



U.S. Department  
of Transportation

**Pipeline and Hazardous  
Materials Safety  
Administration**

**November 06, 2023**

1200 New Jersey Avenue, SE  
Washington, DC 20590

DOT-SP 21598

**EXPIRATION DATE: 2025-10-31**

(FOR RENEWAL, SEE 49 CFR 107.109)

1. GRANTEE: ME Logistic Services GmbH & Co. KG  
Büchenbeuren, Germany

U.S. AGENT: Dangerous Goods of America  
Miami, FL

2. PURPOSE AND LIMITATION:

a. This special permit authorizes the shipment of prototype lithium ion battery assemblies 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 A88 and State Variation US 3 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(a) in that the batteries are not of a type proven to meet the criteria in part III, sub-section 38.3 of the UN Manual of Tests and Criteria.

Tracking Number: 2023074104

5. BASIS: This special permit is based on the application of ME Logistic Services GmbH & Co. KG dated July 3, 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. SAFETY CONTROLS:

(1) Only batteries as outlined in the application dated July 3, 2023, and on file with the Office of Hazardous Materials Safety (OHMS), may be offered for transportation under the terms of this special permit are identified as follows:

(i) Battery 1: HV-MOD.V2 RAIL POWER LION 133.2V 70AH K1 (9.324 Kwh),

(ii) Battery 2: HV-MOD.V2 RAIL POWER LION 133.2V 46AH K3 (6.127 kWh),

(iii) Battery 3: LiAux Modul\_23.0V\_253AH\_T23-LTO (5.819 kWh),

(iv) Battery 4: LiAux Modul\_23.0V\_368AH\_T23-LTO (8.464 kWh),  
and

(v) Battery 5: LiTrac Modul\_32.2V\_138AH\_T23-LTO (4.444 kWh).

(vi) Batteries must be comprised of cells, as described in the application dated July 3, 2023, and on file with OHMS, identified as:

(A) Battery Cell 1: Kokam Co., Ltd.: SLPB120216216G2,

(B) Battery Cell 2: Kokam Co., Ltd.: SLPB 120216216HR2, or

(C) Battery Cell 3: Toshiba Model #: NP2211F10FHB.

(2) Each battery has a nominal voltage of 133.2 V, 133.2 V, 23 V, 23 V, 32.2 V and a nominal energy rating of 9.324 kWh, 6.127 kWh, 5.819 kWh, 8.464 kWh, and 4.444 kWh, respectively.

(3) The state of charge for lithium ion batteries must be not more than 30% when offered for aircraft transportation.

(4) Cells and batteries must be protected against short-circuiting and be equipped with means of venting and preventing dangerous reverse current flow.

(5) Lithium ion batteries must be packed to prevent accidental activation of the battery.

(6) Lithium ion cells or batteries that are leaking or liable to rapidly disassemble, dangerously react produce a flame or a dangerous evolution of heat or a dangerous emission of toxic, corrosive, or flammable gases, or vapors under normal conditions of transport may not be transported under this special permit.

(7) Any changes to the battery or cell from the ones listed above invalidates this special permit.

b. TESTING: Each cell within the battery must be of a type tested in accordance with the UN Manual of Tests and Criteria, 7<sup>th</sup> Revised Edition.

c. PACKAGING:

(1) Inner Packaging:

(i) Each module must be placed in a non-metallic inner packaging that completely encloses the module.

(ii) The inner packaging must be surrounded by cushioning material that is non-combustible, electrically non-conductive.

(iii) Each battery must be packaged in a manner to prevent shifting, accidental activation, and short circuiting.

(2) Outer Packaging: Each inner packaging must be placed in a ZARGES K40 UN 4B Aluminum box performance packaging box certified by the German Approval Agency and meeting the performance criteria for Packing Group I; and packed as described in the application on file.

(3) Packages offered for transportation must be in accordance with the requirements in Packing Instruction 910 of the Supplement to the ICAO TI. Additionally, waste lithium battery assemblies and lithium battery assemblies being shipped for recycling or disposal are forbidden from air transport, and lithium battery assemblies must not be packed in the same outer packaging with substances and articles of Class 1 (explosives) other than Division 1.4S, Division 2.1 (flammable gases), Class 3 (flammable liquids), Division 4.1 (flammable solids), or Division 5.1 (oxidizers).

(4) No more than one battery is allowed per package;

(5) The net weight of the battery may not exceed 52 kg (114.6 pounds) for batteries 1 and 2, 67 kg (147.7 pounds) for battery 3, 103 kg (227.1 pounds) for battery 4 and 55 kg (121.3 pounds) for battery 5.

d. MARKING: Each package, and overpack if used, prepared under the provisions of this special permit must be marked with the special permit number DOT-SP 21598 in accordance with § 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 modification or change is made to the package or its contents and it is reoffered for transportation in conformance with this special permit, the HMR, and the ICAO TI.

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

c. 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 or State of the Operator.

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

10. MODAL REQUIREMENTS: A current copy of this special permit must be carried aboard each 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 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: CT/TG