



U.S. Department
of Transportation

**Research and
Special Programs
Administration**

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

DOT-E 9140 (EXTENSION)
SECOND REVISION August 4, 1987

In accordance with 49 CFR 107.105 of the Department of Transportation (DOT) Hazardous Materials Regulations DOT-E 9140 is hereby extended for the party(ies) listed below by changing the expiration date in paragraph 10 to June 30, 1996. 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.

JUL 29 1994

Suzanne Hedgerath
Jan I. Robert's
Associate Administrator
for Hazardous Materials Safety

(DATE)

Dist: FHWA FRA USCG

EXEMPTION HOLDER

APPLICATION DATE

Crown Rotational Molded Products, Inc.
Marked Tree, AR

June 30, 1994

ADVISORY

IF YOU ARE A HOLDER OF AN EXEMPTION THAT AUTHORIZES THE USE OF A PACKAGING WITH A MAXIMUM CAPACITY LESS THAN 450 L (119 GALLONS) OR A MAXIMUM NET MASS LESS THAN 400 KG (882 POUNDS), PLEASE BE ADVISED THAT YOUR EXEMPTION MAY NOT BE RENEWED BEYOND SEPTEMBER 30, 1996. IN ADDITION, NO NEW CONSTRUCTION OF PACKAGINGS WHICH FALL WITHIN THE NON-BULK CAPACITIES LISTED ABOVE ARE AUTHORIZED AFTER SEPTEMBER 30, 1994. THIS IS CONSISTENT WITH THE IMPLEMENTATION OF THE NEW PACKAGING REQUIREMENTS ADOPTED UNDER DOCKET HM-181. ANY APPLICATION SUBMITTED TO THIS OFFICE TO RENEW AN EXEMPTION BEYOND THE SEPTEMBER 30, 1996 DATE WILL BE DENIED UNLESS THE APPLICATION CONTAINS SUPPORTING INFORMATION TO JUSTIFY THE CONTINUATION OF THE EXEMPTION.



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DOT-E 9140
(SECOND REVISION)

1. Crown Rotational Molded Products, Inc., Marked Tree, Arkansas is hereby granted an exemption from those provisions of this Department's Hazardous Materials Regulations specified in paragraph 5 below to manufacture, mark, and sell the packaging described in paragraph 7 below for use in the transportation of corrosive liquids, flammable liquids or an oxidizer described in paragraph 3 below in commerce subject to the requirements specified herein. This exemption authorizes the use of a non-DOT specification rotationally molded, cross-linked polyethylene portable tank for the shipment of corrosive liquids, flammable liquids or an oxidizer, and provides no relief from any regulation other than as specifically stated.

2. BASIS. This exemption is based on Crown Rotational Molded Products, Inc.'s applications dated June 2 and July 29, 1987, submitted in accordance with 49 CFR 107.103 and 107.105 and the public proceeding thereon.

3. HAZARDOUS MATERIALS (Descriptor and class). Corrosive liquids for which a DOT-34 reusable polyethylene container is prescribed in 49 CFR Part 173, and which have no secondary hazards and a vapor pressure of no greater than 14.7 psia at 130°F, classed as corrosive material; compounds, cleaning liquid, containing not more than 52% hydrofluoric acid, classed as corrosive material; hydrogen peroxide solution in water containing 52 percent or less hydrogen peroxide by weight, classed as oxidizer; flammable liquids which have no secondary hazard and have a flash point of 73°F. or higher; and other flammable liquids which are 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). Specific chemical name or generic description, as appropriate.

5. REGULATION AFFECTED. 49 CFR Part 173, Subpart F, 173.119, 173.256, 173.266, 178.19, 178.253.

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

7. SAFETY CONTROL MEASURES.

a. Packaging prescribed is a non-DOT specification rotationally molded polyethylene portable tank of nominal 250-gallon capacity as shown on Crown Rotational Molded Products, Inc.'s Drawing No. DP-100057, Rev. D, Sheets 1 and 2, dated July 1987. Each portable tank must be made from high-density, cross-linkable polyethylene which has been specifically identified and is acceptable to the OHMT and be in compliance with the provisions of 49 CFR 178.19-2, 178.19-6 and 178.19-7(a)(3), except as follows:

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- The swelling ratio of the polyethylene, as determined by Method C of ASTM Test D-2765-68, "Test for Degree of Cross-linking in Cross-linked Ethylene Plastics as Determined by Solvent Extraction;"
- The density of the polyethylene, as determined by ASTM Test D-1505-68, or any acceptable equivalent test method.

