

# ORNL PE Pail Open Head 1-Gallon Pail Specification

**This Specification is for Information Only**  
**The 1-Gallon PE Pail is no Longer a Stores Item**

Press  to see Check List only.

Description	Stores Catalog Number	Packaging Filling Instructions	Plant
Pail, polyethylene, open head, 1 gallon, solid lid, threaded, with locking latch <b>UN 1H2/Y 6/S</b> , 0.060" wall thickness, HDPE	02-117-1000	<a href="#">ORNL-CHK-43</a> <a href="#">Rev. 0</a>	ORNL

**Mfg. Details Per: ORNL Packaging Specifications**  
**No. 300-1H2-0000**  
**Issue Date: May 31, 2001**  
**Revised Date:**



[1.0 GENERAL DESCRIPTION](#)

[2.0 MATERIAL DETAILS](#)

[3.0 CONTAINER PERFORMANCE CRITERIA](#)

[4.0 QUALITY ASSURANCE](#)

[5.0 MARKING](#)

[6.0 INTENDED USE](#)

[7.0 SUGGESTED MANUFACTURERS](#)

[8.0 AUTHORIZED CHANGES](#)

[9.0 DISTRIBUTION OF UN PERFORMANCE TEST REPORTS \(per ¶3.1\)](#)  
[and CLOSURE INSTRUCTIONS \(per ¶2.2\)](#)

# Oak Ridge National Laboratory (ORNL)

## Packaging Specifications

### Open Head Polyethelyene Pail

Specification No. 300-1H2-0000

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Page 1 of 4

## 1.0 GENERAL DESCRIPTION

One (1) gallon open head (OH) all poly (HDPE) pail, and two (2) gallon open head (OH) all poly (HDPE) pail, with solid threaded, poly (HDPE) lids with locking latch.

### 1.1 United Nations Designation - UN 1H2 /Y 6/S \* & UN 1H2/Y 12/S \* [per 49 CFR, ¶178.503]

**1H2** = Open head polyethylene pail.

**Y** = Suitable for Packing Group II and III materials.

**6 & 12** = Maximum allowable gross weight in kilograms for which the design type was tested.

**S** = Designation indicates packaging is for solid materials [*or combination packaging*].

**\*** = The last two (2) digits of the calendar year in which the container was manufactured.

Specific UN markings as specified above and in the Catalog Description for the referenced Catalog Number for each of the two pails, are the ORNL minimum UN requirements.

### 1.2 Size:

One Gallon: Inside diameter – 8.25 inches; inside height – 6.88 inches (*Stores Number 02-117-1000*)

Two Gallon: Inside diameter – 9.42 inches; inside height – 8.81 inches (*Stores Number 02-117-2000*)

### 1.3 Tare Weight:

One Gallon – 0.958 lbs (0.435 kgs)

Two Gallon – 1.70 lbs (0.772 kgs)

## 2.0 MATERIAL DETAILS

The open head polyethylene pails are manufactured from prime high density polyethylene (HDPE) material. The lids for the pails are manufactured from the same HDPE material.

Pails have poly handles (straps.)

The lids do not have bung openings---but are plain (solid) lids.

### 2.1 Color:

The pails are the standard white color.

### 2.2 Closure:

Poly lids are threaded with locking latches inserted on the lid tops.

Lids contain inserted rubber gasket.

Manufacturer/supplier must furnish ORNL, in writing, closure requirements, as performed for the UN design test per 49 CFR ¶178.2(c)(1).

# Open Head Polyethylene Pail

Specification No. 300-1H2-0000

Issued: May 31, 2001

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Page 2 of 4

## 2.3 Cleanliness:

Finished poly pails must be free of dirt, oil, solvents, stains and any foreign contaminants.

## 3.0 CONTAINER PERFORMANCE CRITERIA

Manufacturer shall successfully test and certify that containers meet or exceed the requirements of 49 CFR, §§178.600 - 178.608, for the Packing Group II level.

### 3.1 Performance Test Documentation:

Upon request, the manufacturer must be capable of providing copies of the performance test documentation for purchased packagings, as required by 49 CFR, §178.601(l) for the UN certification marked packaging. Periodic audit copies will be requested randomly on purchased UN packagings. Ref: [§19.0](#).

### 3.2 Performance Tests:

The specified pails require the **US Department of Transportation** UN performance criteria for design qualification testing, periodic retesting, and production tests established in 49 CFR, §§178.600 - 178.608.

NOTE TO SELLER: The UN/test marking certifications must be made by the pail manufacturer or a Department of Transportation approved third-party tester.

## 4.0 QUALITY ASSURANCE

The Seller shall assure, and be responsible, that the quality of the pails furnished under this document are of good quality, as pursuant to industry standard manufacturing practices for poly pails, including the materials/components used in the manufacturing of the stated pails.

The Seller shall meet the requirements stipulated in this document, and the specific requirements of the Catalog Description for the specific pails as specified in the purchase order.

