10196

U.S. Department of Transportation
Research and Special Programs Administration

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

**DOT-E 10196 (EXTENSION)**
**FIRST REVISION October 30, 1990**

In accordance with 49 CFR 107.105 of the Department of Transportation (DOT) Hazardous Materials Regulations DOT-E 10196 is hereby extended for the party(ies) listed below by changing the expiration date in paragraph 10 to September 30, 1994. 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.

J Suzanne Hedgpeth
Alan I. Roberts
Associate Administrator
for Hazardous Materials Safety

MAR 31 1993
(DATE)

Dist: FHWA FAA

| EXEMPTION HOLDER | APPLICATION DATE |
|---|---|
| Penox Technologies Inc.<br>Pittston, PA | February 10, 1993 |

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DOT-E 10196
(FIRST REVISION)

1. Penox Technologies Inc., Pittston, Pennsylvania, is hereby granted an exemption from certain provisions of this Department's Hazardous Materials Regulations to manufacture, mark and sell the packaging described in paragraph 7 below for use in the transportation in commerce of the hazardous materials described in paragraph 3 below, subject to the limitations and special requirements specified herein. This exemption authorizes shipments of liquid oxygen in an insulated non-DOT specification cylinder conforming with 49 CFR 178.57 except 178.57-2 and 178.57-8(c), and provides no relief from any regulation other than as specifically stated.

2. BASIS. This exemption is based on Penox Technologies Inc.'s, application dated May 24, July 10, 1989, April 30 and July 23, 1990, submitted in accordance with 49 CFR 107.103 and 107.105 and the public proceeding thereon.

3. HAZARDOUS MATERIALS (Descriptor and class). Oxygen, refrigerated liquid, classed as a nonflammable gas.

4. PROPER SHIPPING NAME (49 CFR 172.101). Oxygen, refrigerated liquid (cryogenic liquid).

5. REGULATIONS AFFECTED. 49 CFR 173.316, 178.57-2, 178.57-8(c).

6. MODE OF TRANSPORTATION AUTHORIZED. Motor vehicle and cargo aircraft only.

7. SAFETY CONTROL MEASURES. Packaging prescribed is an insulated non-DOT specification cylinder conforming with Penox Technologies Inc.'s model Unalox liquid oxygen transport system drawings BE-3014-AA, BA-3001-BA, BE-1001-AA BF-3001-AB, BF-3025-AD and DOT Specification 4L (49 CFR 178.57), except as follows:

§ 178.57-2 Type, size, service pressure and design service temperature.

(a) Type and size. Must be fusion welded, with not over 4 pounds water capacity, nominal.

(b) Service pressure. May not be more than 50 psig.

(c) Design service temperature. Must be -320°F or colder.

§ 178.57-8 Manufacture.

(c) * * * except sixth sentence is removed and the fifth sentence is replaced with the following.

"The construction must be such that the total heat transfer, from the atmosphere at ambient temperature to the cylinder lading, will not exceed 0.012 Btu per hour per °F temperature differential per pound of water capacity of the cylinder, but not to exceed 2.0 pounds of evaporated liquid oxygen per day."

8. SPECIAL PROVISIONS.

a. A copy of this exemption must be carried aboard each motor vehicle and cargo aircraft used to transport packages covered by this exemption.

b. 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 modifications 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 offering occurs.

c. Drivers must have been instructed as to necessary safeguards and proper procedures in the event of unusual delay, fire or accident.

d. Each liquid oxygen transport system must be marked "DOT-E 10196" in letters at least 0.25 inch high on a contrasting background.

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

f. 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.

9. REPORTING REQUIREMENTS. Any incident involving loss of packaging contents or packaging failure must be reported to the Associate Administrator for Hazardous Materials Safety as soon as practicable.

10. EXPIRATION DATE. July 31, 1991.

Issued at Washington, D.C.:

OCT 30 1990

(DATE)

Alan I. Roberts
Associate Administrator
for Hazardous Materials Safety

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: Exemptions Branch.

Dist: FHWA