

April 17, 2009



U.S. Department  
of Transportation

East Building, PHH-30  
1200 New Jersey Avenue, Southeast  
Washington, D.C. 20590

**Pipeline and Hazardous  
Materials Safety Administration**

DOT-SP 10048  
(FOURTEENTH REVISION)

(FOR RENEWAL, SEE 49 CFR § 107.109)

1. GRANTEE: (See individual authorization letter)
2. PURPOSE AND LIMITATION:
  - a. This special permit authorizes the use of a UN 1A2 drum with inside non-DOT specification metal containers for the transportation in commerce of the materials described in paragraph 6 below. This special permit provides no relief from any regulation other than as specifically stated herein. The most recent revision supersedes all previous revisions.
  - b. The safety analyses performed in development of this special permit only considered the hazards and risks associated with transportation in commerce.
  - c. Unless otherwise stated herein, this special permit consists of the special permit authorization letter issued to the grantee together with this document.
3. REGULATORY SYSTEM AFFECTED: 49 CFR Parts 106, 107 and 171-180.
4. REGULATIONS FROM WHICH EXEMPTED: 49 CFR §§ 173.181, 173.187, 173.201, 173.202, 173.211, 173.212, 173.226, and 173.227 in that the packaging is not authorized, except as prescribed herein.
5. BASIS: This special permit is based on the Pipeline and Hazardous Materials Safety Administration's (PHMSA) editorial review under § 107.121 initiated on December 4, 2008.

6. HAZARDOUS MATERIALS (49 CFR § 172.101):

<b>Hazardous Materials Description</b>			
<b>Proper Shipping Name</b>	<b>Hazard Class/ Division</b>	<b>Identification Number</b>	<b>Packing Group</b>
Aluminum alkyl Hydrides	4.2	UN3076	I
Aluminum alkyls	4.2	UN3051	I
Carbon tetrachloride	6.1	UN1846	II
Diethylzinc	4.2	UN1366	I
Dimethylzinc	4.2	UN1370	I
Flammable liquids, toxic, n.o.s.	3	UN1992	II
Magnesium alkyls*	4.2	UN3053	I
Metal alkyls, water-reactive, n.o.s. or Metal aryls, water-reactive n.o.s.*	4.2	UN2003	I
Metal alkyls, water-reactive, n.o.s. or Metal aryls, water reactive n.o.s. (Tertiarybutylphosphine)*	4.2	UN2003	I (Zone B)
Metal Carbonyls, solid, n.o.s.	6.1	UN3466	II
Organometallic compound or Compound solution or Compound dispersion, water-reactive, flammable, n.o.s.	4.3	UN3207	I
Organometallic substance, solid, pyrophoric, water-reactive	4.2	UN3393	I

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Hazardous Materials Description			
Proper Shipping Name	Hazard Class/ Division	Identification Number	Packing Group
Organometallic substance, liquid, water-reactive, flammable, n.o.s.	4.3	UN3399	I
Organometallic substance, liquid, pyrophoric, water-reactive	4.2	UN3394	I
Pyrophoric solids, organic, n.o.s.	4.2	UN2846	I
Pyrophoric liquids, organic, n.o.s.	4.2	UN2845	I
Pyrophoric liquids, organic, n.o.s. (Tertiary butylphosphine)	4.2	UN 2845	PG I (Zone B)
Selenium compound, n.o.s.	6.1	UN3283	II
Selenium compound, liquid, n.o.s.	6.1	UN3440	II
Tellurium compound, n.o.s.	6.1	UN3284	II
Toxic, liquids, organic, n.o.s.	6.1	UN2810	I
Toxic solids, flammable, organic, n.o.s.	6.1	UN2930	I
Toxic liquids, organic, n.o.s. <i>Inhalation hazard, Packing Group I Zone A</i> (Tertiarybutylarsine)	6.1	UN2810	I (Zone A)
Toxic liquids, inorganic, n.o.s.	6.1	UN3287	II
Water-reactive liquid, toxic, n.o.s.	4.3	UN3130	I

7. PACKAGING AND SAFETY CONTROL MEASURES:

a. PACKAGING - Packaging prescribed is a non-DOT specification welded cylinder described as a bubbler overpacked in a UN1A2 drum. The inside containers must be as described in Epichem, Limited's drawing number 10536, dated January 27, 1988 or drawing number OM175-A dated September 10, 2001 on file with the Office of Hazardous Materials Special Permits and Approvals. The inside containers must be designed to Section VIII, Division I of the ASME Code. In addition:

(1) The capacity of the inside containers may not exceed 4 liters.

