

U.S. Department of Transportation

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

Research and Special Programs Administration

# DOT-E 8791 (EXTENSION) FIRST REVISION April 8, 1986

In accordance with 49 CFR 107.105 of the Department of Transportation (DOT) Hazardous Materials Regulations DOT-E 8791 is hereby extended for the party(ies) listed below by changing the expiration date in paragraph 10 to November 30, 1993. 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.

Alam I. Roberts

Associate Administrator

for Hazardous Materials Safety

JAN | 5 | 1992

(DATE)

Dist: FHWA FRA USCG

EXEMPTION HOLDER

APPLICATION DATE

ICI Americas, Inc. Wilmington, DE

November 18, 1991



U.S. Department of Transportation

Research and Special Programs Administration 400 Seventh St., S.W. Washington, D.C. 20590

## DOT-E 8791 (FIRST REVISION)

- 1. Stauffer Chemical Company, Westport, Connecticut, is hereby granted an exemption from those provisions of this Department's Hazardous Materials Regulations specified in paragraph 5 below to offer the packaging described in paragraph 7 below for use in the transportation of the corrosive materials described in paragraph 3 below in commerce subject to the requirements specified herein. This exemption authorizes the use of a non-DOT specification portable tank equivalent to a DOT Specification 51 portable tank, and provides no relief from any regulation other than as specifically stated.
- 2. BASIS. This exemption is based on Stauffer Chemical Company's application dated February 12, 1986, submitted in accordance with 49 CFR 107.105 and the public proceeding thereon, and additional information dated March 17, 1986.
- 3. HAZARDOUS MATERIALS (Descriptor and class).
  - a. Ethyl chlorothioformate classed as corrosive material; other corrosive liquids which are corrosive to skin only and are compatible with the tank and its appurtenances; and corrosive liquids specifically identified to, and acknowledged in writing by, the Office of Hazardous Materials Transportation (OHMT) prior to first shipment.
- 4. PROPER SHIPPING NAME (49 CFR 172.101). Chemical name, or generic description, as appropriate.
- 5. REGULATION AFFECTED. 49 CFR 173.3a, 173.245a, 178.245-1.
- 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 manufactured by Bignier, Schmid Laurent (BSL) that is built to the DOT-51 specification except for postweld heat treatment. The tank is mounted in an ISO frame, designed and constructed in accordance with technical specifications and calculations on file with the OHMT and in compliance with the following:

(1)	Design drawings	BSL 134021-1 through 134021-5	BSL 130431-1 through 134031-4
(2)	Code-Complies with	ASME Code	
(3)	Water Capacity (U.S. Gallons)	4755	4250
(4)	Material	Stainless steel AISI 316L	

(5)	Tank Size (inches)				
	Outside diameter	81.35	77.17		
	Length	229.50	228.58		
	Shell thickness	0.31	0.31		
	Head thickness (after forming)	0.33	0.33		
	Weld joint efficiency	1.0	1.0		
(6)	Design Pressure (nsig)	100	100		

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

- (7) Test Pressure, Minimum (psig) 150 150
- (8) Openings One(1) 19.7 inch diameter manhole; two(2) relief valve/rupture disc assemblies, one(1) fill/discharge line assembly with a 3 inch top outlet ball valve and terminating in a blank flange, one(1) air/nitrogen connection complete with a 2 inch ball valve and terminating in a blank flange, two(2) 1-1/2 inch diameter pressure gauge to monitor rupture disc integrity.
- (9) Safety relief devices two(2) relief valves in series with and outboard of two rupture discs all set at 100 to 110 psig. Capacity 741,000 SCFH.
- (10) G-Loading Vertical up 1; Vertical down 2; Transverse 1; Longitudinally 2.

(11)	Maximum Gross Weight (pounds)	55,115	55,115
(12)	Tare Weight (pounds)	9,920	9,920
(13)	Payload Weight (pounds)	45,195	45,195
(14)	Design Specific Gravity	1.13	1.13
(15)	Maximum Product Specific Gravity	1.41	1.60
(16)	Tank Area (square feet)	490	425

#### 8. SPECIAL PROVISIONS.

- a. Shippers may use the packaging(s) covered by this exemption pursuant to the 49 CFR 173.22a.
- b. A copy of this exemption must be carried aboard each vessel, and motor vehicle 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 8791." Additionally, each tank used to transport ethyl chlorothioformate must be marked "INHALATION HAZARD" in letters at least three and one-half inches high on a contrasting background. Name plate must be marked with DOT-E 8791 in lieu of DOT-51.
- d. Hydrostatic test certificates for each tank must be kept on file by the manufacturer or owner at its principal business office and be made available to the OHMT upon request.
- e. No product may be shipped that has venting requirements exceeding 741,000 SCFH. 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. The tank must be filled so as not to be liquid full at less than or equal to 130°F.
- g. Each tank must be (i) visually inspected prior to each trip to insure that it has not been damaged on the previous trip; (ii) visually inspected at least once every 2-1/2 years in accordance with the provisions of 49 CFR 173.32(c) and (iii) pressure tested at least once every 5 years, at one and one-half times the design pressure.
- h. Shipment by rail in container-on-flat car (COFC) service or trailer-on-flat car (TOFC) service is only authorized under conditions approved by the Associate Administrator for Safety, Federal Railroad Administration.
- i. For the transportation of ethyl chlorothioformate, this exemption serves as an approval under the provisions of 49 CFR 173.3a(a)(3).

### 9. REPORTING REQUIREMENTS.

- 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 difficulties encountered.
- b. The holder of this exemption, as identified in paragraph I 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 damage to the packaging or loss of contents of the package described herein to the OHMT as soon as practicable.

(DATE)

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# 10. EXPIRATION DATE. March 31, 1988.

Issued at Washington, D.C.:

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Alan I. Roberts

Director

Office of Hazardous Materials Transportation

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.

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