

October 10, 2018



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 14722  
(FIFTH REVISION)

**EXPIRATION DATE: 2022-09-30**

(FOR RENEWAL, SEE 49 CFR 107.109)

1. GRANTEE: Global Nucleonics, LLC  
Houston, TX
2. PURPOSE AND LIMITATIONS:
  - a. This special permit authorizes the manufacture, marking, sale, and use of a non-DOT specification packaging described as a hermetically-sealed electron tube device for the transportation in commerce of the materials authorized by this special permit. This special permit provides no relief from the Hazardous Materials Regulations (HMR) other than as specifically stated herein. The most 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. 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.
  - c. In accordance with 49 CFR 107.107(a) party status may not be granted to a manufacturing permit. These packagings may be used in accordance with 49 CFR 173.22a.
3. REGULATORY SYSTEM AFFECTED: 49 CFR Parts 106, 107 and 171-180.
4. REGULATIONS FROM WHICH EXEMPTED: 49 CFR §§ 173.302a, 173.306(b) (4) and 175.3 in that the electron tube is not an authorized packaging, except as specified herein.

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5. BASIS: This special permit is based on the application of Global Nucleonics LLC dated September 27, 2018, submitted in accordance with § 107.109.
6. HAZARDOUS MATERIALS (49 CFR 172.101):

<b>Hazardous Material Description</b>			
<b>Proper Shipping Name</b>	<b>Hazard Class/ Division</b>	<b>Identification Number</b>	<b>Packing Group</b>
Compressed gases, n.o.s. (may contain Helium, Argon, Neon, Nitrogen, Xenon, Krypton, Carbon Dioxide and not more than 5% Methane)	2.2	UN1956	N/A

7. SAFETY CONTROL MEASURES:

a. PACKAGING: Prescribed packaging is a non-DOT specification metal, single trip, inside container, described as hermetically sealed electron tube radiation sensor. Each radiation sensor is designed and constructed in accordance with Centronic, LLC Technical Specification sheet submitted with the June 13, 2008 application on file with the Office of Hazardous Materials Safety Approvals and Permits Division (OHMSAPD). Each radiation sensor must conform to the following design criteria:

Materials: 300 series stainless steel or 1100 or 3000 series aluminum welded to achieve a hermetic seal, with ceramic-to-metal insulator feed-through assemblies.

Diameter: 1/4 inch to 5 inches

Volume: 7.22 to 350 cubic inches water capacity

Lengths: 1 inch to 90 inches

Wall Thickness: 0.016 inch to 1 inch

Operating Pressure: 20 psig to 294 psig

Minimum Burst Pressure:

- The design burst pressure must be three times the design pressure if equipped with a pressure relief device; or
- The design burst pressure must be four times the design pressure if not equipped with a pressure relief device.

b. OPERATIONAL CONTROLS:

(1) The radiation sensor must be shipped in a strong outside packaging capable withstanding a minimum drop test of four feet without breakage of the radiation sensor or rupture of the outside package.

(2) If repackaged, the packaging(s) used to ship larger equipment containing radiation sensors covered by this special permit must be in a strong outside packaging(s) providing equivalent protection for the devices as specified in paragraph 7.b.(1) above.

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

8. SPECIAL PROVISIONS:

a. In accordance with the provisions of Paragraph (b) of § 173.22a, persons may use the packaging authorized by this special permit for the transportation of the hazardous materials specified in paragraph 6, only in conformance with the terms of this special permit.

b. A person who is not a holder of this special permit, but 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 offered for transportation in conformance with this special permit and the HMR.

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

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- d. Each packaging manufactured under the authority of this special permit must be either (1) marked with the name of the manufacturer and location (city and state) of the facility at which it is manufactured or (2) marked with a registration symbol designated by the Office of Hazardous Materials Special Permits and Approvals for a specific manufacturing facility.
- e. A current copy of this special permit must be maintained at each facility where the package is manufactured under this special permit. It must be made available to a DOT representative upon request.
- f. Except when offered for transportation by air:
- (1) Packages covered by this special permit are accepted from labeling requirements of Subpart E of Part 172.
  - (2) Shipments are not subject to the placarding requirements of Subpart F of 49 CFR Part 172.
9. MODES OF TRANSPORTATION AUTHORIZED: Motor vehicle, rail freight, cargo vessel, cargo aircraft only, and passenger-carrying aircraft.
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.

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0 Registration required by § 107.601 et seq., when applicable.

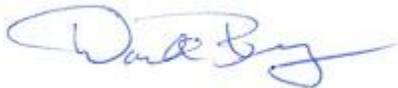
Each "Hazmat employee", as defined in § 171.8, who performs a function subject to this special permit must receive training on the requirements and conditions of this special permit in addition to the training required by §§ 172.700 through 172.704.

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 notices 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 - OHMEA, 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

Address all inquiries to: Associate Administrator for Hazardous Materials Safety, Pipeline and Hazardous Material Safety Administration, U.S. Department of Transportation, East Building PHH-30, 1200 New Jersey Avenue, Southeast, Washington, D.C. 20590.

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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: SEG/SG