U.S. Department
of Transportation

**Research and
Special Programs
Administration**

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

JUN 10 1996

DOT-E 10738
(SECOND REVISION)

1. Rotonics Manufacturing, Inc., Gardena, California is hereby granted an exemption from certain provisions of this Department's Hazardous Materials Regulations to manufacture, mark, and sell a reusable, rotationally molded polyethylene portable tank as described in paragraph 7 below for use in the transportation in commerce of certain Class 8, 3, and Division 5.1 materials described in paragraph 3 below subject to the limitations and special requirements specified herein. This exemption authorizes the use of a non-DOT specification rotationally molded, crosslinkable high density, polyethylene portable tank with a plastic base, for the shipment of certain Class 8, 3, and Division 5.1 materials and provides no relief from any regulation other than as specifically stated. NOTE: Reference to 49 CFR sections in this exemption are to regulations in effect on September 30, 1990.

2. BASIS. This exemption is based on Rotonics Manufacturing, Inc.'s application dated June 3, 1996, submitted in accordance with 49 CFR 107.105.

3. HAZARDOUS MATERIALS (Descriptor and class).

(a) Corrosive liquids for which a DOT Specification 34 reusable polyethylene containers 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 Class 8.

(b) Hydrogen peroxide solution in water containing 52 percent or less hydrogen peroxide by weight, classed as Division 5.1.

(c) Isopropyl alcohol, ethyl alcohol, methyl alcohol and water solutions thereof, classed as Class 3; other flammable liquids compatible with polyethylene which have no secondary hazards and have a flash point of 73°F. or higher and a vapor pressure of no greater than 14.7 psia at 130°F; and other flammable liquids which have been specifically identified to, and acknowledged in writing, by the Office of Hazardous Materials Exemptions and Approvals (OHMEA) prior to the first shipment.

(d) For transportation by cargo vessel, the following requirements apply:

(i) No hazardous material listed in the Annex to subsection 26.4 of the General Introduction to the IMDG Code may be carried in the non-DOT specification portable tanks authorized under this exemption.

(ii) Hazardous materials that are listed as suitable for rigid plastic intermediate bulk containers (IBS's), Column (5) in Appendix 1 to Section 26 of the General Introduction to the IMDG Code and which are specified above are authorized to be transported in the non-DOT specification portable tanks authorized under this exemption. Materials that are no: listed in that appendix; allowed for transport in column (5) of the appendix; nor listed above may not be transported under the terms of this exemption.

5. REGULATION AFFECTED. 49 CFR Part 173, Subparts D and F; 173. 178.19, 178.253.

6. MODES OF TRANSPORTATION AUTHORIZED. Motor vehicle, rail freight and cargo vessel. Shipments by cargo vessel must be made in conformance with Section 26 of the General Introduction to the International Maritime Dangerous Goods (IMDG) Code.

7. PACKAGING AND SAFETY CONTROL MEASURES:

a. Packaging prescribed is a non-DOT specification rotationally molded polyethylene portable tank having a nominal water capacity of 300 gallons with a plastic base. The polyethylene portable tank has a bottom outlet (2" ball valve). The 300 gallon portable tank and plastic base must be as described in petitioner's January 27, 1992 application through H-1375-G all dated 01/21/92. Each tank must be made of high density crosslinkable polyethylene which has been specifically identified, is acceptable to the OHMEA and be in conformance with the provisions of 49 CFR 178.19 except as follows:

i. 178.19-3 - Does not apply.

ii. 178.19-4 - Does not apply.

iii. 178.19-6(a) - Does not apply. Instead, each portable tank must be permanently marked by embossment or with a metal certificate plate permanently affixed to each tank. Where the tank is marked by embossment of the polyethylene unit, the serial number and date of manufacture may be etched or stamped into the polyethylene. Where

stamping or etching is performed, the marked area thickness may not be reduced below the minimum reduced thickness prescribed herein. The markings must be in letters and number 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 10738 portable tank
Tank Manufacturer_____
Test pressure 15 psig.
Serial number_____
Date of manufacture_____ month/year____
Tare weight_____lbs.
Rated gross weight_____lbs.
Capacity_____U.S. gal.

