



U.S. Department
of Transportation

**Research and
Special Programs
Administration**

NOV 3 - 1995

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

DOT-E 11211
(FIRST REVISION)

EXPIRATION DATE: January 31, 1997

(FOR RENEWAL, SEE 49 CFR 107.105.)

1. GRANTEE: Citergaz SA, Civray, France
US Agent: Travel and Trade International,
Alexandria, Virginia
2. PURPOSE AND LIMITATIONS: This exemption authorizes the manufacture, mark and sale of non-DOT specification portable tanks comparable to DOT Specification 51 except for the location of the openings to be used for the transportation in commerce of certain compressed gases. 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 Section 178.245-1(b).
5. BASIS: This exemption is based on the application of Citergaz dated January 22, 1994, and supplemental information dated May 6, 18, August 31, October 6, December 17, 1994 and January 25 and September 14, 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	Identification number
Ammonia, anhydrous, liquefied	2.3	UN1005
Butadienes, inhibited	2.1	UN1010
Butane	2.1	UN1011
Butylene	2.1	UN1012
Chlorodifluoromethane, (R22)	2.2	UN1018

6. HAZARDOUS MATERIALS (49 CFR 172.101) CONTINUED:

Hazardous materials description/proper shipping name	Hazard Class/Division	Identification number
Chloropentafluoroethane, (R115)	2.2	UN1020
Chlorotetrafluoroethane, (R124)	2.2	UN1021
Cyclopropane, liquefied	2.1	UN1027
Dichlorodifluoromethane, (R12)	2.2	UN1028
Dichlorofluoromethane, R21	2.2	UN1029
Difluoroethane, (R152a)	2.1	UN 1030
Dimethylamine, anhydrous	2.1	UN1032
Dimethyl ether	2.1	UN1033
Ethylamine	2.1	UN1036
Ethyl chloride	2.1	UN1037
Isobutylene	2.1	UN1055
Methylamine, anhydrous	2.1	UN1061
Methyl chloride	2.1	UN1063
Propylene	2.1	UN1077
Trimethylamine, anhydrous	2.1	UN1083
Vinyl chloride, inhibited	2.1	UN1086
Vinyl methyl ether, inhibited	2.1	UN1087
Dichlorotetrafluoroethane, (R114)	2.2	UN1958
Isobutane or Isobutane mixtures	2.1	UN1969
Chlorodifluoromethane and chloropentafluoroethane mixture, (R502)	2.2	UN1973
Chlorodifluorobromomethane, R12B1	2.2	UN1974
Propane	2.1	UN1978
Chlorotrifluoroethane, (R133a)	2.2	UN1983
Trifluoroethane, compressed, (R143)	2.1	UN2035
Chlorodifluoroethanes, (R142)	2.1	UN2517
Dichlorodifluoromethane and difluoroethane azeotropic mixture, R500	2.2	UN2602

7. PACKAGING(S) and SAFETY CONTROL MEASURES:

a. PACKAGING - Packaging prescribed is a non-DOT specification portable tank, mounted in an ISO frame, designed and constructed in accordance with Citergaz SA drawing numbers ES240003 Rev. E; CHC225 Rev. B; 92239 Rev. A; 91230 Rev. B; 91308 Rev. B. Portable tanks must be designed and constructed in accordance with drawings, technical specifications, and calculations on file with the Office of Hazardous Materials Exemptions and Approvals (OHMEA), and in compliance with the following provisions:

i. Code:

A. Complies with DOT Specification 51 in all respects except openings may be located on the tank in areas other than on the top or at the end;

B. is designed, constructed, and certified in accordance with the ASME Code; and

C. meets IMO Type 5.

ii. Water capacity (U.S. Gallons) - 6,420

iii. Insulation - Tanks are provided with a sun shield.

iv. Material - ASME SA-738 Grade A (carbon steel)

v. Tank Size:

	Outside Diameter	Length	Thickness
(Inches)	94.4	237.8	0.807

Head Thickness - 0.744 inches

Weld Joint Efficiency - 1.0

Corrosion Allowance - 0.0

Number of Baffles - 3

vi. Design pressure (psig) - 319

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

vii. Test Pressure, minimum (psig) - 479

- viii. Openings - One (1) 18 inch diameter opening for the manhole; one (1) 2 inch diameter opening for the vapor phase connection and one (1) 2 inch diameter opening for the liquid phase connection on the bottom of the tank; and one (1) 5 inch diameter opening for the pressure relief device on the top 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.

