U.S. Department
of Transportation

**Research and
Special Programs
Administration**

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

DOT-E 9658
(FOURTH REVISION)

EXPIRATION DATE: March 31, 1998 (See Appendix A for PTE renewal date(s)

(FOR RENEWAL, SEE 49 CFR SECTION 107.105)

1. GRANTEE: Fluoroware, Inc.
Chaska, MN

2. PURPOSE AND LIMITATION: This exemption authorizes the manufacture, mark, and sale, until September 30, 1996, of a non-DOT specification rotationally molded, composite crosslinked or non-crosslinked polyethylene and Teflon PFA plastic portable tank for use in the transportation in commerce of certain Class 8 materials, Class 3 materials, or Division 5.1 materials described in paragraph 6 below. This exemption provides no relief from any regulation other than as specifically stated.

3. REGULATORY SYSTEM AFFECTED: 49 CFR Parts 106, 107 and 171-180.

4. REGULATIONS FROM WHICH EXEMPTED: **49 CFR Part 173.242, 173.243 and Part 178, Subparts N and O, and Part 180, Subpart D.**

5. BASIS: This exemption is based on Fluoroware, Inc.'s application dated March 6, 1996, submitted in accordance with 49 CFR 107.105.

6. HAZARDOUS MATERIALS (49 CFR 172.101):

Hazardous materials authorized	Hazard Class/ Division	Identi-fication Number	Packing Group
Class 8 liquids for which a DOT-34 reusable polyethylene container or a DOT 6D/2S or 2SL composite packaging is prescribed in 49 CFR Part 173, **effective on September 30, 1991,** and which have no secondary hazards and a vapor pressure of no greater than 14.7 psia at 130°F.	8	as appli-cable	as appli-cable
Hydrogen peroxide solution in water containing 52 percent or less hydrogen peroxide by weight.	5.1	as appli-cable	as appli-cable
Class 3 liquids compatible with Teflon which have no secondary hazards and have a flash point of 73° or higher; and other Class 3 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.	3	as appli-cable	as appli-cable
Perchloric acid, *more than 50 percent but not more than 72 percent acid, by mass.*	5.1	UN1873	I
Nitric acid *other than red fuming, with not more than 70 percent nitric acid.*	8	UN2031	II

7. SAFETY CONTROL MEASURES.

NOTE: Reference to 49 CFR Part 178 in the following paragraphs are references to the regulations in effect on September 30, 1991.

Packaging prescribed is a non-DOT specification rotationally molded, composite polyethylene and Teflon PFA plastic portable tank having a nominal water capacity of either 220 gallons or 330 gallons, within a heavy duty steel and wire mesh enclosure as shown on Fluoroware, Inc. drawing numbers D151-24-1 Rev. C, D151-39-1 Rev. D, D150-39-1 Rev. F, D150-41-1 Rev. D and 700.973 Rev. G on file with the OHMEA. The composite packaging consists of a chemically inert Teflon PFA liner having a nominal thickness of 0.046 inch and an outer polyethylene tank having a minimum thickness of 0.190 inch.

a. The outer tank must be made from high density crosslinkable or linear low density polyethylene which has been specifically identified and is acceptable to the OHMEA. In addition, the composite polyethylene and Teflon PFA portable tank must be in compliance 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 certification plate permanently affixed to each tank. The marking 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 the requirements of this exemption and must contain at least the following information:

DOT-E 9658 portable tank
Tank manufacturer _____
Test pressure: 15 psig
Serial number _____
Date of manufacture (month and year)___
Tare weight _____ lbs.
Rated gross weight _____ lbs.
Capacity _____

iv. 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.

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(c)(1)

- The pressure relief device must open between 10 psig and 15 psig.

- The minimum venting capacity for pressure activated vents must be 6,000 SCFH at not more than 15 psig.

ii. 178.253-4(c)(3)

- A fusible device that will function at a temperature no greater than 250°F. may be used provided the vapor pressure in the tank at 250°F. does not exceed 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 and stacking tests prescribed in 49 CFR 178.253-5(a)(1) and 178.251-5(a)(2).

d. The minimum thickness of the polyethylene outer tank, measured at any point on the container, is 0.190 inch. Other details of the shipping container must be as depicted on Fluoroware, Inc. drawings D151-24-1 Rev. C, D151- 39-1 Rev. D, D150-39-1 Rev. F, and D150-41-1 Rev. D and 700.973 Rev. G, included in the petitioner's applications.

e. The portable tank must possess the chemical and physical properties as reported to the OHMEA by the petitioner's letter dated August 22, 1986.

f. Any changes in design, resin, or process methods must be approved by the OHMEA. Prototype test results for the tests required in paragraph 7.c. of this exemption must accompany any requests for changes in design, resin, or process methods.

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 portable 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 paragraph 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 Teflon PFA plastic inner tank and must not permeate the teflon 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.

m. Tanks must always be filled and shipped with the portable tank in the outer steel and wire mesh enclosure as shown in the petitioner's application.

8. SPECIAL PROVISIONS.

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

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

c. Each portable tank must be plainly marked on both side near the middle, in letters and numbers at least two inches high on a contrasting background, "DOT-E 9658".

d. Each packaging manufactured in accordance with the requirements of this exemption must be marked in a manner which identifies the physical location (city and state) of the facility at which it is manufactured.

e. The "Nonreusable container" marking specified in 49 CFR 173.399(b) for etching acid liquid, n.o.s. does not apply to packagings covered by this exemption.

f. Shipments by rail must be in compliance with the requirements of 49 CFR 174.63.

g. Shippers using the packaging covered by this exemption must be cognizant of the marking requirements of 49 CFR 172.301(a) and the special packaging requirements of 49 CFR 173.3a for certain liquid materials which are toxic by inhalation.

h. 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 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. MODES OF TRANSPORTATION AUTHORIZED. Motor vehicle and rail freight.

10. 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 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.

11. 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 inform the AAHMS, in writing, of any incidents involving the package and shipments made under the terms of this exemption.

Issued at Washington, D.C.:

for Marilyn E. Morris

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, U.S. Department of Transportation, Washington, D.C., 20590. Attention: DHM-31.

Dist: FHWA, FRA.