1. **GRANTEE:** Air Liquide Electronics U.S. LP  
   Morrisville, PA

2. **PURPOSE AND LIMITATION:**
   
   a. This special permit authorizes transportation in commerce of certain DOT 4BW and SP 12531 cylinders which are dedicated to transport Dichlorosilane and have been periodically requalified using an alternative method to that required in the HMR. This special permit provides no relief from the Hazardous Materials Regulations (HMR) or the International Maritime Dangerous Goods (IMDG) Code 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. No party status will be granted to this special permit.
   
   d. This special permit serves as an “exemption” as defined in Chapter 7.9, Section 7.9.1 of the IMDG Code (see IMO MSC/Circ. 1075-Granting Exemptions from the Provisions of the IMDG Code) and as a “Competent Authority Approval” as defined under 49 CFR § 107.1.

3. **REGULATORY SYSTEM AFFECTED:** 49 CFR Parts 106, 107 and 171-180 and the IMDG Code.
4. REGULATIONS FROM WHICH EXEMPTED: 49 CFR § 180.205(g) and DOT-SP 12531 paragraph 7.b in that alternative tests are authorized herein.

5. BASIS: This special permit is based on the application of Air Liquide Electronics U.S. LP dated February 25, 2019 submitted in accordance with § 107.105 and the public proceeding thereon.

6. HAZARDOUS MATERIALS (49 CFR 172.101):

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<th>Hazardous Materials Description</th>
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<tr>
<td><strong>Proper Shipping Name</strong></td>
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<td>Dichlorosilane</td>
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7. SAFETY CONTROL MEASURES:

a. PACKAGING: Packagings prescribed are DOT Specification 4BW260 cylinders and non-DOT-specification, welded stainless steel cylinders authorized under DOT-SP 12531 with 260 psig service pressure, each with 1000-pound nominal water capacity.

b. REQUALIFICATION: Every five years each cylinder must be periodically requalified as follows: internal and external inspections in accordance with CGA Pamphlet C-6 as required by 49 CFR 180.205(f), followed by a pneumatic pressure test at 2 times the marked service pressure. The pressure test must be conducted by FIBA Technologies procedure, “Safety Measures During Pneumatic Proof Pressure Testing” on file with the Office of Hazardous Materials Special Permits and Approvals (OHMSPA). The cylinder must hold the pressure for at least five (5) minutes without drop in pressure of more than 5% of the test pressure. It must be carefully examined under pressure and removed from service if a leak or another harmful defect is found.

c. OPERATIONAL CONTROLS:

1) The cylinders must be used exclusively in dichlorosilane service.
2) The stainless-steel cylinders authorized under DOT-SP 12531 must be transported in accordance with all applicable provisions of that special permit, except that the requalification requirements in paragraph 7.b. shall be superseded by the testing requirements of 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, the HMR, and the IMDG Code.

b. Any person who receives a package covered by this special permit may offer it for transportation when it contains only the residue of the authorized hazardous material listed in paragraph 6 above provided no modification or change is made to the packaging and the package is transported only to the grantee in conformance with this special permit. Securing a closure on the packaging prior to offering the package for transportation under this paragraph does not constitute a modification or change to the packaging.

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

d. This special permit in no way affects the need to obtain any required authorizations from other agencies of the United States Government or from the competent authorities of countries of origin, transit, and destination.

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

10. MODAL REQUIREMENTS: A current copy of this special permit must be carried aboard each cargo vessel, aircraft, or motor vehicle used to transport packages covered by this special permit. The shipper must furnish a copy of this special permit 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 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
Continuation of DOT-SP 20838

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 William Schoonover
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: RS/HS/Teresa D'Onfro