



U.S. Department  
of Transportation

**Research and  
Special Programs  
Administration**

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

**SEP 25 2002**

DOT-E 13023  
(FIRST REVISION)

**EXPIRATION DATE: November 30, 2002**

(FOR RENEWAL, SEE 49 CFR § 107.109)

1. GRANTEE: Energy Conversion Devices, Inc.  
Troy, MI
2. PURPOSE AND LIMITATION:
  - a. This exemption authorizes the one-way, one-time transportation in commerce of a pyrophoric solid, inorganic, n.o.s. contained in a non-DOT specification aluminum module, overpacked in a steel box, for testing and evaluation. 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 § 173.187 in that a non-DOT specification packaging is not authorized, except as specified herein.
5. BASIS: This exemption is based on the application of Energy Conversion Devices, Inc. dated May 21, 2002, submitted in accordance with § 107.105 and the public proceeding thereon.
6. HAZARDOUS MATERIALS (49 CFR § 172.101):

Hazardous Materials Description			
Proper Shipping Name	Hazard Class/ Division	Identification Number	Packing Group
Pyrophoric solid, inorganic, n.o.s. (Titanium, manganese)	4.2	UN3200	I

7. SAFETY CONTROL MEASURES:

a. PACKAGING - Packaging prescribed is a non-DOT specification aluminum module (module) enclosed in a steel box overpack. The aluminum module has a design pressure of 679 psig and is ASME Code "U" stamped. The aluminum module is bolted to a steel base plate which is bolted to a wooden pallet base and covered with a steel cover bolted to the base plate. The steel box overpack has dimensions of 78" x 38" x 30".

b. OPERATIONAL CONTROLS -

(1) The module contains approximately 50 kgs of metal hydride powder.

(2) Prior to transportation, the hydrogen gas in the module will be displaced with helium gas at 15 psig.

8. SPECIAL PROVISIONS:

a. This exemption authorizes only one-way, one-time transportation from Troy, Michigan to Richmond, California.

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.

10. MODAL REQUIREMENTS: A current copy of this exemption must be carried aboard each motor vehicle used to transport the package 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 Registration required by § 107.601 et seq., when applicable.

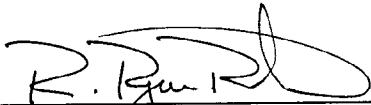
Each "Hazmat employee", as defined in § 171.8, who performs a function subject to this exemption must receive training on the requirements and conditions of this exemption in

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 this 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.:



*fe* Robert A. McGuire  
Associate Administrator for  
Hazardous Materials Safety

SEP 25 2002

(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: PTolson/dl