U.S. Department
of Transportation

**Research and
Special Programs
Administration**

MAR 3 2000

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

DOT-E 9812
(THIRD REVISION)

EXPIRATION DATE: February 28, 2002

(FOR RENEWAL, SEE 49 CFR § 107.109)

1. GRANTEE: Shinko-Pfaudler Company Ltd.
Kobe, Japan (U.S. Agent: Ihara Chemical
Co., Ltd., Parsippany, NJ)

2. PURPOSE AND LIMITATION: This exemption authorizes the transportation in commerce of certain hazardous materials in a non-DOT specification portable tank, equivalent to a DOT specification IM 101, except for the material of construction. This exemption provides no relief from any Hazardous Materials Regulation (HMR) 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 § 178.270-3(a).

5. BASIS: This exemption is based on the application of Shinko-Pfaudler Company dated February 25, 2000, submitted in accordance with § 107.109.

6. HAZARDOUS MATERIALS (49 CFR § 172.101):

Proper Shipping Name/ Hazardous Materials Description --	Hazard Class/ Division	Identi- fication Number	Packing Group
Proper shipping name or generic description, as appropriate*	as appro- priate	as appro- priate	as appro- priate

*** Those hazardous materials, appropriately classed, authorized in the IM tank table to be transported in IM-101 steel portable tanks designed, built, and equipped identically to the tanks described herein except for the material of construction, and as limited by the equivalent thickness in steel specified in paragraph 7 below. In addition, tank contents must be compatible with nickel as required in § 173.24(e)(2).**

7. SAFETY CONTROL MEASURES: Packaging prescribed is a non-DOT specification portable tank mounted in an ISO frame built in accordance with the ASME Code but not "U" stamped. Designed and constructed in accordance with Shinko-Pfaudler Company Ltd. drawings nos. 32175, 44278 and other drawings, technical specifications and calculations on file with the Office of Hazardous Materials Exemptions and Approvals (OHMEA), and in compliance with the following:

(1) Code - Complies with DOT Specification IM 101 except that tanks are constructed of nickel alloy SB-162.

(2) Insulation - Optional.

Tanks are fitted with steam heating coils.

(3) Water capacity (U.S. Gallons) - 4227

(4) Materials - SB-162 Nickel alloy

(outside dia.) X (length) X (thickness)

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(5) Tank Size 77.0223.8 0.220(min)(inches)

Equivalent shell thickness in mild steel - 0.253

Head Thickness - 0.232 (min)

Weld Joint Efficiency - 0.85

Corrosion Allowance - 0.0

(6) Design Pressure (psig) - 42.8 psig Note: Design pressure means "maximum allowable working pressure (MAWP)" as used in the ASME Code.

(7) Test Pressure - 64.3 psig

(8) Openings - one (1) - 17.7 inch diameter manhold opening; one (1) - 3.15 inch liquid outlet opening; one (1) 3.54 inch relief valve opening; one (1) 1.0 inch vent line opening all located on the top of the tank and one (1) 3.15 inch outlet on the bottom of the head.

(9) Tank surface area (square feet) - 402

(10) Pressure Relief Devices - One (1) 3.54 inch diameter spring loaded safety relief valve set at 53.5 psig. Total relief capacity is 332,274 SCFH.

(11) G-Loadings: Vertical down 3: Vertical up: 1: Longitudinal 2: and Transverse 1.

(12) Maximum Gross Weight (pound) - 52,910

(13) Maximum Commodity Weight (pounds) - 43,872

(14) Tare Weight (pounds) - 9,038

(15) Design Temperature (degrees F) - 149.

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 change are made to the package and it is reoffered for transportation in conformance with this exemption and the HMR.

b. Hydrostatic test certificates for each tank must be maintained by the owner or manufacturer at its principal business office and be made available to any representative of the DOT upon request.

c. No product may be shipped that has venting requirements exceeding that specified in paragraph 7.a. The venting capacity required for each product must be determined by the flow formulas contained in Compressed Gas Association (CGA) pamphlet S-1.2.

d. Each tank must be (i) visually inspected prior to each trip to insure that it has not been damaged on the previous trip; and (ii) retested and reinspected in accordance with § 173.32b. as prescribed for a DOT Specification IM 101 portable tanks.

e. Each portable tank must be plainly marked on both sides near the middle, in letters at least two inches high on a contrasting background, "DOT-E 9812".

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

g. Portable tanks may not be transported in container-on-flat car (COFC) or trailer-on-flat car (TOFC) service except under conditions approved by the Associate Administrator for Safety, Federal Railroad Administration.

h. DOT-E 9812 must be stamped on the metal manufacturer's data plate on the line which reads "U.S. DOT Specification No.".

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

10. MODAL REQUIREMENTS:

A copy of this exemption must be carried aboard each cargo vessel or motor vehicle 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:

- 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 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 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.:

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For Robert A. McGuire
Acting Associate Administrator
for Hazardous Materials Safety

(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, USCG
PO: sdc