U.S. Department
of Transportation

**Research and
Special Programs
Administration**

AUG 1 0 2000

400 Seventh Street, S.W.
Washington, D.C. 20590

DOT-E 12388

EXPIRATION DATE: June 30, 2002

(FOR RENEWAL, SEE 49 CFR § 107.109)

1. GRANTEE: Mountain Safety Research
Seattle, WA

2. PURPOSE AND LIMITATION:

a. This exemption authorizes the transportation in commerce of a Division 2.1 material in a nonrefillable, non-DOT specification inside container conforming in part with the DOT Specification 2P. This exemption provides no relief from the Hazardous Materials Regulations (HMR) other than as specifically stated herein.

b. The safety analyses performed in development of this exemption 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 or other uses not associated with transportation in commerce.

3. REGULATORY SYSTEM AFFECTED: 49 CFR Parts 106, 107 and 171-180.

4. REGULATIONS FROM WHICH EXEMPTED: 49 CFR § 173.304(d)(3)(ii) insofar as non-DOT specification packagings are not authorized and the maximum charging pressure is exceeded except as specified herein.

5. BASIS: This exemption is based on the application of Mountain Safety Research dated November 19, 1999 and additional information dated July 17, 2000, submitted in accordance with § 107.105, and the public proceeding thereon.

6. HAZARDOUS MATERIALS (49 CFR § 172.101):

Proper Shipping Name/ Hazardous Materials Description	Hazard Class/ Division	Identi- fication Number	Packing Group
Petroleum gases, liquefied	2.1	UN1075	N/A

7. SAFETY CONTROL MEASURES:

a. PACKAGING - Packagings prescribed are non-DOT specification, nonrefillable inside containers, with a water capacity not exceeding 17.1 cubic inches, and are constructed in conformance with GoGas International drawing 2125GC and related drawings on file with the Office of Hazardous Materials Exemptions and Approvals (OHMEA). Containers conform with DOT Specification 2P (§ 178.33) except as follows:

(1) § 178.33-2 Type and size.

(a) * * *

(b) The maximum capacity of the containers may not exceed 17.1 cubic inches. The maximum inside diameter must not exceed 86 mm (3.39 inches).

(2) § 178.33-7 Wall thickness.

(a) The minimum wall thickness must be 0.0118 inch.

(3) § 178.33-8 Tests.

(a) One container out of each lot of 1,000 or less successively produced must be pressure tested to destruction. The bottom end of the test container must reverse prior to any leakage or rupture. The test container may not burst below 261 psig. Should the test sample fail, 10 additional samples

must be taken at random from the lot and tested as above. If any of the 10 additional samples fail the test, the lot must be rejected.

(4) § 178.33-9 Marking.

(a) * * *

(1) "DOT-E 12388" in lieu of "DOT 2P".

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b. OPERATIONAL CONTROLS - Containers must be shipped as follows:

(1) Filling density must be in accordance with § 173.304(d)(1). In addition, the liquid portion of the gas may not completely fill the container at any temperature up to and including 130°F.

(2) Each completed container filled for shipment must have been heated until the pressure in the container is equivalent to the equilibrium pressure of the contents at 130°F without evidence of leakage, distortion, or other defect.

(3) The pressure in the container may not exceed 62 psig at 70°F and 158 psig at 130°F.

(4) Each container must be packed in strong outside packagings as prescribed in § 173.301(k).

(5) Each outside packaging must be marked "INSIDE CONTAINERS CONFORM WITH DOT-E 12338".

(6) Each package may not exceed 66 pounds gross weight.

8. SPECIAL PROVISIONS:

a. A person who is not a holder of this exemption who receives a package covered by this exemption may reoffer it for transportation provided no modifications or changes are made to the package and it is reoffered for transportation in conformance with this exemption and the HMR.

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

c. Test data obtained under paragraph 7.a(3), §178.33-8 Tests, of this exemption, must be kept on file and made available upon request by a DOT representative. Additionally, the following information must be submitted to OHMEA:

(1) Burst test results for the first 20 lots tested under paragraph 7.a(3) of this exemption.

(2) Lading temperature and pressure test data for the first 20 lots to verify the tests specified in paragraphs 7.b.(2) and 7.b.(3) of this exemption. A description of the quality assurance controls used to assume compliance with the requirements of paragraph 7.b.(2).

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

10. MODAL REQUIREMENTS: A current copy of this exemption must be carried aboard each cargo vessel or aircraft used to transport packages covered by this exemption. The shipper must furnish a copy of this exemption 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 exemption and penalties prescribed by the Federal hazardous materials transportation law, 49 U.S.C. 5101 et seq:

- All terms and conditions prescribed in this exemption and the Hazardous Materials Regulations, 49 CFR Parts 171-180.

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

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

No person may use or apply this exemption, including display of its number, when this exemption has expired or is otherwise no longer in effect.

12. REPORTING REQUIREMENTS: The carrier is required to report any incident involving loss of packaging contents or packaging failure to the Associate Administrator for Hazardous Materials Safety (AAHMS) as soon as practicable. (Sections 171.15 and 171.16 apply to any activity undertaken under the authority of this exemption.) In addition, the holder(s) of this exemption must inform the AAHMS, in writing, of any incident involving the package and shipments made under the terms of this exemption.

Issued in Washington, D.C.:

Robert A. McGuire
Associate Administrator for
Hazardous Materials Safety

AUG 10 2000
(DATE)

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Address all inquiries to: Associate Administrator for Hazardous Materials Safety, Research and Special Programs Administration, Department of Transportation, Washington, D.C. 20590. Attention: DHM-31.

The original of this exemption is on file at the above office. Photo reproductions and legible reductions of this exemption are permitted. Any alteration of this exemption is prohibited.

Copies of exemptions may be obtained from the AAHMS, U.S. Department of Transportation, 400 7th Street, S.W., Washington, DC 20590-0001, Attention: Records Center, 202-366-5046.

PO: SS