



U.S. Department
of Transportation

**Pipeline and Hazardous
Materials Safety
Administration**

January 04, 2022

1200 New Jersey Avenue, SE
Washington, DC 20590

DOT-SP 5749
(TWENTIETH REVISION)

EXPIRATION DATE: 2025-11-30

(FOR RENEWAL, SEE 49 CFR 107.109)

1. GRANTEE: The Chemours Company FC LLC
Wilmington, DE
2. PURPOSE AND LIMITATION:
 - a. This special permit authorizes the transportation in commerce of a 60 percent tetrafluoroethylene/40 percent hydrogen chloride gas mixture classed as a Division 2.3 hazardous material in an insulated nickel-steel DOT Specification MC-331 cargo tank. 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.
 - c. Party status will not 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 173.315(a), Notes 22 and 25, in that alternative packaging is authorized as provided herein.
5. BASIS: This special permit is based on the application of The Chemours Company FC LLC dated September 10, 2021, submitted in accordance with § 107.109.

6. HAZARDOUS MATERIALS (49 172.101):

Hazardous Materials Description			
Proper Shipping Name	Hazard Class/ Division	Identification Number	Packing Group
Compressed gas, toxic, flammable, n.o.s. (60 percent tetrafluoroethylene/40 percent hydrogen chloride gas mixture)	2.3	UN1953	Hazard Zone D

7. SAFETY CONTROL MEASURES:

a. PACKAGING: Authorized packagings are prescribed in paragraphs 7.a.(1), (2), and (3) below:

(1) Packaging prescribed is an insulated nickel-steel DOT Specification MC 331 cargo tank as described on Lubbock Manufacturing Company's Drawing STR-716-A, TR-1609 (both with design pressure of 250 psig) except that liquid discharge openings are fitted with valves specifically approved by the Associate Administrator for Hazardous Materials Safety, as evidenced by listing in the cover letter to the current special permit. ORBIT Valve Company, ITT, or Hill-McCann Division valves as shown on the above drawing are acceptable. Liquid discharge opening must be less than 1-1/4 inches diameter as specified in § 178.337-11(c). The above-mentioned valves may also be applied to other discharge openings on the trailers. Means to determine that the valve is closed must be provided. Instructions must be permanently marked on the vehicle in the valve cabinet area to instruct the driver and other interested persons how to check on the valve closure. The reverse buckling rupture disc safety valve assembly must contain a screen designed and located to prevent fragments of the disc clogging the valve, and the space between the disc and the valve must be checked for pressure build-up each time the tank is loaded. Permissible modifications to drawings include:

- (i) Installation of a catwalk around outside of man way protective housing with access ladder to catwalk;
- (ii) Installation of a lightweight man way protective housing cover which retains original provision for safety valve discharge venting;
- (iii) Telltale device to verify integrity of rupture disc below safety valve;

- (iv) Replacement of original bolts and studs that may be susceptible to stress corrosion with alloy steel (ASTM 193 B7 OR B7M and ASTM A320 Grade 17M), Monel (ASTM F-468) or Inconel (AMS-5664A) bolts and studs;
 - (v) Replacement of carbon steel emergency cover rings at tank bottom outlet flanged fittings with Inconel emergency cover rings to eliminate corrosion of these rings;
 - (vi) Replacement of welded steel sheet metal bottom of the piping guard cabinet with Inconel edged fiberglass panels which are removable to provide open access to the trailer's operating valves under emergency conditions. The piping guard cabinet must meet the requirements of § 178.337-10;
 - (vii) Installation of storage cabinet on trailer to store emergency capping kit equipment; and
 - (viii) Modification of manhole dome protective housing to accommodate an emergency capping equipment yoke. The manhole dome protective housing must meet the requirements of § 178.337-10(a) and (b).
- (2) Packaging prescribed is an insulated nickel-steel DOT Specification MC 331 cargo tank as described on Keen Service Corporation's drawings D-230, D-231, and D-234 (design pressure of 450 psi). The liquid load line rupture disc assembly, as noted in detail X of drawing D-234 Rev. B, must be of the non-fragmenting type. The space between the rupture disc and the pressure relief valve must be checked for pressure build-up each time the tank is loaded.
- (3) Packaging prescribed is an insulated nickel-steel DOT Specification MC 331 cargo tank as described on Keen Service Corporation's drawings D-770, D-771 and D-774 (design pressure of 450 psi). The liquid load line rupture disc assembly, as noted in view A of drawing D-774, must be of the non-fragmenting type. The space between the rupture disc and the pressure relief valve must be checked for pressure build-up each time the tank is loaded.
- (4) Permissible modifications to the drawings include those for packaging authorized in paragraph 7.a.(1) of this permit as long as all changes comply with DOT Specification MC 331 cargo tanks and any requirements specific to the 60-percent tetrafluoroethylene/40-percent hydrogen chloride gas mixture.
- b. TESTING: Tanks must be tested to 1-1/2 times the service (design) pressure before being placed in service. Each cargo tank must be reinspected and retested once every 2 years in accordance with § 180.407(c) as prescribed for DOT Specification MC-331 cargo tanks.

c. OPERATIONAL CONTROLS:

(1) Material is loaded at -40 °F. Tanks must be filled by weight. Maximum filling density is 105%.

(2) The maximum hauling time is calculated as follows:

Max. Hauling Time = [Holding Time - 24 hours] ÷ 2.

Holding times and hauling times for tanks are as follows:

Tank Design Pressure	Holding Time	Hauling Time
250 psig	105 hours	40.5 hours
450 psig	207 hours	91.5 hours

(3) Before transportation in a residue condition, each tank must not contain more than 1,250 pounds of material. In addition, the vapor pressure must be so reduced to avoid the possibility of venting en route.

(4) Drivers must have been instructed about necessary safeguards and proper procedures in the event of unusual delay, fire, or accident.

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 who receives a package covered by this special permit may reoffer it for transportation provided no modifications or changes are 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 and cover letter must be maintained at each facility where the package is offered or reoffered for transportation.

d. MARKING: Each cargo tank must be plainly marked on the right side near the front, in letters at least 2-inches high on a contrasting background, "DOT-SP 5749".

9. MODES OF TRANSPORTATION AUTHORIZED: Motor vehicle.10. MODAL REQUIREMENTS: A current copy of this special permit must be carried aboard each 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 the 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: VC/NICKS