



U.S. Department  
of Transportation

**Research and  
Special Programs  
Administration**

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

**AUG 20 1999**

DOT-E 12071

**EXPIRATION DATE: July 31, 2001**

(FOR RENEWAL, SEE 49 CFR § 107.109)

1. GRANTEE: Pennwalt India Limited  
Worli, Mumbai, India  
(US Agent: ABS Integrated Services, Inc.  
Houston, Texas)
2. PURPOSE AND LIMITATION:
  - a. This exemption authorizes the transportation in commerce of certain polyvinylidene fluoride (PVDF) lined DOT Specification IM 101 portable tanks containing bromine or bromine solutions. 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.
3. REGULATORY SYSTEM AFFECTED: 49 CFR Parts 106, 107 and 171-180.
4. REGULATIONS FROM WHICH EXEMPTED: 49 CFR § 173.249(c) in that IM 101 portable tanks with a 4 mm PVDF lining is authorized in lieu of nickel-clad or lead-lined steel portable tank.
5. BASIS: This exemption is based on the application of Pennwalt India Limited dated April 27, 1998 and supplemental information dated May 6, 1998, 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
Bromine or Bromine Solutions	8	UN1744	I HAZARD ZONE A

7. SAFETY CONTROL MEASURES:

a. PACKAGING - Packaging prescribed is a DOT Specification IM 101 steel portable tank authorized for bromine or bromine solutions except that it is lined with a coating of PVDF (4 mm minimum thickness) in lieu of the nickel cladding or lead lining specified in § 173.249(d). Four (4) tanks must be grouped together and permanently enclosed within a 20' x 8' x 8' ISO frame. Each group of four (4) tanks in an ISO frame is numbered serially as one container. Ten ISO frame containers identified by manufacturer's serial number PILC-1C-001 through PILC-1C-010 are authorized. Each tank must be as shown on Pennwalt India Limited Drawing Numbers 2-305-1057 Rev 2, sheets 1-3 of 3, and 2-305-1069-B (all approved by ABS on May 28, 1997) on file with the Office of Hazardous Materials Exemptions and Approvals (OHMEA). Additionally, each tank must be in accordance with the following description:

Shell and Head Material	SA 516 70
Water Capacity	1250 L (273.5 Gallons)
Shell Dimensions	43.31" ID x 39.37" L
Shell and Head Thickness	12mm (0.472") Minimum
Design Pressure	6 bar (87 psig)
Design Temperature	-20°F to 392°F
Design Specific Gravity	4.48

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b. TESTING -

(1) Each portable tank must be visually inspected prior to each trip to insure that it was not damaged on the previous trip.

(2) Each portable tank must be tested and inspected as specified for DOT Specification IM 101 steel portable tanks in § 173.32b. Test pressure must be at least 9 bar (130.5 psig).

(3) The integrity of the PVDF lining must be verified at least once each year as specified in § 180.407(f).

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 - Each ISO frame container holding a group of 4 tanks must be plainly marked on both sides near the middle, in letters and numerals at least two inches high on a contrasting background, "DOT-E 12071".

d. A test report documenting a satisfactory ISO prototype test for each tank design must be on file with OHMEA prior to the first shipment.

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

10. MODAL REQUIREMENTS: A current copy of this exemption must be carried aboard each cargo vessel or motor vehicle used to transport packages covered by this exemption.

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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 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 at Washington, D.C.:



Alan I. Roberts  
Associate Administrator for  
Hazardous Materials Safety

AUG 20 1999

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(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.

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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, USCG  
PO: PTolson