(2) The design pressure of the inside containers must be at least 400 psig.

(3) The bodies of the inside containers must be constructed of ASTM A240-316 or equivalent stainless steel with a minimum thickness of 1/16 inch. The end plates must be constructed of ASTM A249-316 or equivalent stainless steel with a minimum thickness of 1/8 inch.

(4) The inside containers may be equipped with valves. Openings in the flange type enclosures may not exceed 6 inches for inside containers described in drawing OM175-A. Openings in all other inside containers may not exceed one inch in diameter.

(5) Inside containers must be surrounded on all sides by incombustible cushioning material inside the UN 1A2 drum.

b. TESTING: Each inside container must be inspected and hydrostatically retested by volumetric expansion at least once every five years at 5/3 times the design pressure in accordance with procedure described in § 180.205 for a DOT-3AA cylinder.

8. SPECIAL PROVISIONS:

a. A person who is not a holder of this special permit who receives a package covered by this special permit may

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reoffer it for transportation provided no modifications or changes are made to the package and it is reoffered for transportation in conformance with this special permit and the HMR.

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

c. Net quantity of Division 4.2 liquids may not exceed two-thirds of the rated capacity of the outer drum.

d. Drivers must have been instructed as to necessary safeguards and proper procedure in the event of fire, or accident.

e. Each inside container must be hydrostatically tested by volumetric expansion with a pressure of at least 728 psig at the time of manufacture as described in the application on file with the Office of Hazardous Materials Special Permits and Approvals (OHMSPA). A copy of the test results must be maintained at the manufacturing facility and must be made available to a DOT representative upon request.

9. MODES OF TRANSPORTATION AUTHORIZED: Motor vehicle and cargo vessel.
10. MODAL REQUIREMENTS: A current copy of this special permit must be carried aboard each cargo vessel and motor vehicle used to transport packages covered by this special permit.
11. COMPLIANCE: Failure by a person to comply with any of the following may result in suspension or revocation of this special permit 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 special permit and the Hazardous Materials Regulations, 49 CFR Parts 171-180.
  - o Persons operating under the terms of this special permit must comply with the security plan requirement in Subpart I of Part 172 of the HMR, when applicable.
  - o Registration required by 49 CFR 107.601 et seq., when applicable.

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

No person may use or apply this special permit, including display of its number, when the special permit has expired or is otherwise no longer in effect.

Under Title VII of the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU)- 'The Hazardous Materials Safety and Security Reauthorization Act of 2005' (Pub. L. 109-59), 119 Stat. 1144 (August 10, 2005), amended the Federal hazardous materials transportation law by changing the term "exemption" to "special permit" and authorizes a special permit to be granted up to two years for new special permits and up to four years for renewals.

12. REPORTING REQUIREMENTS: Shipments or operations conducted under this special permit are subject to the Hazardous Materials Incident Reporting requirements specified in 49 CFR §§ 171.15 - Immediate notice of certain hazardous materials incidents, and 171.16 - Detailed hazardous materials incident reports. In addition, the grantee(s) of this special permit must notify the Associate Administrator for Hazardous Materials Safety, in writing, of any incident involving a package, shipment or operation conducted under terms of this special permit.

Issued in Washington, D.C.:



for Theodore L. Willke  
Associate Administrator for Hazardous Materials Safety

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

Copies of this special permit may be obtained by accessing the Hazardous Materials Safety Homepage at [http://hazmat.dot.gov/sp\\_app/special\\_permits/spec\\_perm\\_index.htm](http://hazmat.dot.gov/sp_app/special_permits/spec_perm_index.htm) Photo reproductions and legible reductions of this special permit are permitted. Any alteration of this special permit is prohibited.

PO: KFW:sln