



U.S. Department  
of Transportation

**Research and  
Special Programs  
Administration**

FEB 20 1996

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

DOT-E 11604

**EXPIRATION DATE: January 31, 1998**

(FOR RENEWAL, SEE 49 CFR SECTION 107.105)

1. **GRANTEE:** G.R.P. Transporti Ferroviari S.A.  
Chiasso, Switzerland  
  
US Agent: James R. Grothe, Daytona Beach, FL
2. **PURPOSE AND LIMITATION:** This exemption authorizes the transportation in commerce of certain Division 2.2 materials in non-DOT specification IMO Type 5 steel portable tanks which are mounted in ISO frames and conform with DOT Specification 51, except all openings are not grouped in one location. This exemption provides no relief from any regulation other than as specifically stated herein.
3. **REGULATORY SYSTEM AFFECTED:** 49 CFR Parts 106, 107 and 171-180.
4. **REGULATIONS FROM WHICH EXEMPTED:** 49 CFR Part 178.245-1(b).
5. **BASIS:** This exemption is based on the application of G.R.P. Transporti Ferroviari S.A., dated November 28, 1995, submitted in accordance with 49 CFR 107.103 and the public proceeding thereon.
6. **HAZARDOUS MATERIALS (49 CFR 172.101):**

Hazardous materials description -- proper shipping name	Hazard Class/ Division	Identi- fication Number	Packing Group
Chlorodifluoromethane, R22	2.2	UN1018	N/A
Dichlorofluoromethane, R12	2.2	UN1028	N/A

7. PACKAGING AND SAFETY CONTROL MEASURES:

a. PACKAGING - Packaging prescribed is a non-DOT specification steel portable tank, mounted in an ISO frame, designed to comply with DOT Specification 51, including ASME "U" stamp, except that the fill and discharge openings are located on the bottom of the tank. The tanks are constructed in accordance with GRIRO S.A. drawing numbers GR-4154-1.0, Sheets 1 and 2 and GR-4154-2.0, other drawings, technical specifications, and calculations on file with the Office of Hazardous Materials Exemptions and Approvals (OHMEA) and in compliance with the following:

- (1) Code - Tanks must comply with DOT Specification 51 in all respects except that the fill and discharge openings are located on the bottom of the tank.
- (2) Material - SA-299 carbon steel.
- (3) Water Capacity (US Gallons) - 4,755.
- (4) Insulation - None. Tank provided with sunshield.
- (5) Baffles - 2
- (6) Tank Size -

	Outside Diameter	Length	Thickness
Inches	80.7	188.2	Shell: 0.77 Head: 0.86

Head Thickness - 0.77 (min. after forming)

Weld Joint Efficiency - 1

Corrosion Allowance - 0.0

- (7) Design pressure - 360 psig

Note: Design pressure means "Maximum allowable working pressure (MAWP)" as used in the ASME Code.

(8) Test pressure - 540 psig

(9) Openings - Two (2) openings for 2 inch diameter pressure relief devices on top of the tank; one (1) opening for a 16.5 inch diameter manway on the front head; one (1) opening for a 2 inch diameter vapor phase valve and one (1) opening for a 3 inch diameter liquid phase valve on the bottom of the tank.

NOTE: Each bottom outlet valve must be provided with a shear section that meets the requirements of 49 CFR 178.337-12.

(10) Pressure relief devices - Two (2) 2 inch diameter spring loaded safety relief valve set at 396 psig.

(11) Total relief device capacity - 2,055,614 SCFH

(12) Maximum gross weight (pounds) - 67,210

(13) Maximum commodity weight (pounds) - 47,255

(14) Tare weight (pounds) - 19,955

(15) Design temperature - -40°F to +131°F

b. TESTING - Each tank must (i) be initially tested as required for DOT Specification 51 portable tanks in 49 CFR 178.245; and (ii) be reinspected and retested once every five years in accordance with 49 CFR 173.32(e) as prescribed for DOT Specification 51 portable tanks.

c. OPERATIONAL CONTROLS -

(1) Each tank must be visually inspected prior to shipment to ensure that it has not been damaged during loading.

(2) No product may be shipped that has a venting requirement exceeding 2,055,614 SCFH. The venting capacity required for each product must be determined by the flow formulas contained in the Compressed Gas Association (CGA) Pamphlet S-1.2.

8. SPECIAL PROVISIONS:

a. Persons who receive the packages covered by this exemption may reoffer them for transportation provided no modifications or changes are made to the packages, all terms of this exemption are complied with and a current copy of this exemption is maintained at each facility from which such reoffering occurs.

b. Shippers using the packaging covered by this exemption must comply with all provisions of this exemption, and all other applicable requirements contained in 49 CFR Parts 171-180.

c. MARKING - Each portable tank must be plainly marked on both sides near the middle, in letters and numerals at least two inches high on a contrasting background, "DOT-E 11604". Each pressure relief valve must be marked with start-to-discharge pressure in psig and a rated relief device capacity in SCF/min.

9. MODES OF TRANSPORTATION AUTHORIZED: Motor vehicle, rail freight, and cargo vessel.10. MODAL REQUIREMENTS:

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

b. Rear end protection for the motor vehicle must meet the requirements of 49 CFR 178.338-10(c) and 49 CFR 393.86.

c. Each portable tank must be secured to the motor vehicle in conformance with the requirements of 49 CFR 393.100 through 393.106.

d. 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.

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. Section 5101 et seq:

- o All terms and conditions prescribed in this exemption and the Hazardous Materials Regulations, 49 CFR Parts 171-180.
- o Registration required by 49 CFR 107.601 et seq., when applicable.

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

12. REPORTING REQUIREMENTS: The carrier is required to report any incident involving loss of packaging contents or packaging failure to the Associate Administrator for Hazardous Materials Safety (AAHMS) as soon as practicable. (49 CFR 171.15 and 171.16 apply to any activity undertaken under the authority of this exemption.) In addition, the holder(s) of this exemption must inform the AAHMS, in writing, of any incidents involving the package and shipments made under the terms of this exemption.

Issued at Washington, D.C.:



Alan I. Roberts  
Associate Administrator  
for Hazardous Materials Safety

FEB 20 1996

(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.

The original of this exemption is on file at the above office. Photo reproductions and legible reductions of this exemption are permitted. Any alteration of this exemption is prohibited.

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