

December 01, 2020



U.S. Department  
of Transportation

East Building, PHH-30  
1200 New Jersey Avenue S.E.  
Washington, D.C. 20590

**Pipeline and Hazardous  
Materials Safety Administration**

DOT-SP 21016  
(SECOND REVISION)

**EXPIRATION DATE: 2022-09-30**

(FOR RENEWAL, SEE 49 CFR 107.109)

1. GRANTEE: Lucid USA, Inc.  
Newark, CA
2. PURPOSE AND LIMITATIONS:
  - a. This special permit authorizes the transportation of low production lithium ion batteries that exceed the allowable weight limit (35 kg) and battery-powered vehicles containing those batteries 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 development of this special permit only considered the hazards and risks associated with transportation in commerce.
  - c. No party status will be granted to this special permit.
  - d. This special permit serves as an "exemption" as defined in 1;3.1.1 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.

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4. REGULATIONS FROM WHICH EXEMPTED: 49 CFR § 172.101 Hazardous Materials Table Column (9B) and Columns 12 and 13 of the ICAO TI in that lithium ion batteries may have a mass exceeding 35 kg per package; 49 CFR §§ 173.185(a) and 2;9.3.1 a) of the ICAO TI in that low production and prototype batteries have not passed the criteria in Part III, subsection 38.3 of the UN Manual of Tests and Criteria; and § 173.185(b) in that each battery is not packed in an inner packaging.
5. BASIS: This special permit is based on the application of Atieva USA Inc. d.b.a. Lucid Motors USA, Inc. dated August 26, 2020 and submitted in accordance with § 107.109 and additional information dated November 11, 2020.
6. HAZARDOUS MATERIALS (49 CFR 172.101):

Hazardous Material Description			
Proper Shipping Name	Hazard Class/ Division	Identification Number	Packing Group
Battery-powered vehicle	9	UN3171	N/A
Lithium ion batteries <i>including lithium ion polymer batteries</i>	9	UN3480	N/A

7. SAFETY CONTROL MEASURES:

- a. OPERATIONAL CONTROLS:

(1) Only low production lithium ion batteries, as described in the grantee's application dated March 16, 2020 and on file with the Office of Hazardous Materials Safety Approvals and Permits Division may be offered for transportation under the terms of this special permit. ("Low production" is defined as a production run of not more than 100 batteries annually of a particular type.) Each different battery type must comply with all the conditions of this special permit prior to being offered for transportation.

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(2) Only battery packs, each comprised of 18 battery modules and each having a watt-hour rating of 93 kWh, as specified in the grantee's application dated on March 16, 2020, may be offered for transportation under the terms of this special permit.

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

(4) Each battery pack must be equipped with a battery management system capable of preventing short-circuiting and thermal runaway.

(5) The battery pack must be equipped with an effective means of preventing dangerous reverse current flow if modules or cells are connected in parallel.

b. TESTING REQUIREMENTS:

(1) Each LG Chem, Ltd. INR21700M48 cell within the battery pack must be of a type tested in accordance with the UN Manual of Tests and Criteria, 6<sup>th</sup> Revised Edition.

(2) Each battery pack need not be of a type tested in accordance with the UN Manual of Tests and Criteria, 6th Revised Edition.

c. PACKAGING REQUIREMENTS:

(1) Each battery pack must have a strong, impact-resistant outer aluminum casing;

(2) Each battery pack (UN3480 only) must be packed in a strong outer packaging (non-UN specification wooden crate);

(3) The net weight of a package may not exceed 580 kg;

(4) Only one battery pack may be packed within each crate or per vehicle; and

(5) The low production battery pack within the vehicle (UN3171) must be securely installed.

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d. MARKING: Each package must be marked with the special permit number DOT-SP 21016 accordance with § 172.301(c). When the battery pack is installed in a vehicle, the requirements of § 172.301(c) do not apply.

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, but 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 offered 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. It must be made available to a DOT representative upon request.

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 the States of origin, transit, over flight, and destination of the consignment, as well as the State of the air operator.

9. MODES OF TRANSPORTATION AUTHORIZED: Motor vehicle, rail freight, 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:

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- 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

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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 Materials Safety Administration, U.S. Department of Transportation, East Building PHH-30, 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/Andrew Eckenrode