



U.S. Department  
of Transportation

**Research and  
Special Programs  
Administration**

400 Seventh Street, S.W.  
Washington, D.C. 20590

**FEB 18 2005**

DOT-E 12228  
(THIRD REVISION)

EXPIRATION DATE: December 31, 2006

(FOR RENEWAL, SEE 49 CFR § 107.109)

1. GRANTEE: E.I. DuPont de Nemours and Company, Inc.  
Wilmington, DE
2. PURPOSE AND LIMITATION:
  - a. This exemption authorizes the transportation in commerce of six (6) non-DOT Specification IMO Type 5 portable tanks that contain Division 2.1 and 2.2 compressed gases. This exemption provides no relief from the Hazardous Materials Regulations (HMR) other than as specifically stated herein.
  - b. The safety analyses performed in development of this exemption only considered the hazards and risks associated with transportation in commerce.
3. REGULATORY SYSTEM AFFECTED: 49 CFR Parts 106, 107 and 171-180.
4. REGULATIONS FROM WHICH EXEMPTED: 49 CFR § 173.315 in that a non-DOT specification portable tank is not authorized, except as specified herein.
5. BASIS: This exemption is based on the application of E.I. DuPont de Nemours and Company, Inc., dated January 21, 2005, submitted in accordance with § 107.109.

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6. HAZARDOUS MATERIALS (49 CFR § 172.101):

Proper Shipping Name/ Hazardous Materials Description	Hazard Class/ Division	Identi- fication Number
1-Chloro-1,2,2,2-tetrafluoroethane, or Refrigerant gas R 124	2.2	UN1021
Chlorodifluoromethane, or Refrigerant gas R 22	2.2	UN1018
Chlorodifluoromethane and chloropentaluoroethane mixture, or Refrigerant gas R 502	2.2	UN1973
Chloropentafluoroethane, or Refrigerant gas R 115	2.2	UN1020
1,2-Dichloro-1,1,2,2-tetrafluoroethane, or Refrigerant gas R 114	2.2	UN1958
1,1-Difluoroethane, or Refrigerant gas R 152a	2.1	UN1030
Dichlorodifluoromethane, or Refrigerant gas R 12	2.2	UN1028
1,1,1,2-Tetrafluoroethane, or Refrigerant gas R 134a	2.2	UN3159

Other Division 2.1 and 2.2 compressed gases may be authorized if specifically identified to, and acknowledged in writing by, the Office of Hazardous Materials Exemptions and Approvals (OHMEA) prior to the first shipment.

7. SAFETY CONTROL MEASURES:

a. PACKAGING - Prescribed packagings are six (6) non-DOT specification portable tanks, mounted in an ISO Type IC frame and are identified as DPGU 135001 through DPGU 135006.

The portable tanks are designed and constructed in accordance with: Section VIII, Division 1 of the ASME Code but are not "U" stamped; and Stefi Sovigal drawings CPS 62.12A (General Arrangement), 62.1B (Tank), 62.3A (Valves and Fittings) and 62.2C (ISO Frame) all dated July 1975, and with other supporting drawings, calculations, and technical specifications on file with the Office of Hazardous Materials Exemptions and Approvals (OHMEA), and in accordance with the following:

