



U.S. Department  
of Transportation

Research and  
Special Programs  
Administration

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

**DOT-E 9916 (EXTENSION)**  
**ORIGINAL October 5, 1988**

In accordance with 49 CFR 107.109 of the Department of Transportation (DOT) Hazardous Materials Regulations DOT-E 9916 is hereby extended for the party(ies) listed below by changing the expiration date in paragraph 10 to September 30, 1998. 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 107.109. This extension constitutes a necessary part of this exemption and must be attached to it.

*Marilyn J. Morris*  
for Alan I. Roberts  
Associate Administrator  
for Hazardous Materials Safety

*November 4, 1996*  
(DATE)

Dist: FHWA FRA USCG

EXEMPTION HOLDER

APPLICATION DATE

Baker Performance Chemicals, Inc.  
Houston, TX

August 5, 1996



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DOT-E 9916

1. B.S.L. Transport, Quievrechain, France (U.S. Agent: BSL Transportation Equipment, Roselle Park, New Jersey), is hereby granted an exemption from certain provisions of this Department's Hazardous Materials Regulations to offer packages of a flammable liquid for transportation in commerce subject to the limitations and special requirements specified herein. This exemption authorizes the shipment of ethylene oxide in 4,760 gallon DOT Specification 51 steel portable tanks with safety relief valves set at 145 psig and a vacuum/perlite insulation system, and provides no relief from any regulation other than as specifically stated.

2. BASIS. This exemption is based on B.S.L. Transports' application dated December 17, 1987, and supplemental information dated March 28, 1988, April 25, 1988, May 25, 1988 and June 15, 1988, submitted in accordance with 49 CFR 107.103 and the public proceeding thereon.

3. HAZARDOUS MATERIAL (Descriptor and class). Ethylene oxide classed as a flammable liquid.

4. PROPER SHIPPING NAME (49 CFR 172.101). Ethylene oxide

5. REGULATION AFFECTED. 49 CFR 173.124(a)(6)(i), (iii) and (vii)

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

7. SAFETY CONTROL MEASURES. Packaging prescribed is a DOT Specification 51 steel portable tank constructed in accordance with BSL Transport drawings ENS 734010 Mod. A dated November 16, 1987, TH 734010 Mod. B dated December 8, 1987 and calculations on file with the Office of Hazardous Materials Transportation (OHMT) and in compliance with the following:

- (1) Tanks must comply with DOT Specification 51 in all respects.
- (2) Materials: SA240 Gr 304
- (3) Water Capacity (US Gallons) 4,760
- (4) Insulation - 0.23 inch (6 mm) carbon steel jacketed vacuum/perlite system.
- (5) Tank Size (inches) - Outside Dia. Length Thickness  
83.34 x 220.23 x 0.378
- Head Thickness - 0.417 (min.)
- Weld Joint Efficiency - 1
- Corrosion Allowance - 0
- (6) Design pressure - 145 psig

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- (8) Openings - One (1) 19.68 inch diameter opening on the top supporting One (1) 6.30 inch diameter opening for the pressure relief device, one (1) 3.15 inch opening for the vapor phase line and one (1) 3.15 inch opening for the liquid phase line.
- (9) Tank surface area (square feet) - 428
- (10) Pressure relief devices - one (1) 3.15 inch diameter spring loaded safety relief valve set at 145 psig in series with and outboard of one (1) 3.15 inch rupture disc set at 145 psig.
- (11) Total emergency venting capacity - 461,476 SCFH
- (12) G-loadings - Vertical down - 3, vertical up - 1, longitudinal - 2, transverse - 1.
- (13) Maximum gross weight (pounds) - 52,910
- (14) Maximum commodity weight (pounds) - 34,210
- (15) Tare weight (pounds) - 18,700
- (16) Design temperature - 50° F
- (17) Nitrogen blanket required during transportation.
- (18) Maximum loading temperature - 32°F (0°C)
- (19) Maximum transport temperature - 50°F (10°C)

8. SPECIAL PROVISIONS.

- a. A copy of this exemption must be carried aboard each motor vehicle used to transport packages covered by this exemption.
- b. A person who receives packages covered by this exemption may reship them pursuant to the provisions of 49 CFR 173.22a
- c. Each tank must (i) be visually inspected prior to shipment to insure that it has not been damaged during loading; and (ii) reinspected and retested once every five years in accordance with 49 CFR 173.32(e) as prescribed for DOT specification 51 portable tanks.
- d. Rear end protection for the motor vehicle must be provided which meets the requirements of 49 CFR 178.340-8(b) and 393.86.


- e. Each portable tank must be secured to the motor vehicle in conformance with the requirements of 49 CFR 393.100 through 393.106.
- f. 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 9916".
- g. A test report documenting a satisfactory prototype test for this tank design must be on file with the OHMT prior to the first shipment.
- h. Hydrostatic test certificates for each tank must be maintained by the manufacturer or owner and made available upon request to any representative of the Department of Transportation.
- i. Each motor carrier used to transport the packaging covered by this exemption must have a "Satisfactory" safety rating issued by the Office of Motor Carrier Safety Field Operations, Federal Highway Administration.
- j. Transportation by rail freight is subject to the provisions of 49 CFR 174.63(b).

9. REPORTING REQUIREMENTS.

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

10. EXPIRATION DATE. June 30, 1990.

Issued at Washington, D.C.:

  
Alan I. Roberts  
Director  
Office of Hazardous Materials Transportation

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(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