



U.S. Department
of Transportation

**Pipeline and Hazardous
Materials Safety
Administration**

April 10, 2023

1200 New Jersey Avenue, SE
Washington, DC 20590

DOT-SP 21487

EXPIRATION DATE: 2025-03-31

(FOR RENEWAL, SEE 49 CFR 107.109)

1. GRANTEE: Ford Motor Company
Dearborn, MI
2. PURPOSE AND LIMITATION:
 - a. This special permit authorizes the transportation in commerce of lithium ion battery modules 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.
 - 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 a lithium ion battery may exceed 35 kg when transported by cargo aircraft; and § 173.185(b) in that alternative packaging is authorized, as specified herein.
5. BASIS: This special permit is based on the applications of Ford Motor Company dated November 30, 2022, submitted in accordance with § 107.105 and the public proceeding thereon.

Tracking Number: 2022124528

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 production lithium ion battery modules identified as Models NL38-10C779-AB, NL38-10C779-BB, and NL38-10C779-CB, as described in Ford Motor Company's application dated November 30, 2022, and on file with the Office of Hazardous Materials Safety may be offered for transportation under the terms of this special permit.
- (2) All battery modules must be offered for transportation at a state of charge not exceeding 30 percent.
- (3) The battery modules must be equipped with an effective means of preventing dangerous reverse current flow for cells that are connected in parallel.
- (4) Cells and battery modules must be protected against short circuiting.
- (5) Cells or battery modules 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.

b. TESTING:

- (1) Each battery module must be comprised of Ford E805 lithium ion cells that are of a type that have passed the required tests as specified in the "UN Manual of Tests and Criteria, 7th Revised Edition".
- (2) The production lithium ion battery modules must be of a type that have passed the required tests as specified in the "UN Manual of Tests and Criteria, 7th Revised Edition".

(3) Any changes to the battery cell, module, or pack from the tested type, invalidates this special permit.

c. PACKAGING:

(1) Batteries must be packaged in specification UN 4D plywood boxes tested to the Packing Group I performance criteria. Each battery must:

- (i) be packed as outlined in the application
- (ii) secured in a manner to prevent shifting, vibration, and accidental activation.

(2) Packaging must comply with the requirements in Packing Instruction 974 of the Supplement to the ICAO TI. Additionally, waste lithium battery modules and lithium battery modules being shipped for recycling or disposal are forbidden from air transport, and lithium ion battery modules 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) Not more than one battery module is allowed per package

d. MARKING: Each package, and overpack if used, prepared under the provisions of this Special Permit must be plainly marked with the approval number DOT-SP 21487.

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 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, and the 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 cargo 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: ae