- (1) Code: complies with DOT Specification 51 except that the tanks are not ASME Code "U" stamped
  - (2) Material: French designation A52P1 carbon steel
  - (3) Design pressure: 291 psig
  - (4) Tank size (inches): 74.8 (OD) x 220.1 (Length)  
Shell thickness (in): 0.590 min.  
Head thickness (in): 0.551 min.
  - (5) Water capacity: 3,786 US Gallons
  - (6) Openings: One (1)- 16 inch manway on the head; two (2) - 2 inch diameter pressure relief devices on the top of the tank; one (1)- 3 inch diameter liquid valve and one (1) - 2 inch diameter vapor valve on the bottom of the tank; two (2) - 0.5 inch diameter nozzles in head for a manometer and a thermowell; and one (1) - 1 inch diameter nozzle for a liquid level gauge in the manhole cover.
  - (7) Pressure relief devices: two (2)- 2 inch diameter spring loaded valves set to discharge at a pressure between 291 and 320 psig; and having a minimum total relief device capacity of 1,386,000 SCFH. Each pressure relief device must be marked with start-to-discharge pressure in psig and a rated relief device capacity in SCFH.
  - (8) Tank surface area: 430 square feet
  - (9) Maximum load: 37,479 pounds
  - (10) Tare weight: 15,432 pounds
  - (11) Maximum gross weight: 52,911 pounds
- b. TESTING - Each tank must be retested and reinspected once every five years as specified for DOT Specification 51 portable tanks in § 173.32.

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c. OPERATIONAL CONTROLS -

(1) Each tank must be visually inspected prior to each trip to insure that it was not damaged on the previous trip.

(2) The tank must be filled so as not to be liquid full at less than or equal to 130°F.

(3) Tanks must be filled by weight.

(4) No product may be shipped that has a venting requirement greater than 1,386,000 SCFH. The venting capacity required for each product must be determined by the flow formulas contained in the Compressed Gas Association Pamphlet S-1.2.

(5) No new construction is authorized.

8. SPECIAL PROVISIONS:

a. A person who is not a holder of this exemption who receives a package covered by this exemption 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 exemption and the HMR.

b. A current copy of this exemption must be maintained at each facility where the package is offered or reoffered for transportation.

c. MARKING - Each tank must be plainly and durably marked on both sides near the middle in letters two inches high on a contrasting background, "DOT-E 12228".

d. Hydrostatic test certificates for each tank must be kept on file by the manufacturer or owner at its principal business office and made available to the Office of Hazardous Materials Safety upon request.

9. MODES OF TRANSPORTATION AUTHORIZED: Motor vehicle, rail freight and cargo vessel.

10. MODAL REQUIREMENTS:

a. A current copy of this exemption must be carried aboard each cargo vessel or motor vehicle used to transport packages covered by this exemption.

b. Portable tanks may not be transported in container-on-flat-car (COFC) or trailer-on-flat-car (TOFC) service except under conditions approved by the Associate Administrator for Safety, Federal Railroad Administration (See § 174.63).

11. COMPLIANCE: Failure by a person to comply with any of the following may result in suspension or revocation of this exemption 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 exemption and the Hazardous Materials Regulations, 49 CFR Parts 171-180.
- o Persons operating under the terms of this exemption 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.

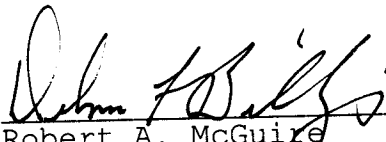
Each "Hazmat employee", as defined in § 171.8, who performs a function subject to this exemption must receive training on the requirements and conditions of this exemption in addition to the training required by §§ 172.700 through 172.704.

No person may use or apply this exemption, including display of its number, when this exemption has expired or is otherwise no longer in effect.

12. REPORTING REQUIREMENTS: Shipments or operations conducted under this exemption 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 exemption must notify the Associate Administrator for

Hazardous Materials Safety -- OHMEA, in writing, of any incident involving a package, shipment or operation conducted under terms of this exemption.

Issued in Washington, D.C.:

*for*  
  
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Robert A. McGuire  
Associate Administrator for  
Hazardous Materials Safety

**FEB 18 2005**

\_\_\_\_\_  
DATE

Address all inquiries to: Associate Administrator for Hazardous Materials Safety, Research and Special Programs Administration, Department of Transportation, Washington, D.C. 20590.  
Attention: DHM-31.

Copies of this exemption may be obtained by accessing the Hazardous Materials Safety Homepage at <http://hazmat.dot.gov/exemptions> Photo reproductions and legible reductions of this exemption are permitted. Any alteration of this exemption is prohibited.

PO: PTO/AM