The manufacturer shall also retain a number of samples cut from portable tanks meeting the requirements of this exemption, in the form of squares of material at least six inches by six inches. (Total mass of all samples to be equal to at least two kilograms.)

Such samples and records of data pertaining to their materials properties must be maintained in current status at each producing plant, for a period of five years.

ii. 178.19-6(a)

- Does not apply. Instead, each portable tank must be permanently marked by embossment or with a metal certification plate permanently affixed to each tank. The markings must be in letters and numbers at least 1/4-inch high located on the side of the tank. The markings shall be understood to certify that the portable tank complies with all requirements of this exemption and must contain at least the following information:

DOT-E 9140 portable tank
Tank manufacture _____
Test pressure 15 psig. _____
Serial number _____
Date of manufacturer (month and year) _____
Tare weight _____ lbs.
Rated gross weight _____ lbs.
Capacity _____ U.S. gal.

- iii. 178.19-7(a)(3) - Changed to read: Each portable tank shall be tested by retaining for 5 minutes, hydrostatic pressure of at least 15 psig at equilibrium without leakage or pressure drop.

b. Each tank must be fitted with a pressure relief device that will limit the pressure in the tanks to 15 psig and is in accordance with 49 CFR 178.253-4 except as follows:

- i. 178.253-4(a)
 - Frangible devices are not authorized.
- ii. 178.253-4(c)(1)

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- The pressure relief device must open at not less than 10 psig and not over 15 psig.
 - The minimum venting capacity for pressure activated vents must be 6,000 SCFH at not more than 15 pounds per square inch gage.
 - iii. 178.253-4(c)(3)
 - The fusible device must function at a temperature no greater than 250°F and at no greater than the tank test pressure of 15 psig.
- c. Portable tanks must be capable of satisfactorily withstanding the drop test and hydrostatic pressure test prescribed in 49 CFR 178.19-7(a) and the vibration test prescribed in 49 CFR 178.253-5(a)(1).
- d. The minimum thickness of the portable tank, measured at any point on the container, is 0.240 inch except for fork pocket wall. Other details of the shipping container must be depicted in Crown Rotational Molded Products, Inc. drawing DP-100057 Rev. D.
- e. Additionally, each portable tank must possess the chemical and physical properties as reported to the OHMT by enclosures to petitioner's letter dated August 31, 1983.
- f. Any changes in design, resin, or process methods must be approved by the OHMT.
- g. Reuse of any portable tank must be in accordance with the applicable requirements of 49 CFR 173.28 and 173.32(f) as modified herein. Each portable tank must be hydrostatically retested in accordance with 49 CFR 173.32(f) as applicable to DOT Spec. 57 tanks, at a test pressure of 15 psig for 5 minutes without a drop in pressure or leakage. Any tank that fails must be rejected and may not be used again for the transportation of hazardous materials. The date of the most recent periodic retest must be marked on the tank near the tank identification markings required in 7, a, ii of this exemption. The owner of the tank or his authorized agent must retain a written record indicating the date and results of all required tests and the name and address of the tester, until the next retest has been satisfactorily completed and recorded.
- h. Portable tanks with repaired bodies are not authorized.
- i. Commodities must be compatible with the polyethylene (PE) portable tank, and must not permeate the PE to an extent that a hazardous condition could be caused during transportation and handling.
- j. Portable tanks for hydrogen peroxide must have a vented closure to prevent accumulation of internal pressure.

k. Any fitting used must be protected in accordance with 49 CFR 178.253-3.

l. The sides of each portable tank must be marked "KEEP THIS END UP" in two places, 180° apart, with an arrow pointing to the tank top.

8. SPECIAL PROVISIONS.

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

b. 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 9140".

c. Shipments by rail must be in compliance with the requirements of 49 CFR 174.63(a) and (c).


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

e. Bottom discharge devices are not permitted on tanks transported aboard cargo vessel.

9. REPORTING REQUIREMENTS. Any incident involving loss of contents of the package must be reported to the OHMT as soon as practicable.

10. EXPIRATION DATE. August 1, 1989.

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: FHWA, FRA, USCG