



U.S. Department  
of Transportation

**Pipeline and Hazardous  
Materials Safety  
Administration**

**March 21, 2025**

1200 New Jersey Avenue, SE  
Washington, DC 20590

DOT-SP 21946

**EXPIRATION DATE: 2025-08-31**

(FOR RENEWAL, SEE 49 CFR 107.109)

1. GRANTEE: DGM Italia Srl  
Vignate, Italy

US AGENT: Currie Associates  
Glens Falls, NY

2. PURPOSE AND LIMITATIONS:

a. This emergency special permit authorizes the transportation in commerce of the satellite transportation container (NTC) that contains a satellite including, low production lithium ion batteries contained in equipment that have not passed the criteria in the UN Manual of Tests and Criteria and exceed 35kg net weight aboard cargo-only aircraft, and certain Division 2.2 and 2.3 liquified and compressed gases contained in non-DOT specification packagings. 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 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 A88 and A99 and State Variation US 3 of the ICAO TI, Supplement Doc 9284 AN/905, A333 of the ICAO TI and a "Competent Authority Approval" as defined under 49 CFR § 107.1.

e. This special permit serves as an exemption to the ICAO TI for the transportation of articles containing toxic gas, n.o.s. (contains Ammonia, anhydrous) UN3539 aboard

Tracking Number: 2025024883

cargo aircraft. For international flights, the ICAO TI may require exemption authorization by the States of origin, transit, overflight, and destination of the consignment, as well as the State of the air operator.

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 lithium batteries may not have a mass exceeding 35 kg per package and in that articles containing toxic gas, n.o.s.(contains Ammonia, anhydrous) UN3539 is authorized aboard cargo aircraft; §§ 172.300 and 172.400 in that marking and labeling of the cylinders contained within the spacecraft is not required; § 173.185(a)(1) in the lithium batteries are of a type not proven to meet the requirements of Section 38.3 of the UN Manual of Tests and Criteria; § 173.185(b) in that alternative packaging is authorized; § 173.301(f)(5)(ii) in that that cylinder containing helium is not required to be fitted with a pressure relief device; § 173.302a(a)(1) in that a non-DOT specification cylinder is authorized for helium; and § 173.304a(a)(2) in that non-DOT specification packaging is authorized for anhydrous ammonia, as specified herein.
5. BASIS: This emergency special permit is based on the application of DGM Italia Srl dated February 24, 2025, submitted in accordance with § 107.117 and the determination it was necessary to prevent significant economic loss.
6. HAZARDOUS MATERIALS (49 CFR 172.101):

Hazardous Material Description			
Proper Shipping Name	Hazard Class/ Division	Identification Number	Packing Group
Lithium ion batteries contained in equipment <i>including lithium ion polymer batteries</i>	9	UN3481	N/A
Articles containing non-flammable, non-toxic gas, n.o.s (contains Ammonia, anhydrous*)	2.2	UN3538	N/A
Articles containing toxic gas, n.o.s (contains Ammonia, anhydrous)	2.3	UN3539	N/A
Helium, compressed	2.2	UN1046	N/A

\*Division 2.3 for international transportation. Division 2.2 as an alternate when only domestic transportation is involved.

7. SAFETY CONTROL MEASURES:

a. PACKAGING: The prescribed outer packaging is an enclosed, specially designed National Advanced Optical System (NAOS) Satellite Transport Container (NTC) as described in the February 24, 2025, application on file with the Office of Hazardous Materials Safety (OHMS). The NTC is used to transport the following:

- (1) A SAFT VES16 lithium ion battery contained within the spacecraft. The weight of the battery must not exceed 35.4 kg (78 pounds).
- (2) 12 heat pipes manufactured from axially grooved 6060 or 6063 series aluminum alloy tubing containing anhydrous ammonia. The heat pipes must be designed, constructed and tested as prescribed in the DGM Italia Srl's application on file with OHMS. After filling the filling port of the heat pipes must be crimped and hermetically sealed. During transportation:
  - (i) The pressure in the 5 heat pipes on the satellite platform must not exceed 8.6 bar (124.7 psig).
  - (ii) The pressure in the 7 heat pipes on the satellite payload must not exceed 10 bar (145 psig).
- (3) A non-DOT specification cylinder (used as the fuel tank), constructed from titanium, and filled only with helium at a pressure not to exceed 2.5bar (36.26 psig) during transportation.

b. TESTING REQUIREMENTS:

- (1) Lithium ion battery:
  - (i) Each cell within the battery must have been successfully tested in accordance with Section 38.3 of the UN Manual of Tests and Criteria, 5th Revised Edition.
  - (ii) The battery is not required to be tested in accordance with the Section 38.3 of the UN Manual of Tests and Criteria.
- (2) Heat pipes: The filled heat pipes must be proof pressure tested at a temperature of at least 120 °C and then leak tested.

c. OPERATIONAL CONTROLS:

- (1) Only low production lithium ion batteries contained in equipment as described in the application of DGM Italia Srl dated February 24, 2025 and on file with OHMS may be offered for transportation under the terms of this special permit. ("Low production" is defined as a production run of no more than 100 cells or batteries annually of a particular type.)
- (2) The watt-hour rating of the SAFT VES16 battery contained in equipment may not exceed a nominal energy of 3,072 Wh.
- (3) The battery must be equipped with an effective means of preventing dangerous reverse current flow.
- (4) The cells and the battery must be protected against short circuiting.
- (5) Transportation of the NTC containing the spacecraft and hazardous materials within the spacecraft is authorized for one-way from Italy to the United States.
- (6) The emergency response information provided with the shipment and available via an emergency response telephone number must indicate that certain packagings within the NTC are not fitted with a pressure relief device and must provide appropriate guidance in case of fire exposure.

d. MARKING: The NTC must be plainly and durably marked on two opposite sides in letters at least 2 inches in height on a contrasting background, "DOT-SP 21946" and "DO NOT STACK" as specified in § 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 or its contents and it is reoffered for transportation in conformance with this special permit and the HMR.
- b. A current copy of this special permit must be maintained at each facility where the package is offered or reoffered for transportation.

9. MODES OF TRANSPORTATION AUTHORIZED: Motor vehicle 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:
- 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 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: Steve H/ae