



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

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

DOT-E 12384
(FIFTH REVISION)

NOV 14 2003

EXPIRATION DATE: October 31, 2005

(FOR RENEWAL, SEE 49 CFR § 107.109)

1. **GRANTEE:** Oil Air Hydraulics, Incorporated
Houston, TX
2. **PURPOSE AND LIMITATION:**
 - a. This exemption authorizes the transportation in commerce of certain non-DOT specification hydraulic accumulators containing compressed nitrogen. This exemption provides no relief from any Hazardous Materials Regulation (HMR) other than as specifically stated herein.
 - b. The safety analyses performed in development of this exemption only considered the hazards and risks associated with transportation in commerce. The safety analyses did not consider the hazards and risks associated with consumer use, use as a component of a transport vehicle or other device, or other uses not associated with transportation in commerce.
3. **REGULATORY SYSTEM AFFECTED:** 49 CFR Parts 106, 107 and 171-180.
4. **REGULATIONS FROM WHICH EXEMPTED:** 49 CFR §§ 173.302a(a)(1), and 175.3 in that the prescribed packagings are not authorized except as specified herein.
5. **BASIS:** This exemption is based on the application of Oil Air Hydraulics Inc. dated November 12, 2003 submitted in accordance with § 107.109 and supplement letter dated November 14, 2003.

6. HAZARDOUS MATERIALS (49 CFR § 172.101):

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| Hazardous Material Description | | | |
|---|------------------------|-----------------------|---------------|
| Proper Shipping Name | Hazard Class/ Division | Identification Number | Packing Group |
| Articles, pressurized pneumatic or hydraulic containing non-flammable gas | 2.2 | UN3164 | N/A |

7. SAFETY CONTROL MEASURES:

a. PACKAGING - Prescribed packagings are steel hydraulic accumulators conforming with drawings on file with the Office of Hazardous Materials Exemptions and Approvals and in conformance with the following:

(1) Gas Bottle: A seamless accumulator having a capacity of not over 40 gallons, a design pressure not exceeding 3000 psig, and in full compliance with Section VIII, Division 1 of the ASME Code, with a minimum 3.5:1 burst to design pressure ratio; or

(2) Gas Bottle: A seamless accumulator having a capacity of not over 40 gallons, a design pressure not exceeding 5000 psig, and in full compliance with Section VIII, Division 1 of the ASME Code, with a minimum 3.5:1 burst to design pressure ratio; or

(3) Surge Arrestor: A seamless accumulator having a capacity of not over 120 gallons, a design pressure not exceeding 500 psig, designed, fabricated and tested in accordance with Section VIII, Division 1 of the ASME Code with a minimum 3.5:1 burst to design pressure ratio; or

(4) Diaphragm: a welded accumulator having a capacity of not over 1 gallon, a design pressure not exceeding 4,000 psig, with a minimum 4:1 burst to design pressure ratio; or

(5) Bladder Accumulator: A seamless accumulator having a capacity of not over 40 gallons, a design pressure not over 6,500 psig and in full compliance with Section VIII, Division 1, Appendix 22 of the ASME Code, with a minimum 3:1 burst to design pressure ratio; or

(6) Bladder Accumulator: A welded accumulator having a capacity of not over 120 gallons, a design pressure not exceeding 500 psig, and in full compliance with Section VIII, Division 1 of the ASME Code, with a minimum 3.5:1 burst to design pressure ratio; or

(7) Piston Accumulator: A seamless accumulator having a capacity not over 50 gallons, a design pressure not exceeding 5,000 psig, designed, fabricated and tested in accordance with Section VIII, Division 1 of the ASME Code with a minimum 3.5:1 burst to design pressure ratio; or

(8) Hydracushion: A welded accumulator having a capacity of not over 1 gallon, a design pressure not exceeding 2,000 psig, with a minimum 4:1 burst to design pressure ratio.

b. TESTING - Accumulators must be tested without evidence of failure or damage, to at least 1 ½ times the design pressure prior to each refill and reshipment.

c. OPERATIONAL CONTROLS -

(1) The charged pressure of each accumulator at 70°F for shipment must not exceed 70 percent of the design pressure.

(2) Each accumulator up to and including a 1 gallon capacity must be shipped in strong outside packaging in accordance with § 173.301(a)(9). Units above 1 gallon capacity must be securely strapped to a wooden pallet. Each package must be marked "DOT-E 12384" and "NITROGEN-HYDRAULIC ACCUMULATORS".

(3) Each accumulator must be constructed to relieve pressure without bursting in a fire or must be equipped with a pressure relief device as required in § 173.301(f).

8. SPECIAL PROVISIONS:

a. A person who is not a holder of this exemption who receives a package covered by this exemption may reoffer it for transportation provided no modifications or changes are made to the package and it is reoffered for transportation in conformance with this exemption and the HMR.

b. A current copy of this exemption must be maintained at each facility where the package is offered or reoffered for transportation.

9. MODES OF TRANSPORTATION AUTHORIZED: Motor vehicle, rail freight, cargo vessel, passenger-carrying aircraft, and cargo aircraft only.

10. MODAL REQUIREMENTS: A current copy of this exemption must be carried aboard each cargo vessel or aircraft used to transport packages covered by this exemption. The shipper must furnish a current copy of this exemption to the air carrier before or at the time the shipment is tendered.

11. 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. 5101 et seq:

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

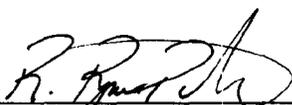
Each "Hazmat employee", as defined in § 171.8, who performs a function subject to this exemption must receive training on the requirements and conditions of this exemption in addition to the training required by §§ 172.700 through 172.704.

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.

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12. 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. (Sections 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 incident involving the package and shipments made under the terms of this exemption.

Issued in Washington, D.C.:



for Robert A. McGuire
Associate Administrator for
Hazardous Materials Safety

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(DATE)

Address all inquiries to: Associate Administrator for Hazardous Materials Safety, Research and Special Programs Administration, Department of Transportation, Washington, D.C. 20590.
Attention: DHM-31.

Copies of this exemption may be obtained by accessing the Hazardous Materials Safety Homepage at <http://hazmat.dot.gov/exemptions> Photo reproductions and legible reductions of this exemption are permitted. Any alteration of this exemption is prohibited.

PO: CWFreeman/sln