ml.
- (3) Each receptacle's pressure unit (PU) must have a maximum volume of not more than 80.2 ml.
- (4) Each receptacle's pressure unit (PU) must be charged to not more than 120 psig.

- (5) The maximum pressure in each receptacle's pressure unit (PU) must not exceed 160 psig at 130 °F (54.4 °C).
 - (6) The contents within the receptacle's Filling Volume (FV) reservoir must not completely fill the container at 130 °F (54.4 °C).
 - (7) Each receptacle must be packed in a strong outside packaging that is capable of meeting the Packing Group II performance level.
- b. **TESTING:** In addition to the testing required in 49 CFR 178.33b, 25 containers must withstand a packaging qualification hot air test at 65 °C (149 °F) for a minimum of 5 hours, without rupture, in accordance with European Aerosols Federation (FEA) Standards FEA X8-647E, -647F, and -647D and Plastic Aerosol Research Group, LLC Method No. PARG-15.0 as described in Airopack B.V.'s application dated April 29, 2021 and on file with the Office of Hazardous Materials Safety (OHMS). Any receptacle that ruptures will cause the entire lot to be rejected.
- c. **QUALITY ASSURANCE PROGRAM:** Airopack B.V. must employ a quality assurance program for evaluating and controlling recycled plastic material used in the manufacture of non-refillable plastic inner receptacles, as follows:
- (1) **Sorting and cleaning of used plastic material and identification of resins:** Only resins which have been prepared and evaluated under Airopack B.V.'s quality assurance program and determined to be suitable for use may be used in non-refillable plastic inner receptacles manufacture. All recycled materials selected for use must be cleaned in a manner that removed all residue from the prior lading.
 - (2) **Batching:** For purposed of this approval, a batch of resin from recycled material is not more than 250,000 pounds of resin that has been sorted and selected as detailed in Airopack B.V.'s quality assurance program and is identified with regard to:
 - (i) Source of the recycled material (e.g. plastics packagings, etc.) and description of the sorting process.
 - (ii) Previous lading of recycled containers, including identification of hazardous materials, if applicable.
 - (iii) Results of the plastic receptacles specifications set forth below.
 - (3) **Rejection of unsuitable material:** Airopack B.V. may not use a resin from recycled material which:

- (i) Is made from containers which previously contained a Division 6.1 material;
 - (ii) Does not conform to the resin specifications set forth below; and
 - (iii) Is otherwise determined to be unsuitable under Airopack B.V.'s quality assurance program.
- (4) Resin specifications:
- (i) Airopack B.V. shall verify that each batch of recycled plastics material has the proper melt flow rate and density consistent with that of the design type manufactured from such recycled material. This evaluation shall be conducted in accordance with the following standards:
 - (A) Melt flow rate – ASTM D-1238, Standard Test Method for Flow Rate of Thermoplastics by Extrusion Plastometer.
 - (B) Density – ASTM D-1505, Standard Test Method for Density of Plastics by Density-Gradient Technique; or ASTM D-792, Standard Test Method for Density and Specific Gravity (Relative Density) of Plastics by Displacement.
 - (ii) Each batch of resin must demonstrate:
 - (A) A melt index (HMLI), when tested in accordance with ASTM D-1238 within the ranges specified in the standard for polyethylene terephthalate (PET), high density polyethylene (HDPE), impact modified polyester blend (LPV), polypropylene (PP), and polyoxymethylene (POM)/Acetal.
 - (B) A density, when tested in accordance with either ASTM D-1505 or D-792, within the ranges specified for the applicable plastics
 - (C) Each batch must be accompanied by a Certificate of Conformity in accordance with Article 16 of Regulation EC/1935/2004.
- (5) Manufacture of receptacles using recycled material:
- (i) Performance testing. Performance testing must be conducted in accordance with § 178.33b-7 at least every 30 days.

(ii) Marking. In addition to the marking requirements of § 178.33b-9, each receptacle shall be marked in a permanent manner (e.g. embossed) in a lettering size conforming to § 178.3(a) with the following:

(A) The statement “Not for food or drink”, unless otherwise authorized by a Federal governmental agency; and

(B) The letters “REC”, which indicate the receptacle is manufactured from recycled material.

(C) The special permit number “DOT-SP 21233” as required by § 172.301(c).

d. Documentation and record retention: Airopack B.V. shall maintain for as long as a receptacle is produced and for two years thereafter, and make available upon request by DOT representatives at the manufacturing facility, the following information:

(1) A copy of Airopack B.V.’s quality assurance program.

(2) For each resin used in the manufacture of a receptacle:

(i) The source of the recycled material (e.g. drums, aerosol containers, etc.) and description of the sorting process.

(ii) Previous lading of recycled containers, including identification of hazardous materials, if applicable.

(iii) Results of the resin specifications set forth in paragraph 7.c.(4)(i) above.

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

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