



U.S. Department
of Transportation

**Pipeline and Hazardous
Materials Safety
Administration**

April 11, 2022

1200 New Jersey Avenue, SE
Washington, DC 20590

DOT-SP 20470
(THIRD 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 ion battery assemblies exceeding 35 kg 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 International Civil Aviation Organization Technical Instructions (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 a lithium battery assembly may not exceed 35 kg when transported aboard cargo-only aircraft, except as provided herein.
5. BASIS: This special permit is based on the application of Imperial Automotive Logistics GmbH dated November 15, 2021 submitted in accordance with § 107.105, 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) Inner Packaging: Each battery assembly must be packaged in a plastic foil bag that completely encloses the assembly;
- (2) Outer Packaging: Each inner packaging must be packaged in a UN 4G fiberboard box meeting the Packing Group II performance criteria in accordance with § 173.185(b) and Packing Instruction 974 of the Supplement to the ICAO TI and must be surrounded by cushioning material to prevent movement during transport. Additionally, waste lithium and battery assemblies and lithium battery assemblies being shipped for recycling or disposal are forbidden from air transport, and lithium ion 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);
- (3) Only one battery assembly is allowed per package; and
- (4) The net weight of battery assembly within each package must not exceed 160 kg.

b. TESTING:

- (1) Each cell within the battery modules must have successfully passed the tests in accordance with the UN Manual of Tests and Criteria, 5th Revised Edition.
- (2) Each battery module must have successfully passed the tests in accordance with the UN Manual of Tests and Criteria, 5th Revised Edition.
- (3) Battery modules (Model: MP0023LS001B, MP0023LS002B, MP0023LS001C, or MP0023LS002C) must be comprised of lithium ion cells (Model: CS0495RT005A, or CS495RT006A) that are of a type (Model:

CS0495RT001A at 180 Wh nominal) that has passed the required tests as specified in the “UN Manual of Tests and Criteria, 6th Revised Edition”.

(4) The lithium ion battery modules (Model: MP0023LS001B, MP0023LS002B, MP0023LS001C, or MP0023LS002C) must be of a type (Model: MP0023LS001A or MP0023LS002A at 2.37 kWh nominal) that has passed the required tests as specified in the “UN Manual of Tests and Criteria, 6th Revised Edition”.

(5) For purposes of these testing requirements a cell or battery module type would be determined in accordance with 38.3.2.2 of the UN Manual of Tests and Criteria, 6th Revised Edition. Any change in the battery module or cell from the tested type invalidates this special permit.

c. SAFETY CONTROLS:

(1) Authorized battery assemblies identified as AUDI AG CS370-37Ah are comprised of battery modules each with not more than the number of Samsung lithium ion cells (Model: CS0370R0001C) as described in Audi Aktiengesellschaft’s May 22, 2017 application on file with the Office of Hazardous Materials Safety (OHMS).

(2) Authorized battery assemblies identified as MLB53A SWB, MLB53A NWB, Panamera G2PA, or MLB42A are comprised of battery modules (Model: MP0023LS001B, MP0023LS002B, MP0023LS001C, or MP0023LS002C) each with thirteen (13) Samsung lithium ion cells (Model: CS0495RT005A or CS0495RT006A).

(3) Each battery assembly consists of eight (8) battery modules and may not exceed 17.9 kWh in nominal energy rating.

(4) Cells, battery modules, and battery assemblies must be protected against short-circuiting.

(5) Each battery module and battery assembly must be offered for transportation at a state of charge not exceeding 30%.

(6) The battery assembly must be equipped with a system capable of monitoring the battery assembly and preventing short circuits, or over discharge between the battery modules in the assembly and any overheating or overcharge of the battery assembly.

d. MARKING: Each package, and over pack if used, must be marked with the special permit number, “DOT-SP 20470”, 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 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, and destination and State of the Operator.
- d. The grantee must maintain a record of all activity conducted under the authority granted in this special permit and upon request make this information 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: SH/HERZOG