



U.S. Department  
of Transportation

**Pipeline and Hazardous  
Materials Safety  
Administration**

**January 28, 2022**

1200 New Jersey Avenue, SE  
Washington, DC 20590

**DOT-SP 15869  
(FIFTH REVISION)**

(FOR RENEWAL, SEE 49 CFR § 107.109)

1. GRANTEE: (See individual authorization letter)
2. PURPOSE AND LIMITATION:
  - a. This special permit authorizes the transportation in commerce of lithium batteries exceeding the 35 kg maximum weight authorized for transportation 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. Unless otherwise stated herein, this special permit consists of the special permit authorization letter issued to the grantee together with this document.
  - 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 and the ICAO TI.
4. REGULATIONS FROM WHICH EXEMPTED: 49 CFR § 172.101 Hazardous Materials Table Column (9B) in that a lithium battery assembly may not exceed 35 kg when transported by cargo aircraft, except as provided herein.
5. BASIS: This special permit is based on the modification application of MERCEDES-BENZ USA, LLC dated July 21, 2016, submitted in accordance with § 107.105 and the public proceeding thereon and additional information dated January 21, 2022.

6. HAZARDOUS MATERIALS (49 CFR 172.101):

Hazardous Materials Description			
Proper Shipping Name	Hazard Class/ Division	Identification Number	Packing Group
Lithium ion batteries	9	UN3480	N/A

7. SAFETY CONTROL MEASURES:a. OPERATIONAL CONTROLS:

(1) This special permit is valid only for transportation of the lithium ion battery assemblies identified as P2-90/M14-1, P2-85/P2-80, P2-60/P2-65/P2-50, E18-2evo, and E18-1, assembled from cells identified as E370, LEV 21F, LEV 21F, E51, and HEA 50, respectively, which are on file with the Office of Hazardous Materials Safety (OHMS), or battery assemblies which do not differ from the tested type. Any change in the battery assembly that does not meet the requirements of paragraphs 7.a.(2) through (6) or packaging that does not meet the requirements of paragraph 7.c. invalidates this special permit.

(2) Each battery assembly is made up of up to 120 cells assembled at a maximum rating of up to 17.6 kWh and maximum voltage of up to 420 V, in accordance with the assembly summary as shown in the table on file with OHMS. The kWh rating and voltage may exceed these values in accordance with the limits specified in 38.3.2.2 of the UN Manual of Tests and Criteria (i.e., a change in nominal energy in Watt-hours of 20% or less or an increase in nominal voltage of 20% or less) provided the battery is of the same type specified in paragraph 7.a.(1).

(3) Cells and battery assemblies must be protected against short-circuiting.

(4) Cells or battery assemblies connected in parallel must be equipped with an effective means to prevent dangerous reverse current flow.

(5) All of the battery assemblies must be offered for transportation at a state of charge not greater than 30%.

(6) A battery assembly which has a rating exceeding 6,200 Wh needs not be tested in accordance with the UN Manual of Tests and Criteria, 5<sup>th</sup> Revised Edition provided that the assembly is equipped with a system capable of monitoring the battery assembly and preventing short circuits, or over discharge between the modules in the assembly and any overheat or overcharge of the battery assembly.

b. TESTING REQUIREMENTS: Each cell and battery assembly must be a type that has successfully passed the required tests in accordance with the UN Manual of Tests and Criteria, 5<sup>th</sup> Revised Edition.

c. Packaging:

(1) Inner Packaging: Each battery assembly must be individually placed in a non-metallic inner packaging that completely encloses the battery assembly and surrounded by cushioning material that is non-combustible and non-conductive inside an outer packaging.

(2) Outer Packaging: UN 4B aluminum box meeting the Packing Group I performance level or a UN 4D plywood box meeting the Packing Group II performance level containing not more than one (1) inner packaging.

(3) Packaging must comply with the requirements in ICAO TI Packing Instruction 965.

(4) The net weight of battery assembly within each package must not exceed 179 kg.

d. MARKING: Each package covered under the terms of this special permit must be durably and legibly marked and displayed on a background of contrasting color with "DOT-SP 15869."

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 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 and made available for examination at each facility where the materials are packaged and 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 the State of the Operator.

d. The special permit holder must maintain a record of all activity conducted under the authority granted in this special permit.

e. The record must contain a complete listing and number of shipments made to include:

- (1) Dates of Shipment.
- (2) Description of each type of shipment (to include origination/destination).

f. All of the above information must be made available upon request to a DOT representative or an enforcement official.

g. A cell, battery assembly, or monitoring system that is determined to be defective, may not be shipped under this special permit.

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.

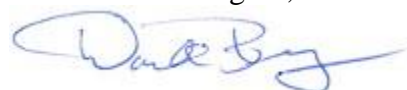
Each “Hazmat employee”, as defined in § 171.8, who performs a function subject to this special permit must receive training on the requirements and conditions of this special permit in addition to the training required by §§ 172.700 through 172.704.

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: Steve H/NICKS