



U.S. Department
of Transportation

**Pipeline and Hazardous
Materials Safety
Administration**

October 12, 2023

1200 New Jersey Avenue, SE
Washington, DC 20590

DOT-SP 21139
(FIFTH REVISION)

EXPIRATION DATE: 2026-08-31

(FOR RENEWAL, SEE 49 CFR 107.109)

1. GRANTEE: KULR Technology Corporation
San Diego, CA
2. PURPOSE AND LIMITATIONS:
 - a. This special permit authorizes the manufacture, mark, sale, and use of non-DOT specification packagings for the transportation in commerce of lithium ion cells and batteries and lithium metal cells and batteries and those contained in or packed with equipment for recycling, reuse, refurbishment, repurposing or evaluation. This special permit provides no relief from the Hazardous Materials Regulations (HMR) 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. The safety analyses did not consider the hazards and risks associated with consumer use, use as a component of a transport vehicle or other device, or other uses not associated with transportation in commerce.
 - c. In accordance with 49 CFR 107.107(a), party status may not be granted to a manufacturing special permit. These packagings may be used in accordance with 49 CFR 173.22a.
3. REGULATORY SYSTEM AFFECTED: 49 CFR Parts 106, 107 and 171-180.
4. REGULATIONS FROM WHICH EXEMPTED: 49 CFR Subparts C and H of Part 172 in that shipping papers and training are not required for lithium batteries with a Watt-hour (Wh) rating or lithium content (grams) not greater than that specified herein; and § 173.185(b) in that alternative packaging is authorized, as specified herein.

Tracking Number: 2023094069

5. BASIS: This special permit is based on the application of KULR Technology Corporation dated September 1, 2023, submitted in accordance with § 107.105 and the public proceeding thereon.
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
Lithium ion batteries contained in equipment <i>including lithium ion polymer batteries</i>	9	UN3481	N/A
Lithium ion batteries packed with equipment <i>including lithium ion polymer batteries</i>	9	UN3481	N/A
Lithium metal batteries <i>including lithium alloy batteries</i>	9	UN3090	N/A
Lithium metal batteries contained in equipment <i>including lithium alloy batteries</i>	9	UN3091	N/A
Lithium metal batteries packed with equipment <i>including lithium alloy batteries</i>	9	UN3091	N/A

7. SAFETY CONTROL MEASURES:

a. PACKAGING:

- (1) INNER PACKAGING: Cells or batteries or pieces of equipment containing these cells or batteries must be packaged in a specially designed inner bag as described in the application on file with the Office of Hazardous Materials Safety that consists of a synthetic composite temperature resistant bag lined with the fiber core material containing a cooling liquid.
- (2) OUTER PACKAGING: Inner bags must be further placed in rigid strong outer packings.
- (3) Each package may not exceed 30 kg (66 pounds) gross weight.

(4) The gross weight of a package may be increased to a maximum of 100 kg if the combination of the cell, the battery or the piece of equipment containing these batteries and the packaging exceeds 30 kg. For packages that exceed 30 kg, only one cell, one battery or one piece of equipment may be transported in each outer packaging. The outer packaging must be a UN specification packaging tested and certified to meet the Packing Group II performance level. The package test report must be made available to a DOT representative upon request.

(5) The aggregate energy content of each inner packaging with a fiber core lining containing a cooling liquid may not exceed 2.5 kWh or the equivalent lithium content (200 grams).

(6) Packagings may be reused provided they continue to meet the requirements of this special permit and general packaging requirements of the HMR.

b. OPERATIONAL CONTROLS:

(1) The packaging under this special permit is not authorized for lithium cells and batteries, and those contained in or packed with equipment, identified as damaged, defective, or recalled. This packaging may only be used for the transportation of cells or batteries and those contained in or packed with equipment for recycling, reuse, refurbishment, repurposing or evaluation purposes.

(2) Packages must be kept away from heat sources.

(3) Lithium cells and batteries and those contained in or packed with equipment must be secured and protected against short circuiting. Suitable methods of protecting the cells or batteries against short circuits include, but are not limited to, placing the batteries in individual plastic bags; or taping and covering the exposed terminals. The means of protection used to prevent short circuits must remain in place while the packages are in transportation.

(4) Equipment containing lithium cells or batteries must be protected from inadvertent activation.

(5) Detailed closure, packing, and shipping instructions must be provided to individuals preparing shipments under the terms of this special permit.

(6) A bill of lading or alternate shipping document in association with a packaging offered for transportation or transported in accordance with this special permit must include:

(i) Lithium batteries intended for recycling in accordance with DOT-SP 21139; and

(ii) Forbidden for Transport by Aircraft and Vessel.

(7) The alternate shipping document may be placed adjacent to where the parcel shipping label is placed on the packaging.

(8) The grantee must make available upon request a list of names and addresses of each person who has ordered the packaging authorized by this special permit and used under this special permit. The grantee must be notified when the packaging has reached its destination.

(9) Shipments containing a single packaging, pallet or aggregate quantity of packages with a gross weight exceeding 1,000 pounds are not excepted from the requirements of Subparts C and H of Part 172.

c. **MARKING AND LABELING:** Each packaging manufactured under terms of this special permit must be durably and legibly marked and labeled and displayed on a background of contrasting color with the following:

(1) All required markings and labels as required by the HMR.

(2) “DOT-SP 21139”.

(3) “FOR GROUND TRANSPORT ONLY – FORBIDDEN FOR TRANSPORT BY AIRCRAFT AND VESSEL” at least 6 mm (0.25 inch) in height and the lithium battery mark conforming to § 173.185(c)(3).

8. **SPECIAL PROVISIONS:**

a. In accordance with the provisions of Paragraph (b) of § 173.22a, persons may use the packaging authorized by this special permit for the transportation of the hazardous materials specified in paragraph 6, only in conformance with the terms of this special permit.

b. A person who is not a holder of this special permit, but receives a package covered by this special permit, may offer or reoffer it for transportation provided no modification or change is made to the package and it is offered or reoffered for transportation in conformance with this special permit and the HMR.

- c. A current copy of this special permit must be maintained at each facility where the package is offered or reoffered for transportation.
 - d. Each packaging manufactured under the authority of this special permit must be either (1) marked with the name of the manufacturer and location (city and state) of the facility at which it is manufactured or (2) marked with a registration symbol designated by the Office of Hazardous Materials Safety for a specific manufacturing facility.
 - e. A current copy of this special permit must be maintained at each facility where the packaging is manufactured under this special permit. It must be made available to a DOT representative upon request.
 - f. When utilized as specified in this special permit, the completed package is subject to 49 CFR Subparts D and E of Part 172 (i.e., marking, labeling), except as specified herein.
 - g. Detailed closure, packing, and shipping instructions must be provided to individuals preparing shipments under the terms of this special permit. Persons offering packages for transportation must comply with the closure, packing, and shipping instructions accompanying the packaging and be provided with adequate instruction and training that addresses the requirements for complying with the terms of this special permit.
 - h. Transportation by vessel or aircraft is not authorized under the terms of this special permit.
9. MODES OF TRANSPORTATION AUTHORIZED: Motor vehicle and rail freight.
10. MODAL REQUIREMENTS: None as a requirement of this special permit.
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 adequate instruction on the requirements and conditions of this special permit. Adequate instruction should include providing closure instructions and providing access to online training and testing that can be completed prior to offering packages for transport.

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 Materials 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