U.S. Department
of Transportation

**Research and
Special Programs
Administration**

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

NOV 7 1995

DOT-E 11433

EXPIRATION DATE: July 31, 1997

(FOR RENEWAL, SEE 49 CFR 107.105)

1. GRANTEE: Teledyne Fluid Systems
Brecksville, Ohio

2. PURPOSE AND LIMITATIONS:

a. This exemption authorizes the manufacture, marking and sale of accumulators which deviate from the required test parameters. This exemption provides no relief from any regulation other than as specifically stated herein.

b. EXEMPTIONS SCOPE LIMITATIONS - An exemption authorization to manufacture, mark, sell, and transport only represents certification of safety for a package when it is an article of commerce in transportation. The safety analyses performed in development of this exemption only considered the hazards and risks associcated 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: The testing requirements of 49 CFR Sections 173.306(f)(2)(iii) and 173.306(f)(3)(i).

5. BASIS: This exemption is based on the application of Teledyne Fluid Systems dated March 8, 1995 and additional information dated July 20, 1995, submitted in accordance with 49 CFR 107.103 and the public proceeding thereon.

Expired No Renewal

6. HAZARDOUS MATERIALS (49 CFR 172.101):

| Hazardous materials description -- proper shipping name | Hazard Class/ Division | Identi- fication Number | Packing Group |
|---|---|---|---|
| Accumulators, pressurized, pneumatic (containing non-flammable gas) | Division 2.2 | NA1956 | N/A |

7. PACKAGING(S) and SAFETY CONTROL MEASURES:

a. PACKAGING - Packaging prescribed is a gas spring, considered a pneumatic accumulator as defined in 49 CFR 173.306(f). The accumulators are constructed of AISI 4130, 4140, 4142, or 8620 steel, have a maximum diameter of 5 inches and a maximum capacity of 108 cubic inches in volume. The maximum working pressure is 2,610 psig. Accumulators must be designed and fabricated for a burst pressure of no less than 5 times the charged pressure at 70°F. Accumulators must be packed in strong outside packaging as prescribed in 49 CFR 173.301(k).

b. TESTING - A lot is defined as the quantity of 1,000 or less accumulators successively produced over a production shift not exceeding 10 hours, and having identical size, design, construction, material, heat treatment and quality. The following qualification tests must be performed:

(1) One accumulator from each lot must be burst tested and must burst at not less than five times its charged pressure at 70°F when shipped.

(2) Two completed accumulators, one from the beginning and one from the end of each lot must be pressure tested to at least 3 times the charged pressure without leakage or distortion.

(3) If a lot fails to pass either of the above tests, an additional four sets of accumulators taken from that lot may be tested to qualify the lot. If any of the accumulators fail the qualification tests, that lot must be rejected.

c. MARKING -

(1) The outside of each accumulator must be plainly and durably marked "DOT-E 11433".

(2) Each accumulator 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 by the Office of Hazardous Materials Exemptions and Approvals Program for a specific manufacturing facility.

(3) The outside of each outside package must be plainly and durably marked "INSIDE CONTAINERS COMPLY WITH DOT-E 11433".

8. SPECIAL PROVISIONS:

a. Offerors for transportation of the 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.

b. 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.

c. Shippers using the packaging covered by this exemption must comply with all provisions of this exemption, and all other applicable requirements contained in 49 CFR Parts 171-180.

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

10. MODAL REQUIREMENTS: A copy of this exemption must be carried aboard each cargo vessel or aircraft used to transport packages covered by this exemption. In accordance with the provisions of 49 CFR Part 107, Appendix B to Subpart B, paragraph 3, the shipper shall furnish a 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. Section 5101 et seq:

    - All terms and conditions prescribed in this exemption and the Hazardous Materials Regulations, 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.

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. (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.

Issued at Washington, D.C. NOV 7 1995

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: DHM-31.

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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