



U.S. Department
of Transportation

**Research and
Special Programs
Administration**

AUG 19 1999

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

DOT-E 9584
(SECOND REVISION)

EXPIRATION DATE: JULY 31, 2001

(FOR RENEWAL, SEE 49 CFR § 107.109)

1. GRANTEE: Schlumberger Well Services
Division of Schlumberger Technology Corporation
Sugar Land, TX
2. PURPOSE AND LIMITATION: This exemption authorizes the use of a non-DOT specification seamless cylinder for gas sampling purposes. This exemption provides no relief from any regulation other than as specifically stated herein.
3. REGULATORY SYSTEM AFFECTED: 49 CFR Parts 106, 107 and 171-180.
4. REGULATIONS FROM WHICH EXEMPTED: 49 CFR § 173.302 and § 173.304.
5. BASIS: This exemption is based on the application of Schlumberger Well Services dated July 21, 1999, submitted in accordance with § 107.109.
6. HAZARDOUS MATERIALS (49 CFR § 172.101):

Hazardous materials description -- proper shipping name	Hazard Class/ Division	Identi- fication Number	Packing Group
Hydrocarbon gas mixture, compressed, n.o.s.	2.1	UN1964	N/A
Hydrocarbon gas mixture, liquefied, n.o.s.	2.1	UN1965	N/A

7. PACKAGING AND SAFETY CONTROL MEASURES:

PACKAGING - Packaging prescribed is a non-DOT specification seamless cylinder designed and constructed in accordance with DOT Specification 3A (§ 178.36) and with Flopetrol Model ROP 0 104, drawing DT 13029 and related documents on file with the Office of Hazardous Materials Exemptions and Approvals (OHMEA), except as specified below.

- a. The cylinder must be seamless, not over 22 pounds (10 liters) nominal water capacity, with a marked service pressure of 200 bars (2900 psig).
- b. Authorized cylinder material is ASTM A 312 Type 3041 stainless steel.
- c. The completed cylinder may retain properties induced by cold working.
- d. The minimum wall thickness must be such that the wall stress at the minimum prescribed test pressure does not exceed 46,000 psi based on the formula.
$$S = [P(1.3D^2 + 0.4d^2)] / (D^2 - d^2)$$
- e. Each cylinder must be equipped with a safety relief device in conformance with the requirements of CGA Pamphlet S-1.1.
- f. One cylinder out of each lot must be flattened to six (6) times the actual wall thickness without cracking.
- g. One cylinder out of each lot must be hydrostatically pressurized to destruction at a rate not to exceed 200 psig per second. Minimum burst pressure is 13,000 psig.

TESTING - In lieu of the prescribed water jacket test, each cylinder must be subjected to a proof pressure test to 334 bars (4885 psig).

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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. MARKING - The "DOT-E 9584" must replace the "DOT 3A" marking.

d. Persons who receive packages covered by this exemption may reship them pursuant to the provisions of § 173.22a.

e. The cylinder must be filled so that it will not be liquid full at 130°F.

f. Each cylinder must be prepared for shipment as specified in applicant's December 3, 1985 letter. Each cylinder must be inside a strong outside packaging as specified in the application.

g. Each cylinder must be subject to hydrostatic proof pressure retest to 334 bars (4845 psig), once every 5 years. Each cylinder must be visually inspected after each use for signs of corrosion and degradation of the packaging.

h. A copy of the inspector's report on the initial lot of cylinders produced under this exemption required by § 178.35(g) must be submitted to the OHMEA prior to initial shipment.

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

10. MODAL REQUIREMENTS:

A current copy of this exemption must be carried aboard each cargo vessel and aircraft used to transport packages covered by this exemption. The shipper shall 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:

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

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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 at Washington, D.C.:

for Anna Mazzullo
Alan I. Roberts
Associate Administrator
for Hazardous Materials Safety

8/19/99
(DATE)

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.

Dist: FHWA, FRA, FAA
PO: ALB