U.S. Department of Transportation
Research and Special Programs Administration

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

DOT-E 9424 (EXTENSION)
FIRST REVISION August 11, 1988

In accordance with 49 CFR 107.105 of the Department of Transportation (DOT) Hazardous Materials Regulations DOT-E 9424 is hereby extended for the party(ies) listed below by changing the expiration date in paragraph 10 to March 31, 1995. This change is effective from the issue date of this extension. All other terms of the exemption remain unchanged.

This extension applies only to party(ies) listed below based on the application(s) received in accordance with 49 CFR 107.105. This extension constitutes a necessary part of this exemption and must be attached to it.

Alan I. Roberts
Associate Administrator
for Hazardous Materials Safety

(DATE)

Dist: FHWA FRA USCG

*EXEMPTION HOLDER	APPLICATION DATE
VTG Vereinigte Tanklager und Transportmittel GmbH Hamburg, West Germany (U.S. AGENT: Montgomery Tank Lines Exton, PA)	March 25, 1993

EXPIRED - 3-31-95
NOT ACTIVE

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DOT-E 9424
(FIRST REVISION)

AUG 11 1988

1. Vereinigte Tanklager und Transportmittel GmbH (VTG), Hamburg, West Germany (U.S. Agent: Offshore Supply Association, Inc., Houston, Texas) is hereby granted an exemption from certain provisions of this Department's Hazardous Materials Regulations to offer the packaging described in paragraph 7 below for use in the transportation of the liquefied compressed gases described in paragraph 3 below in commerce subject to the requirements specified herein. This exemption authorizes the use of a non-DOT specification IMO Type 5 portable tank, and provides no relief from any regulation other than as specifically stated.

2. BASIS. This exemption is based on VTG's application dated October 28, 1987, and additional information dated April 26, 1988, submitted in accordance with 49 CFR 107.105 and the public proceeding thereon.

3. HAZARDOUS MATERIALS (Descriptor and Class). Dichlorodifluoromethane, classed as nonflammable gas; other nonflammable gases specifically identified to, and acknowledged in writing by, the Office of Hazardous Materials Transportation (OHMT) prior to the first shipment.

4. PROPER SHIPPING NAME (49 CFR 172.101). The chemical name, or generic description, as appropriate.

5. REGULATION AFFECTED. 49 CFR 173.315, 178.245.

6. MODES OF TRANSPORTATION AUTHORIZED. Motor vehicle, rail freight, cargo vessel.

7. SAFETY CONTROL MEASURES.

a. Packaging prescribed is a non-DOT specification portable tank, mounted in ISO frame, designed and constructed in accordance with Westerwalder Eisenwerk drawings CS-908-1, CS-908-3b, CS-908-7.2a, all dated March 15, 1985, other drawings, technical specifications and calculations on file with the OHMT, and in compliance with the following:

(1) Code - Complies with DOT Specification 51 except that the tanks are not ASME Code "U" stamped and have bottom outlets, IMO Type 5.

(2) Insulation - None, equipped with a sun shield.

(3) Water Capacity (U.S. Gallons) - 5,284.

(4) Material - German Steel ESTE 420 equivalent to ASTM SA 737 Grade C; Yield strength - 56,260 psi; Tensile strength - 76,850 psi.

	(outside dia.)	X (length)	X (Thickness)
(5) Tank Size (inches) -	86.61	229.53	0.5669

Head Thickness - 0.5669
Weld Joint Efficiency - 1.0
Corrosion Allowance - 0.0

(6) Design Pressure (PSIG) - 251.3
Note: Design pressure means "maximum allowable working pressure (MAWP)" as used in the ASME Code.

(7) Test Pressure, Minimum (PSIG) - 377.1

(8) Openings - One (1) - 10.23 inch diameter opening for the pressure relief device on the top; one (1) - 19.68 inch diameter opening for the manhole on the head; one (1) - 4.33 inch diameter opening for the liquid phase valve and one (1) - 4.02 inch diameter opening for the gas phase valve on the bottom.
Note. Each bottom outlet valve must be provided with a remote means of closure and a shear section that meets the requirements of 49 CFR 178.337-11 and 178.337-12.

(9) Tank surface area (square feet) - 462

(10) Pressure Relief Devices - One (1) - 3.0 inch diameter spring loaded pressure relief valve outboard of and in series with a 3.0 inch diameter rupture disc both set at 276.4 psig. Total relief device capacity is 1,200,540 SCFH.

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

(12) Maximum Gross Weight (pounds) - 67,200

(13) Maximum Commodity Weight (pounds) - 51,770

(14) Tare Weight (pounds) - 15,430

(15) Design Specific Gravity - 1.17

(16) Design Temperature (°F) - 149

8. SPECIAL PROVISIONS.

a. Shippers may use the packaging covered by this exemption pursuant to 49 CFR 173.22a.

b. A copy of this exemption must be carried aboard each vessel used to transport packages covered by this exemption.

c. 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 9424".

d. 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.

e. No product may be shipped that has venting requirements exceeding 1,200,540 SCFH, or has a specific gravity greater than 1.46. The venting capacity required for each product must be determined by the flow formulas contained in Compressed Gas Association (CGA) pamphlet S-1.2.

f. A test report documenting a satisfactory ISO prototype test for this tank design must be on file with the OHMT prior to the first shipment.

g. The tank must be filled by weight in accordance with the provisions of 49 CFR 173.315.

h. 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 as prescribed for DOT Specification 51 portable tanks.

i. 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.

j. DOT-E 9424 must be stamped on the metal manufacturer's data plate on the line which reads "U.S. DOT Specification No."

k. For each portable tank, the manufacturer must prepare a certificate which must be signed by a responsible official of the manufacturer and an independent inspection agency certifying that the portable tank is designed and constructed in accordance with the ASME Code and this exemption. The certificate for the first portable tank fabricated must be submitted to the OHMT prior to the initial shipment.

l. The construction of all portable tanks authorized by this exemption started after October 1, 1985, must be in full conformance with the ASME Code including the "U" stamp.

9. <u>REPORTING REQUIREMENTS</u>.

a. The owner of the tanks covered by this exemption shall provide to the OHMT a list of all shippers who have shipped under this exemption and a shipping experience report every six months from the effective

date of this exemption. The shipping experience report shall contain approximate number of shipments made during the previous six months and any difficultures encountered.

b. The holder of this exemption, as identified in paragraph 1 above, shall contact the OHMT immediately after any of the tanks covered by this exemption are sold to another party.

c. Shippers who ship under the terms of this exemption shall report any incident involving loss of contents of the tanks described herein to the OHMT as soon as practicable.

10. EXPIRATION DATE. July 1, 1990.

Issued at Washington, D.C.:

AUG 11 1988

Alan I. Roberts
Director
Office of Hazardous Materials
Transportation

(DATE)

Address all inquiries to: Director, Office of Hazardous Materials Transportation, Research and Special Programs Administration, U.S. Department of Transportation, Washington, D.C. 20590. Attention: Exemptions Branch.

Dist: USCG, FHWA, FRA