- ix. Tank surface area (square feet) - 538.2
- x. Pressure Relief Devices - One (1) 3 inch diameter spring loaded pressure relief valve outboard of and in series with one (1) 3 inch rupture disk, all set to open at 319 psig. Total relief device capacity is 24,170 SCF/min.
- xi. G-Loadings: Vertical down 2; Vertical up 1; Longitudinal 2; and Transverse 1.
- xii. Maximum Gross Weight (pounds) - 74,957
- xiii. Maximum Commodity Weight (pounds) - 49,604
- xiv. Tare Weight (pounds) - 25,353
- xv. Design Specific Gravity - 0.926
- xvi. Design Temperature Range (°F): - 40°F to + 131°F.

b. TESTING - Each package must meet all requirements for initial qualification and for retesting that are applicable to a DOT Specification 51 portable tank.

c. MARKING - Each portable tank must be marked in accordance with 49 CFR 173.32(e)(3). Each tank must be plainly marked on both sides near the middle, in letters at least two inches high on a contrasting background, "DOT-E 11211". Each pressure relief device must be marked with a start-to-discharge pressure in psig and a rated relief device capacity in SCF/min. A tank containing anhydrous ammonia must be marked "INHALATION HAZARD" on two opposing sides in accordance with 49 CFR 172.313(a).

8. SPECIAL PROVISIONS:

a. Offerors for transportation of the hazardous materials specified in this exemption may use the packaging described in this exemption for the transportation of such hazardous materials so long as no modifications or changes are made to the packages, all terms of this exemption are complied with, and a copy of the current exemption is maintained at each facility from which such offering occurs.

b. Each packaging manufactured under the authority of this exemption must be either (1) marked with the name of the manufacturer and location (city and state) of the facility at which it is manufactured or (2) marked with a registration symbol designated for a specific manufacturing facility.

c. A copy of this exemption, in its current status, must be maintained at each manufacturing facility at which this packaging is manufactured and must be made available to a DOT representative upon request.

d. 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.

e. Rear end protection for the motor vehicle must meet the requirements of 49 CFR 178.340-8(b) and 393.86.

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

g. Hydrostatic test certificates for each tank must be maintained by the owner or manufacturer at its principal business office and be made available to any representative of the DOT upon request.

h. No product may be shipped that has venting requirements exceeding 24,170 SCF/min. The venting capacity required for each product must be determined by the flow formulas contained in the Compressed Gas Association's (CGA) Pamphlet S-1.2.

i. The tank must be filled by weight in accordance with the provisions of 49 CFR 173.315 for compressed gases.

j. Each tank must be visually inspected prior to each trip to ensure that it has not been damaged on the previous trip.

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

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.

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 Federal hazardous materials transportation law 49 U.S.C Section 5101 et seq:

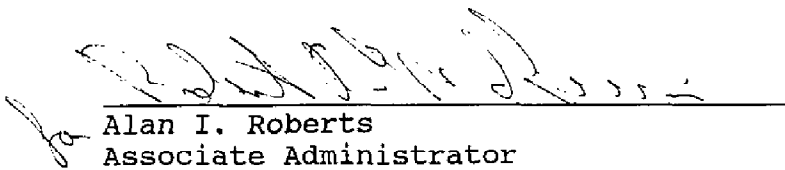
- o All terms and conditions prescribed in this exemption and the Hazardous Materials Regulations, 49 CFR Parts 171-180.
- o Registration required by 49 CFR 107.601 et seq., when applicable.

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.:

NOV 3 - 1995



Alan I. Roberts
Associate Administrator
for Hazardous Materials Safety

(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.
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