**The Oxford/Sure-Seal™ Valve Cap**

This adapter (Catalog number Z40,626-0) is designed for convenient and safe handling of air- and moisture-sensitive materials (e.g., organolithium and Grignard solutions) that are packaged in Aldrich Sure/Seal™ bottles. The valve cap, when equipped with a septum on the top and a nitrogen bleed on the side arm, enables a scientist to conveniently remove desired amounts of liquid. Repeated use of the same Sure/Seal liner, when used in conjunction with the Oxford Sure/Seal Valve Cap, provides a longer shelf life for Aldrich's air- and moisture-sensitive products.

A step-by-step procedure for the use of the Oxford Sure/Seal Valve-cap is presented below.

**NOTE:** Read Technical Bulletin AL-134, Handling Air-Sensitive Reagents, to become completely familiar with syringe techniques.

**Diagram 1.**

1. Remove the plastic overcap, A, from the Sure/Seal bottle, B.
2. Slip O-ring, C (supplied with the Oxford valve), firmly over the metal crown cap until it sits on top of the glass lip of the Sure/Seal bottle.
3. Securely screw the Oxford Sure/Seal Valve Cap, D, on top of the bottle, B, until it sits tightly against O-ring.

**Diagram 2.**

4. Remove the valve top, E, by turning counter-clockwise and replace with a septum, F (not included).
5. Place a septum, G (not included), on the side arm, H, of the Oxford Sure/Seal Valve.
6. Flush the system through septum, G, and out through septum, F, with dry nitrogen for 5 minutes.
7. While maintaining a static pressure of nitrogen through the side arm, H, use syringe techniques (described in Technical Bulletin AL-134) to remove the desired amount of liquid through the septum, F.
8. For extended storage, replace the top septum, F, with the valve top, E, saved from step 5, and hand-tighten the valve.
9. Repeat steps 4-6 the next time a sample of product is needed.
**Accessories**
(Also Use photo from Precision Seal Trifold)

**Precision Seal Septa**

# For use with: White rubber Red rubber
#3 Sidearm of Oxford Sure/Seal valve
8-mm o.d. standard-wall glass tubing
9-mm o.d. medium-wall glass tubing

Z55,391-3 Z55,403-0

#6 Valve top of Oxford Sure/Seal valve
10/30 joints and small test tubes

Z55,395-6 Z55,406-5

**A. Sure/Seal polypropylene overcap**
Red plastic overcap protects metal crown cap. Z40,631-7

**B. Natural-rubber liner- white**
For Z10,807-3; 30mm diam.; 60mil. Z10,808-1

**C. Steel crown cap**
With 1/4in. hole. Z10,214-8

**D. Teflon-faced liner**
For use with steel crown cap. 26mm diam. Z24,447-3

**E. Sure/Seal amber bottles**

<table>
<thead>
<tr>
<th>Capacity</th>
<th>Glass</th>
<th>Plastic-coated</th>
</tr>
</thead>
<tbody>
<tr>
<td>125mL</td>
<td>Z40,627-9</td>
<td>Z40,629-5</td>
</tr>
<tr>
<td>1000mL</td>
<td>Z40,628-7</td>
<td>Z40,630-9</td>
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</tbody>
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**Transfer needles**
12 gauge SS, double-ended with one deflecting tip and one flat-cut end. For fabrication of transfer lines with CHEM-FLEX™ 106 tubing.

6 inches long Z11,639-4
18 inches long Z11,640-8

**CHEM-FLEX™ needle**
Two 12gauge SS needles (6 and 18in.) connected to 30in. of CHEM-FLEX 106 tubing with nylon clamps, ready for use. Liquid comes in contact with Teflon and SS only during transfer. Z23,102-9

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