1. GRANTEE: Albemarle Corporation
   Baton Rouge, LA

2. PURPOSE AND LIMITATION:
   a. This special permit authorizes the transportation in commerce of certain Division 4.2 organometallic liquids in a non-DOT specification pressure vessel designed, constructed and “U” stamped in accordance with the Section VIII, Div. 1 of the ASME code. This special permit provides no relief from the Hazardous Materials Regulations (HMR) other than as specifically stated herein.

   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. No party status will be granted to this special permit.


4. REGULATIONS FROM WHICH EXEMPTED: 49 CFR § 173.181 in that use of a non-DOT specification pressure vessel is not authorized except as specified herein.

5. BASIS: This special permit is based on the application of Albemarle Corporation dated February 14, 2012 submitted in accordance with § 107.109.
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>------------------------</td>
</tr>
<tr>
<td>Organometallic substance, liquid, pyrophoric, water-reactive</td>
</tr>
</tbody>
</table>

7. **SAFETY CONTROL MEASURES:**

a. **PACKAGING** – Packaging prescribed is a non-DOT specification welded pressure vessel designed, constructed and “U” stamped in accordance with the ASME Boiler and Pressure Vessel Code (Section VIII, Division 1). The pressure vessel must conform with Worthington Cylinders Drawing number L026130-AECD on file with the Office of Hazardous Materials Special Permits and Approvals and the following:

- Maximum water capacity: 26 pounds
- Material: SA 414-G
- Outside diameter: 8 in (nominal)
- Length (excl. nozzle/footring): 16.625 in (nominal)
- Minimum wall thickness: 0.075 in
- Design pressure: 350 psig
- Openings: Three top openings; two fitted with a brass valve and the third with a fusible plug. Valves must be securely closed and fitted with a blind cap.

b. **OPERATIONAL CONTROLS** –

(1) Not more than four pressure vessels may be packed in a strong outer packaging, and must be secured and separated from one another in the outer packaging so as to protect the pressure vessels and valves from damage.

(2) During transportation the pressure vessels must be charged with a nitrogen or other inert gas blanket to a pressure not exceeding 10 psig.
(3) Each pressure vessel and each outer packaging must be plainly and durably marked “DOT-SP 14356” as prescribed in § 172.301(c).

c. TESTING – At least once every five years, each pressure vessel must be requalified as follows:

(1) Each pressure vessel must be visually inspected externally and internally in accordance with the requirements for steel cylinders in § 180.205(f). The cylinder must be rejected if it shows any evidence of dents, corrosion, damage, abrasion, leakage or any other condition that might render the pressure vessel unsafe for transport.

(2) Each pressure vessel must be pressurized with nitrogen or other inert gas to a pressure of 75 psig. The pressure vessel must show no evidence of leakage or any other deficiency that might render the pressure vessel unsafe for transport.

(3) The retester must maintain requalification records as specified in § 180.215(b)(2).

(4) Each pressure vessel must be marked in accordance with the requalification marking requirements specified in § 180.213.

NOTE: This special permit does not waive Albemarle Corporation from securing and maintaining a requalifier identification number (RIN) approval in accordance with § 107.805 for the requalification of the pressure vessels authorized by this special permit.

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.
9. **MODES OF TRANSPORTATION AUTHORIZED:** Motor vehicle and rail freight.

10. **MODAL REQUIREMENTS:** A current copy of this special permit must be carried aboard each 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:

   - All terms and conditions prescribed in this special permit and the Hazardous Materials Regulations, 49 CFR Parts 171-180.
   - 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.
   - 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 -- OHMSPA, in writing, of any incident involving a package, shipment or operation conducted under terms of this special permit.

Issued in Washington, D.C.:

[Signature]

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