1. **GRANTEE:** (See individual authorization letter)

2. **PURPOSE AND LIMITATION:**
   
a. This special permit authorizes the transportation in commerce of a Division 4.3 material in a non-DOT specification pressure vessel. This special permit provides no relief from the Hazardous Materials Regulations (HMR) other than as specifically stated herein. The most recent revision supersedes all previous revisions.

   b. The safety analyses performed in the development of this special permit only considered the hazards and risks associated with the 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 § 173.211 in that a non-DOT specification pressure vessel is not authorized, except as specified herein.

5. **BASIS:** This special permit is based on the application of Union Carbide Corporation dated June 7, 2006 submitted in accordance with § 107.105 and the public proceeding thereon and additional information dated August 6, 2013 and July 24, 2014.
6. HAZARDOUS MATERIALS (49 CFR § 172.101):

<table>
<thead>
<tr>
<th>Hazardous Materials Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proper Shipping Name</td>
</tr>
<tr>
<td>Organometallic substance, solid, water-reactive, flammable*</td>
</tr>
</tbody>
</table>

* Requires technical name in accordance with § 172.203(k)

7. SAFETY CONTROL MEASURES:

a. PACKAGING – Packaging prescribed is a non-DOT specification carbon steel pressure vessel. The pressure vessel must be designed, manufactured, and “U” stamped in accordance with Section VIII, Division 1 of the ASME Boiler and Pressure Vessel Code. The pressure vessel must be in accordance with the following:

- Maximum Allowable Working Pressure (MAWP): 175 psig
- Maximum water capacity: 120 gallons
- Minimum shell thickness: 0.225 inch
- Minimum top head thickness: 0.143 inch
- Minimum bottom head thickness: 0.218 inch

b. OPERATIONAL CONTROLS –

(1) Each pressure vessel must be shipped with a nitrogen or inert gas blanket of not more than 20 psig and not less than 10 psig.

(2) Prior to each filling, each pressure vessel must be visually inspected and leakproof tested. Any pressure vessel that shows evidence of leakage or damage that may be detrimental to the pressure vessel must be removed from hazardous materials service.

c. TESTING – At least once every five years, each pressure vessel must be requalified in accordance with the requirements for a DOT 4BW cylinder in § 180.205 except as specified herein. Each pressure vessel must be visually inspected in accordance with § 180.205(f) and must be pneumatically proof pressure tested in accordance with § 180.205(g) to a pressure of at least 1.5 times the MAWP.
d. No new construction is authorized.

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 reoffer it for transportation provided no modification or change is 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. Each pressure vessel must be plainly and durably marked "DOT-SP 14374" as specified in § 172.301(c).

9. MODES OF TRANSPORTATION AUTHORIZED: Motor vehicle, cargo vessel, rail freight.

10. MODAL REQUIREMENTS: A current copy of this special permit must be carried aboard each cargo vessel or 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 § 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 this 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 Dr. Magdy El-Sibaie
Associate Administrator for Hazardous Materials Safety


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 Photo reproductions and legible reductions of this special permit are permitted. Any alteration of this special permit is prohibited.

PO: CWFreeman/dl/kah