



U.S. Department
of Transportation

**Research and
Special Programs
Administration**

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

MAY 17 2004

DOT-E 10497
(SEVENTH REVISION)

EXPIRATION DATE: April 30, 2006

(FOR RENEWAL, SEE 49 CFR § 107.109)

1. GRANTEE: Lockheed Martin Commercial Space Systems
Newton, PA
(Former grantee: Lockheed Martin Space Systems
Company), Sunnyvale, CA
2. PURPOSE AND LIMITATION:
 - a. This exemption authorizes the transportation in commerce of certain non-DOT specification stainless steel tanks containing dinitrogen tetroxide. This exemption provides no relief from the Hazardous Materials Regulations (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.
3. REGULATORY SYSTEM AFFECTED: 49 CFR Parts 106, 107 and 171-180.
4. REGULATIONS FROM WHICH EXEMPTED: 49 CFR § 173.336 in that a non-DOT specification packaging is not authorized, except as specified herein; § 177.834(m), except as specified herein.
5. BASIS: This exemption is based on the application of Lockheed Martin Commercial Space Systems dated January 7, 2004 submitted in accordance with § 107.109.

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6. HAZARDOUS MATERIALS (49 CFR § 172.101):

Hazardous materials description - - proper shipping name	Hazard Class/ Division	Identi- fication Number	Packing Group
Dinitrogen tetroxide	2.3	UN1067	N/A

7. SAFETY CONTROL MEASURES:a. PACKAGING -

(1) Prescribed packaging for liquid dinitrogen tetroxide consists of a stainless steel tank approximately 30 inches in diameter and 7 feet long, provided with two stainless steel valves for filling and discharging dinitrogen tetroxide, located on one end and protected by a gas tight end cap; and a stainless steel plug on the other end. This tank is similar to a specification DOT-110AW multi-unit tank car tank. The tank must be designed and constructed fully in compliance with requirements of the ASME Code for unfired pressure vessels, Section VIII, Division 1. The tank assembly must conform to Malcolm Industries Drawing No. 2021M, dated June 5, 1987, or Grano Steel Corp. Drawing No. M-231, dated January 16, 1990 submitted with and forming a part of the application. No new construction is authorized.

(2) Prior to each shipment, all outlets and inlets must be capped or plugged on each tank containing any amount of Dinitrogen Tetroxide. When shipped with residual dinitrogen tetroxide, the tank assembly must be drained so that the residual amount contained therein is 5 pounds or less.

b. OPERATIONAL CONTROLS -

(1) Transportation is only authorized between the facilities and locations specified in the application in addition to the Mississippi Chemical Company, Yazzo City, Mississippi, and between Yazzo city, Mississippi and Port Everglade, Florida; White Sands, New Mexico; San Clemente, California; Titusville, Florida; Cape

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Canaveral, Florida; Marysville, Washington; Long Beach, California; Charleston, South Carolina and Sunnyvale, California. These shipments must be made by motor vehicle in exclusive use service only.

(2) Chemtrec and the Coast Guard Captain of the Port (COTP) at which the materials are being loaded, must be notified in advance of transport operations and effective communication must be in effect during the transport operation. A current copy of this exemption must be provided to the COTP at least 24 hours in advance of each shipment.

(3) The provisions of § 177.834(m)(1) and (2) must be met.

(4) Motor vehicle drivers and cargo vessel personnel must have been instructed as to necessary safeguards and proper procedures in the event of unusual delay, fire, or other accident. Such instruction must include, as a minimum, the provisions of the "Nitrogen Tetroxide Emergency Response Plan" submitted with the application, and with publication DOT P 5800.5, "2000 Emergency Response Guidebook."

(5) Motor carriers operating under terms of this exemption must have a "Satisfactory" safety rating as prescribed in 49 CFR Part 385.

8. SPECIAL PROVISIONS: Each tank must be marked, on opposite sides, "INHALATION HAZARD" and "DOT-E 10497" in letters and numerals at least 2 inches in height on a contrasting background.
9. MODES OF TRANSPORTATION AUTHORIZED: Motor vehicle and cargo vessel.
10. MODAL REQUIREMENTS: A current copy of this exemption must be carried aboard each motor vehicle and cargo vessel used to transport packages covered by this exemption.
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:

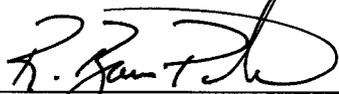
- o All terms and conditions prescribed in this exemption and the Hazardous Materials Regulations, 49 CFR Parts 171-180.
- o Persons operating under the terms of this exemption must comply with the security plan requirement in Subpart I of Part 172 of the HMR, when applicable.
- o Registration required 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.

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.:



fr 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.

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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:sdc