



U.S. Department
of Transportation

**Pipeline and Hazardous
Materials Safety
Administration**

October 04, 2024

1200 New Jersey Avenue, SE
Washington, DC 20590

DOT-SP 21536
(FIRST REVISION)

EXPIRATION DATE: 2025-05-31

(FOR RENEWAL, SEE 49 CFR 107.109)

1. GRANTEE: Fortescue Zero Limited
Oxfordshire, United Kingdom

U.S. AGENT: Currie Associates, Inc.
Glens Falls, NY

2. PURPOSE AND LIMITATION:

a. This special permit authorizes the transportation in commerce of lithium ion batteries exceeding 35 kg net weight aboard cargo-only aircraft. 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 the development of this special permit only considered the hazards and risks associated with the transportation in commerce.

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

d. This special permit serves as an approval under Special Provision A99 of the ICAO TI and as a "Competent Authority Approval" as defined under 49 CFR § 107.1.

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

4. REGULATIONS FROM WHICH EXEMPTED: 49 CFR § 172.101 Hazardous Materials Table Column (9B) in that lithium batteries may have a mass exceeding 35 kg per package and § 173.185(b)(6) in that transportation aboard aircraft is authorized.

Tracking Number: 2024094497

5. BASIS: This special permit is based on the application of Fortescue Zero Limited dated March 14, 2023, submitted in accordance with § 107.105 and the public proceeding thereon.

6. HAZARDOUS MATERIALS (49 CFR 172.101):

Hazardous Materials Description			
Proper Shipping Name	Hazard Class/ Division	Identification Number	Packing Group
Lithium ion batteries <i>including lithium ion polymer batteries</i>	9	UN3480	N/A

7. SAFETY CONTROL MEASURES:

a. PACKAGING:

- (1) Each battery module must weigh 12 kg or greater and have a strong, impact-resistant outer casing.
- (2) Inner Packaging: Each battery must be secured to an inner base and surrounded by cushioning material.
- (3) Outer Packaging: The inner packaging must be placed in a pallet-based UN 50B packaging designed and tested to the Packing Group I performance standard.
- (4) Packaging must comply with the requirements in Packing Instruction 974 of the Supplement to the ICAO TI.
- (5) The net mass of a package may not exceed 288 kg (635 pounds).

b. OPERATIONAL CONTROLS:

- (1) Only lithium ion batteries identified as GEN 3 – FE RESS with 208s2p connections as specified in the WAE Technologies Limited’s March 14, 2023, application on file with the Office of Hazardous Materials Safety may be offered for transportation under the terms of this special permit. Each battery is comprised of sixteen (16) modules and has a nominal energy content of 47 kWh.

- (2) Each module (An S/N followed by 8 digit numbers) is comprised of prismatic SAFT SL27R cells.
- (3) Cells, modules, and batteries must be protected against short-circuiting.
- (4) The state of charge for lithium ion batteries may not exceed 30% when offered for air transportation.
- (5) A battery must be equipped with a battery management system that has been verified as preventing overcharge, short circuits, and over discharge between the modules.
- (6) The cells and battery modules connected in parallel must be equipped with an effective means to prevent dangerous reverse current flow.
- (7) The batteries must be packaged such that terminals are not subjected to the weight of materials that may be superimposed during transportation.
- (8) Not more than one battery may be packaged within an outer packaging.

c. TESTING REQUIREMENTS:

- (1) The battery modules must consist of cells that have passed all required tests in accordance with Section 38.3 of the UN Manual of Tests and Criteria, 7th Revised Edition.
- (2) The six (6) battery modules that comprise the battery must have passed all required tests in accordance with Section 38.3 of the UN Manual of Tests and Criteria, 7th Revised Edition as described in Test Report 1228136.

d. MARKING REQUIREMENTS: Each package, and overpack if used, prepared under the provisions of this special permit must be plainly marked with the special permit number "DOT-SP 21536".

8. SPECIAL PROVISIONS:

- a. Under the terms of this special permit, the grantee may only offer hazardous materials (i.e., the grantee is not authorized as a carrier).
- 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 reoffered for transportation in conformance with this special permit, the HMR, and the ICAO TI.

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

d. This special permit in no way affects the need to obtain any required authorizations from other agencies of the United States Government or from the competent authorities of countries of origin, transit, destination, and the State of Operator.

e. The grantee must maintain the following record and upon request make this record available to DOT representatives or enforcement officials. The record must contain a listing and number of shipments made to include:

- (1) Dates of shipment; and
- (2) Description of each type of shipment.

9. MODES OF TRANSPORTATION AUTHORIZED: Cargo-only aircraft.

10. MODAL REQUIREMENTS: A current copy of this special permit must be carried aboard each aircraft 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 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: BB