



U.S. Department
of Transportation

**Pipeline and Hazardous
Materials Safety
Administration**

April 22, 2022

1200 New Jersey Avenue, SE
Washington, DC 20590

DOT-SP 21310
(SECOND REVISION)

EXPIRATION DATE: 2024-01-31

(FOR RENEWAL, SEE 49 CFR 107.109)

1. GRANTEE: Airbus Defence and Space GmbH
Taufkirchen, Germany

US AGENT: ShipMate, Inc.
Sisters, OR

2. PURPOSE AND LIMITATION:

a. This special permit authorizes the transportation in commerce of a single shipment of a specially designed non-DOT specification containers in which prototype and low production lithium ion batteries contained in equipment (spacecraft) that have not completed all U.N. tests and exceed 35 kg net weight by cargo-only aircraft and articles containing non-flammable, non-toxic gas, n.o.s (contains helium, compressed) within the equipment are being shipped for use in specialty applications. This special permit provides no relief from the Hazardous Materials Regulations (HMR), the International Civil Aviation Organization's Technical Instructions for the Safe Transport of Dangerous Goods by Air (ICAO TI), or the International Maritime Dangerous Goods (IMDG) Code 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 hazard and risks associated with transportation in commerce.

c. No party status will be granted to this special permit.

d. This special permit serves as an approval under Special Provisions A88 and A99 and State Variation US 3 of the ICAO TI, as an "exemption" under section 7.9.1 of the IMDG Code, and as a "Competent Authority Approval" as defined under 49 CFR § 107.1.

Tracking Number: 2022035045

3. REGULATORY SYSTEM AFFECTED: 49 CFR Parts 106, 107 and 171-180, the ICAO TI, and the IMDG Code.
4. REGULATIONS FROM WHICH EXEMPTED: 49 CFR § 172.101 Hazardous Materials Table Column (9B) in that lithium batteries may not have a mass exceeding 35 kg per package; 49 CFR § 173.185(a)(1) in that lithium batteries must have passed the criteria in Part III, subsection 38.3 of the UN Manual of Tests and Criteria; 49 CFR §§ 172.300 and 172.400, Chapter 5.2 of the IMDG Code, and Part 5, Chapters 2 and 3 of the ICAO TI in that marking and labeling of the packaging (pressure vessel) contained within the spacecraft is not required; § 173.301(f) in that the pressure vessel within the equipment is not fitted with a pressure relief device; and § 173.302a(a)(1) in that non-DOT specification packaging (vessel) is not authorized, except as specified herein.
5. BASIS: This special permit is based on the application of Airbus Defence and Space GmbH dated March 31, 2022, submitted in accordance with § 107.117 and the determination that it is necessary to prevent significant economic loss.
6. HAZARDOUS MATERIALS (49 CFR 172.101):

Hazardous Materials Description			
Proper Shipping Name	Hazard Class/ Division	Identification Number	Packing Group
Lithium ion batteries contained in equipment <i>including lithium ion polymer batteries</i>	9	UN3481	N/A
Articles containing non-flammable, non-toxic gas, n.o.s (contains helium)	2.2	UN3538	N/A

7. SAFETY CONTROL MEASURES:
 - a. PACKAGING: Prescribed packagings are non-DOT specification packagings which are packaged as follows:
 - (1) Each battery and pressure vessel must be contained in equipment (spacecraft) designed for space application and constructed of suitable material of adequate strength and design.

(2) The equipment containing the battery and the pressure vessel must be placed in a rigid and fully-encased, specially designed non-DOT specification packaging (outer transport container) as described in the February 4, 2022 supplemental submission and on file with the Office of Hazardous Materials Safety (OHMS).

(3) The aggregate net weight of nine (9) batteries within each package must not exceed 223 kg (492 pounds).

b. TESTING REQUIREMENTS:

(1) Each cell within the battery must be of a type tested in accordance with the UN Manual of Tests and Criteria, 5th Revised Edition.

(2) The battery may not be of a type tested in accordance with the UN Manual of Tests and Criteria.

c. OPERATIONAL CONTROLS:

(1) Only prototype and low production lithium ion batteries contained in equipment as described in the application of Bolloré Logistics Germany GmbH dated November 20, 2021 and on file with the Office of Hazardous Materials Safety (OHMS) may be offered for transportation under the terms of this special permit. ("Low production" is defined as a production run of no more than 100 cells or batteries annually of a particular type.)

(2) The Watt-hour rating of each battery contained in equipment comprised of 144 Saft cells (Model: VES16) may not exceed nominal energy of 2.304 kWh.

(3) There must be not more than nine (9) batteries contained in each equipment with an aggregate nominal energy content of not more than 21 kWh.

(4) All batteries contained in equipment must be offered for transportation at a state of charge not exceeding 30 percent.

(5) The batteries must be equipped with an effective means of preventing dangerous reverse current flow for the batteries that contain cells connected in parallel.

(6) Cells and batteries must be protected against short circuiting.

(7) The pressure vessel containing not more than 1200 L of helium within the spacecraft may not exceed 5 bars (72.5 psig) in the working pressure at room temperature (20 °C) and was built in accordance with PI 200 of the ICAO TI.

(8) Transportation of the spacecraft contained in the transport container is authorized for the one-way movement via cargo aircraft from Munich, Germany or cargo vessel via any European port to the Vandenberg Air Force Base, California.

(9) Emergency response information provided with the shipment and available via an emergency response telephone number must indicate that certain packagings within the outer transport container are not fitted with pressure relief devices and provide appropriate guidance in case of fire exposure.

(10) Only nine batteries (2.304 kWh each) contained in equipment and one pressure vessel may be packed within an outer transport container.

d. MARKING: The outer transport container must be plainly and durably marked on two opposite sides in letters at least 2 inches in height on a contrasting background, "DOT-SP 21310" and "DO NOT STACK" as specified in § 172.301(c).

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 modifications or changes are made to the package and it is reoffered for transportation in conformance with this special permit and the HMR.

b. A current copy of this special permit will be maintained at each facility where the package is offered or reoffered for transportation.

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

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

"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 Material 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: ae