### 4.1 Manufacturer's Certification:

By the act of placing the UN performance criteria markings on each pail purchased, the manufacturer acknowledges he has certified, and accepted responsibility, that the stated pail design meets or exceeds the U.S. Department of Transportation's UN performance requirements as stipulated in [§13.2](#) of this document, and in accordance with the markings prescribed in 49 CFR, §178.503.

In addition, this certification marking acknowledges that the pail manufacturer has complied with the specific standards for poly pails specifically listed in 49 CFR §178.509.

### 4.2 Receiver Inspections:

The following inspections will be performed on the incoming pails by receiver to determine the pails meet quality standards and the requirements of this document. However, the receiver is not limited to the following inspections to determine quality and specification conformance. Conformance will be indicated by a **Y** or **N** in the yes/no column, and negative responses documented on the Nonconformance Report (NCR), *UCN-11457*, items 3 - 21b, attached to the checklist, and submitted to ORNL's Packaging Operations (PkgOps) for necessary action.

*NOTE: Checklist for this specification is on following page.*

## Open Head Polyethylene Pail

Specification No. 300-1H2-0000

Issued: May 31, 2001

Revised: N/A

Page 3 of 4

*This checklist is to be reproduced for QC Inspections.*

### Receiver Inspection Quality Control (QC) Checklist for Incoming Polyethylene Pails

QC Conformance	Y/N	<i>&lt;&lt; "No's" to be documented on form UCN-11457 with checklist</i>
1		Drum is the capacity specified in the Order/Catalog Description.
2		Clean, no significant scratching, dings or oil stains, etc. on the pail surfaces
3		Lids are plain (solid), and show no damage, or significant warping.
		Lids screw tightly onto pail and latch with locking device is installed in the lid.
4		The UN markings (the minimums) are specified per the Catalog Description.
		The complete UN markings are legible, and durably marked on either the bottom or the side of poly pail, per 49 CFR, ¶178.503.
5		Quantity of containers shown on packing list was on hand at time of QC inspection.

Catalog Number \_\_\_\_\_

P. O. Number \_\_\_\_\_

Total Units Received \_\_\_\_\_

Inspection Method: Per ORNL QC Inspection Plan

Sample Size \_\_\_\_\_ [Based on ANSI/ASQC Z1.4-1993]

NCR No. \_\_\_\_\_

Inspector/Date \_\_\_\_\_

Additional comments on back: \_\_\_\_\_ check, if yes.

The above QC inspection check list shall be accomplished for each order based on random samples of incoming poly pails, by QC personnel to determine manufacturer's conformance to these specified Packaging Specifications.

Shipments of poly pails not meeting specified requirements will be returned to the seller for credit.

QC inspections resulting in noncompliance with the Packaging Specifications will be cause for rejection of the entire shipment.

# Open Head Polyethylene Pail

Specification No. 300-1H2-0000

Issued: May 31, 2001

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Page 4 of 4

## 5.0 MARKING

As a minimum, each pail shall be marked with the UN markings in accordance with 49 CFR, ¶178.2, 178.3, and 178.503 in a conspicuous location on exterior surface of the drum. Markings shall have a minimum letter height of 1/2 inch per 49 CFR.

## 6.0 INTENDED USE

Containers are intended for Packing Group II, and III hazardous materials in **solid** form or as packaging for material which meets the DOT definition of a labpack. Maximum fill capacity of the poly pail shall not exceed the tested gross weight (in kilograms) marked on the pail.

## 7.0 SUGGESTED MANUFACTURERS

The following list of suggested manufacturers have demonstrated ability to comply with the requirements set forth in this document. However, this list does not guarantee current or continued availability as a suggested manufacturer source:

Packaging for Industry, Knoxville, Tennessee

The Seller must advise the Company prior to any change in the current source (manufacturer) of packaging materials described in these Packaging Specifications.

Any manufacturer that satisfactorily demonstrates to the Company the capability to furnish packaging in compliance with these Packaging Specifications may be added to the above listing.

## 8.0 AUTHORIZED CHANGES

Changes/revisions in the requirements specified in this document will only be authorized by ORNL PkgOps as coordinated with Oak Ridge facilities packaging operations.

## 9.0 DISTRIBUTION OF UN PERFORMANCE TEST REPORTS (per [§13.1](#)) and CLOSURE INSTRUCTIONS (per [§12.2](#))

A) Closure instructions must be furnished for each initial order, and annually (at the minimum) for each type/size plastic pail purchased by ORNL, directly to the Packaging Operations Manager, at the address below.

B) Upon specific request, UN performance test documentation for specified order/shipment will be submitted directly to the Packaging Operations Manager at the address below:

**Oak Ridge National Laboratory ( ORNL)  
Packaging Operations Manager  
Bldg. 7001, MS 6288  
P.O. Box 2008, 1 Bethel Valley Road  
OakRidge,Tennessee37831-6288**