



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

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

**OCT 1 2003**

DOT-E 13088  
(FIRST REVISION)

EXPIRATION DATE: February 28, 2005

(FOR RENEWAL, SEE 49 CFR § 107.109)

1. GRANTEE: Electron Transfer Technologies  
Edison, NJ
2. PURPOSE AND LIMITATION:
  - a. This exemption authorizes the transportation in commerce of certain non-DOT specification multi-phase material containers containing Divisions 2.3, 6.1, and Class 8 materials. 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. 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 §§ 173.40, 173.192, and 175.3 in that the multi-phase material container is not an authorized packaging except as specified herein.
5. BASIS: This exemption is based on the application of Electron Transfer Technologies, Incorporated dated May 13, 2003 submitted in accordance with § 107.105 and the public proceeding thereon.

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6. HAZARDOUS MATERIALS (49 CFR § 172.101):

Hazardous Materials Description				
Proper Shipping Name	Hazard Class/ Division	Identification Number	Packing Group	
Arsenic	6.1	UN1558	II	
Arsine	2.3	UN2188	N/A	
Germane	2.3	UN2192	N/A	
Phosphine	2.3	UN2199	N/A	
Potassium hydroxide, solution	8	UN1814	II	
Toxic solid, inorganic, n.o.s.	6.1	UN3288	I, II, or III	

7. SAFETY CONTROL MEASURES:a. PACKAGING -

(1) Packaging prescribed is described as a multi-phase material container. The welded stainless steel container is a pressure vessel with a removable multi-screw flange on top. The pressure vessel must be designed and constructed according to Section VIII Division 1 of the ASME Code. The pressure vessel is not ASME Code "U" stamped. The pressure vessel has a maximum capacity of 7 liters and a rated design working pressure of 30 psig. The pressure vessel is not equipped with a pressure relief device. The multi-phase material container and overpack must be in accordance with drawings on file with the Office of Hazardous Materials Exemptions and Approvals (OHMEA).

(2) The multi-phase material container must be overpacked in a reusable 30-gallon UN1A2 PG 1 steel drum. The drum must have a bolted, gasketed lid with gasketed ports for sampling. The drum must have an absorbant in the event of valve leakage and foam inserts to support the container within.

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b. TESTING - Prior to each shipment, the multi-phase material container must be internally and externally visually inspected and helium leak tested at 25 psig. The inspection and testing must be performed in accordance with Electron Transfer Technologies written QA checklist on file with the OHMEA. Any container with a leak must not be shipped.

c. OPERATIONAL CONTROLS -

(1) The multi-phase material container must be shipped at no greater than atmospheric pressure.

(2) Emergency response information provided with the shipment and available via an emergency response telephone number must indicate that the receptacles are not fitted with pressure relief devices and provide appropriate guidance for exposure to fire.

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 modification or change is made to the package or its contents 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.

c. Each multi-phase material container and overpack must be plainly and durably marked "DOT-E 13088" in accordance with § 172.301(c).

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

10. MODAL REQUIREMENTS: A current copy of this exemption must be carried aboard each cargo vessel, aircraft or motor vehicle used to transport packages covered by this exemption. The shipper must 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. 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.:

*Robert A. McGuire*  
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607 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: CWFreeman