U.S. Department
of Transportation

**Research and
Special Programs
Administration**

MAR 8 2000

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

DOT-E 8977
(SECOND REVISION)

EXPIRATION DATE: February 28, 2002

(FOR RENEWAL, SEE 49 CFR § 107.109)

1. GRANTEE: Eurotainer SA
Paris, France
(U.S. Agent Eurotainer US, Inc. Somerset, NJ)

2. PURPOSE AND LIMITATION: This exemption authorizes the transportation in commerce of certain liquefied compressed gases in non-DOT Specification IMO Type 5 portable tanks. 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 §§ 173.315 and 178.245.

5. BASIS: This exemption is based on the application of Eurotainer SA dated February 15, 2000, submitted in accordance with § 107.109.

6. HAZARDOUS MATERIALS (49 CFR § 172.101):

Hazardous materials description -- proper shipping name	Hazard Class/ Division	Identi-fication Number	Packing Group
Chlorodifluoromethane	2.2	UN1018	N/A
Chloropentafluoroethane	2.2	UN1020	N/A
Dichlorodifluromethane	2.2	UN1028	N/A

7. PACKAGING 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 Bignier, Schmid-Laurent drawing 234020-1 Rev.B, 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--Complies with DOT Specification 51 except tanks are not ASME Code stamped; IMO Type 5.

(2) Insulation -- None, tank is provided with a sun shield.

(3) Water Capacity (U.S. Gallons) -- 4,438.

(4) Material -- French steel standard NFA 36205, designation A 52 FP (Carbon steel), Yield strength- 51,475 psi. Tensile strength -73,950 psi.

(5) Tank Size (inches)

(outside dia.)	X (length)	X (thickness)
82.677	213.50	0.677 (min.)

Head Thickness -- 0.630 (min.)
Weld Joint Efficiency -- 1.0
Corrosion Allowance -- 0.0
Number of Baffles -- 2

(6) Design Pressure (PSIG) -- 304.5
Note: Design pressure means "maximum allowable working pressure (MAWP)" as used in the ASME Code.

(7) Test Pressure, Minimum (PSIG) -- 456.8

(8) Openings -- Two(2), 6.5 inch diameter openings for the safety relief devices on the top; one(1), 18 inch diameter manhole, one(1), 3 inch diameter liquid phase opening and one(1), 2 inch diameter gas phase opening on the head. No bottom outlets.

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

(9) Tank surface area (square feet) -- 409

(10) Pressure Relief Devices -- Two(2), 2.0 inch diameter spring loaded safety relief valves set at 328 psig. Total relief device capacity is 1,439,800 SCFH.

(11) G-Loadings: Vertical down 2; Vertical up 2; Longitudinal 2; and Transverse 2.

(12) Maximum Gross Weight (pounds) -- 57,320

(13) Maximum Commodity Weight (pounds) -- 39,904

(14) Tare Weight (pounds) -- 17,416

(15) Design Specific Gravity = 1.08

(16) Operating Temperature Range (°F) = (-40 to 131)

b. TESTING -

1. Each tank must be (i) visually inspected prior to each trip to insure that it has not been damaged on the previous trip; and (ii) retested and reinspected once every five years in accordance with 49 CFR 173.32 prescribed for DOT Specification 51 portable tanks.

2. A test report documenting a satisfactorily ISO prototype test for this tank design must be on file with the OHMEA prior to the first shipment.

3. 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.

c. OPERATIONAL CONTROLS -

1. No product may be shipped that has venting requirements exceeding 1,439,800 SCFH, or has a specific gravity greater than 1.35. The venting capacity required for each product must be determined by the flow formulas contained in Compressed Gas Association (CGA) pamphlet S-1.2.

2. The tank must be filled in accordance with the provisions of § 173.315.

3. 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.

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 modifications or changes are made to the package 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 -

1. Each portable tank must be plainly marked on both sides near the middle, in letters at least two inches high on a contrasting background, "DOT-E 8977".

2. "DOT-E 8977" must be stamped on the metal manufacturer's data plate on the line which reads "U.S. D.O.T. Specification No.".

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

10. MODAL REQUIREMENTS: A current copy of this exemption must be carried aboard each cargo vessel 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 the Federal hazardous materials transportation law, 49 U.S.C. 5101 et seq:

- All terms and conditions prescribed in this exemption and the Hazardous Materials Regulations, 49 CFR Parts 171-180.
- 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 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. (Sections 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 incident involving the package and shipments made under the terms of this exemption.

Issued at Washington, D.C.:

For Robert A. McGuire
Acting Associate Administrator
for Hazardous Materials Safety

MAR 8 2000
(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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