



U.S. Department  
of Transportation

**Pipeline and Hazardous  
Materials Safety  
Administration**

**March 18, 2025**

1200 New Jersey Avenue, SE  
Washington, DC 20590

DOT-SP 21854

**EXPIRATION DATE: 2027-01-31**

(FOR RENEWAL, SEE 49 CFR 107.109)

1. **GRANTEE:** Electronic Fluorocarbons, LLC  
Hopkinton, MA
2. **PURPOSE AND LIMITATION:**
  - a. This special permit authorizes the transportation in commerce of certain liquified gases in DOT 3AA specification cylinders where the liquid portion completely fills the cylinder. 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.
3. **REGULATORY SYSTEM AFFECTED:** 49 CFR Parts 106, 107 and 171-180.
4. **REGULATIONS FROM WHICH EXEMPTED:** 49 CFR § 173.304(b) and § 173.301(f)(2) in that the liquid portion of the gas may completely fill the cylinder at a temperature less than 55 °C (131 °F) and the pressure relief device is not in the vapor phase.
5. **BASIS:** This special permit is based on the application of Electronic Fluorocarbons, LLC dated August 30, 2024, submitted in accordance with § 107.105, the public proceeding thereon, and additional information submitted November 20, 2024.

Tracking Number: 2024094157

6. HAZARDOUS MATERIALS (49 CFR 172.101):

<b>Hazardous Materials Description</b>			
<b>Proper Shipping Name</b>	<b>Hazard Class/ Division</b>	<b>Identification Number</b>	<b>Packing Group</b>
Methyl fluoride, <i>or</i> Refrigerant gas R 41	2.1	UN2454	N/A

7. SAFETY CONTROL MEASURES:

a. PACKAGING Prescribed packaging is DOT specification 3AA cylinder which meets all requirements of §§ 178.35 and 178.37 as applicable.

- (1) The cylinder must have a marked service pressure of 2,265 psig or higher and minimum volume of 43.8 liters.
- (2) The cylinder shall be equipped with a pressure relief device (PRD) selected and set in accordance with § 173.301(f)(1) and (3).
- (3) The PRD burst disk must be rated for test pressure of 3,775 psig.
- (4) The maximum fill density of methyl fluoride (R41) in the cylinder shall not exceed 35.55 lb/ft<sup>3</sup>.

b. OPERATIONAL CONTROLS:

- (1) The cylinders must be shipped upright in cylinder racks or stands and properly secured for hazmat shipment.
- (2) The shipping papers must identify the cylinders with the special permit number "DOT-SP 21854".
- (3) The applicant, EFC Gases and Advanced Materials will act as the shipper and the cylinders must be transported by carriers that are hazmat certified.
- (4) The estimated number of shipments is 50 shipments per year with each shipment containing 10-30 cylinders.
- (5) Emergency response information is provided with the shipment on Safety Data Sheet (SDS) and Chemical Transportation Emergency Center (CHEMTREC) emergency response phone number.

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 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, rail freight, and cargo vessel

10. MODAL REQUIREMENTS: A current copy of this special permit must be carried aboard each cargo vessel, or motor vehicle used to transport packages covered by 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 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: RS/TG