

May 02, 2019



U.S. Department
of Transportation

East Building, PHH – 30
1200 New Jersey Avenue, Southeast
Washington, D.C. 20590

**Pipeline and Hazardous
Materials Safety Administration**

DOT-SP 20872

EXPIRATION DATE: 2019-09-30

(FOR RENEWAL, SEE 49 CFR 107.109)

1. GRANTEE: SAP SE
Walldorf, Germany

U.S. AGENT: CEVA Freight LLC
Houston, TX
2. PURPOSE AND LIMITATIONS:
 - a. This emergency special permit authorizes the transportation in commerce of prototype lithium ion batteries that 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 by 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. This special permit serves as an approval under Special Provisions A88 and A99, and Packing Instruction (PI) 910 of the Supplement to the ICAO TI and as a "Competent Authority Approval" as defined under 49 CFR § 107.1.
 - d. No party status will be granted to this special permit.
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 Column (9B) in that batteries are in excess of 35 kg net weight for certain batteries and 173.185(e)(6) in that prototype batteries are not proven to be of the type to meet the criteria in Part III, subsection 38.3 of the UN Manual of Tests and Criteria, as specified herein.
5. BASIS: This special permit is based on the application of SAP SE, dated April 24, 2019, submitted in accordance with § 107.117 and a determination that it is necessary to prevent severe economic impact.
6. HAZARDOUS MATERIALS (49 CFR 172.101):

Hazardous Material 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) The lithium ion batteries, identified as EVE indoor (type 10.30.01461), are constructed of nine (9) modules (type 10.30.01622) connected in series with each module comprised of sixty-three (63) Samsung cells (Model INR18650-29E) connected in parallel. The nominal energy rating of the battery is 5.7 kWh.

(2) The cells and batteries must be protected against short-circuiting.

(3) The batteries must be equipped with an effective means of preventing dangerous reverse current flow for cells that are connected in parallel.

(4) The battery must be equipped with a battery management system to control the cells.

May 02, 2019

(5) Batteries must be offered for transportation by cargo air at a state of charge not greater than 30%.

(6) Not more than two (2) packages containing prototype lithium ion batteries may be transported under the terms of this special permit.

b. TESTING:

(1) All lithium ion cells (Samsung iNR18650-29E) must be of a type that has passed all required tests as specified in the "UN Manual of Tests and Criteria, 5th Revised Edition."

(2) The prototype modules (nominal energy rating of 0.63 kWh) and batteries (5.7 kWh) need not be tested in accordance with the "UN Manual of Tests and Criteria, 5th Revised Edition."

c. PACKAGING - Each battery must be packaged in accordance with § 173.185(e), PI 910 of the Supplement to the ICAO TI, and the following:

(1) Inner Packaging: Plastic bag containing not more than one (1) lithium ion battery. The inner packaging must completely enclose the battery.

(2) Outer Packaging: UN 4D plywood box meeting the Packing Group II performance level containing not more than one (1) inner packaging. The inner packaging must be surrounded by cushioning material to prevent movement during transportation. The cushion material must be non-combustible and non-conductive thermal insulation material to protect against a dangerous evolution of heat.

(3) The outer packaging or the overpack, if used, must be securely attached to a wooden pallet to prevent movement incidental to normal transportation. Measures must be taken to prevent movement of the battery that may damage or a dangerous condition during transport. Cushioning material that is non-combustible and non-conductive may be used to meet this requirement.

(4) The battery terminals must be protected to prevent damage from the weight of other material that may be superimposed during transportation.

May 02, 2019

(5) The net weight of the battery may not exceed 66 kg (146 pounds).

d. MARKING: Each package, and overpack if used, 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 20872."

8. SPECIAL PROVISIONS:

a. Under the terms of this approval, the approval holder may only offer hazardous materials (i.e., the approval holder is not authorized as a carrier).

b. 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 and the HMR.

c. A current copy of this special permit must be maintained and made available for examination at each facility where the materials are package and offered or reoffered for transportation.

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 countries of origin, transit and destination.

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

f. 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).

g. All the above information must be made available upon request to a DOT representative or an enforcement Official.

9. MODES OF TRANSPORTATION AUTHORIZED: Cargo-only aircraft.

May 02, 2019

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

May 02, 2019

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-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 http://hazmat.dot.gov/sp_app/special_permits/spec_perm_index.htm Photo reproductions and legible reductions of this special permit are permitted. Any alteration of this special permit is prohibited.

PO: Steve H/kah