
**Oak Ridge National Laboratory (ORNL)
Transportation and Packaging Management (TPM)
Container Preparation and Filling Instructions/Checklist**

Reusable Type A Croft Safpak

ORNL-PKG-24, Rev. 0

Issued: 2/27/1997

Revised: N/A

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NOTE: The [Reusable Type A Croft Safpak](#) (Design No. 2767T) is certified for shipment of Type A amounts of radionuclides in solid or liquid form. For liquids, the package may hold up to 500 milliliters in one bottle or in several inner bottles at the direction of the Packaging Supervisor. The pressure requirement for air shipments of liquid materials [95 kPa (13.8 psi)] is met by the inner container (Design No. 2952). The inner container (Design No. 2952) provides shielding equivalent to 4 mm of lead, and a lead pot is available for additional shielding.

A. Packaging the Reusable Type A Croft Safpak

**Packaging
Operations**

1. Ensure that external and internal contamination limits are within Oak Ridge National Laboratory (ORNL) site limits by:
 - " Reviewing existing Health Physics (HP) tag or documentation, **or**
 - " Requesting new HP survey.
2. Inspect the following visually for damage, dents, defects, etc:
 - o Outer container and lid;
 - o Cork cushioning material;
 - o Inner container, including lid and external threads;
 - o O-ring for wearing or tears;
 - o Brass closure ring, including internal threads; **and**
 - o Lead pot, if required.
3. Report any deficiencies to the Packaging Supervisor.
4. **IF** shielding is required, **THEN**
Place the primary container(s) inside the lead pot or inside the inner container.
5. Cushion the inner container(s) with enough absorbent material to securely position the inner container(s) and, if applicable, to absorb twice the volume of the liquid contents.
6. Place the o-ring and lid on the inner container.
7. Place the brass retaining ring on the inner container and hand tighten.

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Packaging Operations

A. Packaging the Reusable Type A Croft Safpak (con'td)

8. Place the inner container into the cork cushioning material.
9. Place the cork lid over the inner container.
10. Close the outer lid by aligning arrows and tab, **THEN**
Rotate the lid as indicated on the container and fasten the latch into the tab.
11. Ensure that the gross weight of the package does not exceed 20.3 kg (44 lb).
12. Attach a plain wire seal for nonaccountable materials or a controlled, numbered seal for accountable materials, if required.

The seal wire should be threaded through the latch so that the latch cannot be opened without breaking the wire.
13. Record the controlled, numbered seal information on the Seal Log Sheet, if applicable.

APPENDIX

[Appendix A: DOT 7A Type A Package Design](#)

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Approved by: Jeff Shelton

May 25, 2001

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ORNL TPM – Packaging Operations

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APPENDIX A

DOT 7A TYPE A PACKAGE DESIGN