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

v. 178.19-7(c)(2) - Does not apply.

b. Each tank must be fitted with a pressure relief device that will limit the pressure in the tank 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 on portable tanks transported by vessel.

ii. 178.253-4(c)(1) - 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 psig.

iii. 178.253-4(c)(3) - A fusible device that will function at a temperature no greater than 250°F does not exceed 15 psig when the device functions.

c. The minimum polyethylene thickness at any point on the portable tank must be 0.215 inch.

d. Portable tank must be capable of satisfactorily withstanding the drop test and hydrostatic pressure test prescribed in 49 CFR 178.19-7(a), the stacking and lifting device tests prescribed in 49 CFR 178.251-5(a)(2), and the vibration test prescribed in 49 CFR 178.253-5(a)(1).

e. Each portable tank must possess the chemical and physical properties as reported to the OHMEA by the petitioner's letter dated January 27, 1992.

f. Any changes in design, resin, or process methods must be approved by the OHMEA prior to change. Prototype test results for the drop, hydrostatic pressure, and vibration tests required in paragraph 7.d. of this exemption must accompany any request for changes in design, resin, or process method. In addition, prototype test results for the stacking and lifting device tests required in paragraph 7.d. of this exemption must accompany any request for changes in the design or construction of the portable tank or plastic base.

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 Specification 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 for the transportation of hazardous materials. The date of the most recent periodic retest must be marked near the tank identification markings required in paragraph 7.a. 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 having any portion of their molded body or components repaired are not authorized.

i. Commodities must be with the compatible with the polyethylene (PE) portable tank, and may 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 degrees apart, with an arrow pointing to the tank top.

m. A prototype container must be subjected to and satisfactorily withstand the drop test and hydrostatic pressure test prescribed in 49 CFR 178.19-7(a) except the hydrostatic pressure test may be at 14.5 psig in 49 CFR 178.251-5(a)(2), and the vibration test prescribed in 49 CFR 178.253-5(a)(i).

n. Portable tanks must always be filled and shipped on the plastic base as shown in the petitioner's application.

8. SPECIAL PROVISIONS.

a. Offerors for transportation of hazardous materials specified in this exemption may use the packaging described in this exemption for the transportation of such hazardous materials so long as no modification or changes are made to the packages, all terms of this exemption are complied with, and a copy of the current exemption is maintained at each facility from which such reoffering occurs.

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 10738". In addition, "Do not stack over two high" must be marked on the sides as the exemption number, in letters at least two inches high on a contrasting background.

c. 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. Portable tanks may be shipped only in a railcar that provides specific facilities for bracing and tie down of the tanks.

d. A copy of this exemption, in its current status, must be maintained at each manufacturing facility at which this packaging is manufactured and must be made available to a DOT representative upon request.

e. Each packaging manufactured under the authority of this exemption must be either (1) marked with the name of the manufacturer and location (city and state) of the facility at which it is manufactured or (2) marked with a registration symbol designated for a specific manufacturing facility.

f. When transported by vessel, each polyethylene portable tank must be permanently and durably marked, in letters at least give centimeters (two inches) high on a contrasting background, in accordance with the requirements of subsection 26.1.5 of the General Introduction to the IMDG Code. The use of labels, tags, or signs for marking purposes is prohibited.

g. Consistent with the regulations adopted under Docket HM-181E for intermediate bulk containers, (IBCs), exemptions for IBCs of the type covered by those regulations will not allow new construction after September 30, 1996. Existing IBCs may be continued in service, provided renewal provisions under Section 107.105 are met, until September 30, 1998 under the conditions specified in the exemption that applies to their use. After September 30, 1998, each IBC must conform to, and be certified as meeting, a UN IBC standard set forth in Subparts N and O of Part 178 of the Hazardous Materials Regulations (HMR; 49 CFR). A provision for approval of an equivalent IBC is specified in 49 CFR 178.801(i).

9. 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. Section 5101 et seq:

- All terms and conditions prescribed in this exemption and the Hazardous Materials Regulations, 49 CFR parts 171-180.
- Registration required by 49 CFR 107.601 et seq., when applicable.

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.

10. 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. (49 CFR 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 also inform the AAHMS, in writing, as soon as practicable of any incidents involving the package and shipments made under this exemption.

11. EXPIRATION DATE. May 31, 1998.

Issued at Washington, D.C.:

for Marilyn E. Morris

JUN 10 1996

Alan I. Roberts
Associate Administrator for
Hazardous Materials Safety

DATE

Address all inquiries to: Associate Administrator for Hazardous Materials Safety, Research and Special Programs Administration, Department of Transportation, Washington, D.C. 20590. Attention: Exemptions Program.

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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