1. **GRANTEE:** Balchem Corporation  
   New Hampton, NY

2. **PURPOSE AND LIMITATION:**
   
a. This special permit authorizes the transportation in commerce of ethylene in non-DOT specification containers, most comparable to the DOT-2Q, and allows for the controlled release of the hazardous material for the purposes of ripening produce. This special permit provides no relief from the Hazardous Materials Regulations (HMR) or 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” under Part 7, Chapter 7.9, Section 7.9.1 of the IMDG Code, and as a “Competent Authority Approval” as defined under 49 CFR § 107.1.


4. REGULATIONS FROM WHICH EXEMPTED: 49 CFR §§ 173.24(b)(1), 174.3, 177.834(h), and Chapter 4.1, Section 4.1.1.1 of the IMDG Code in that no release of hazardous material is authorized and discharge of hazardous material from a packaging without removal from the transport vehicle is not authorized; §§ 171.23(a), 173.304 and Chapter 4.1, Section 4.1.4, Packing Instruction 200 of the IMDG Code in that non-DOT specification packagings are not authorized; and § 176.3 in that a carrier may not transport packagings not prepared in accordance with part 173 except as provided herein.

5. BASIS: This special permit is based on the application of Balchem Corporation dated April 9, 2019 and submitted in accordance with § 107.109.

6. HAZARDOUS MATERIALS (49 CFR § 172.101):

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

a. PACKAGING: Prescribed packaging is a non-DOT specification container, most comparable to the DOT-2Q, with a maximum water capacity of 372 ml (22.7 cubic inches) and a minimum burst pressure of 400 psig.

b. OPERATIONAL CONTROLS:

(1) Each container must be filled at approximately 72°F to a pressure no greater than 130 psig and must contain no more than 4 grams of ethylene.

(2) The individual containers within each outer packaging must be secured against contact with one another.
(3) One pallet, containing a maximum quantity of 2000 grams of ethylene, is authorized for shipment directly from the filler to the end user per truck.

(4) For in-transportation ripening of produce:

(i) A maximum mass of 96 grams of ethylene in fast-release (complete venting within 1 hour) and constant-release (complete venting within 1 to 7 days) containers must be placed in each motor vehicle, railcar, or freight container.

(ii) The air exchange rate between the atmosphere and the interior of the cargo unit must be a minimum of 3.4 cubic feet per minute (CFM).

(5) For transportation by cargo vessel:

(i) Freight containers must be stowed on deck (Category D) and clear of living quarters.

(ii) No smoking, burning, or welding is permitted in the vicinity of a loaded freight container.

(iii) A warning sign must be affixed to the access doors of the freight container and must read as follows: “WARNING—MAY CONTAIN EXPLOSIVE MIXTURES WITH AIR—KEEP IGNITION SOURCES AWAY WHEN OPENING—VENTILATE BEFORE ENTERING.” The warning sign must be readily legible from distance of 8 m (26 feet).

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 or IMDG Code as applicable.

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, rail freight, and cargo vessel.
10. **MODAL REQUIREMENTS**: A current copy of this special permit must be carried aboard each motor vehicle and cargo vessel 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.:

[Signature]

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: Andrew Eckenrode