I. INTRODUCTION AND PRECAUTION

Due to the hazardous nature of pyrophoric reagents, we strongly recommend that all users read this bulletin carefully and completely before starting any actual laboratory work. If you are unsure of any of these procedures or if you need assistance, please contact us prior to use.

All users of these reagents must be fully qualified and experienced laboratory workers to handle pyrophoric reagents without problems. All users must be made aware of the very hazardous nature of these products.

Users must have read and understood our Technical Information Bulletin No. AL-134 which describes standard syringe and double-tipped-needle transfer techniques before attempting to handle liquid pyrophoric reagents (see Fig. 2).

II. NATURE OF THE REAGENTS

Pyrophoric reagents are extremely reactive toward oxygen and in most cases, water, and must never be exposed to the atmosphere. Failure to follow proper handling techniques could result in serious injury. Exposure of these reagents to air could result in spontaneous combustion, which could cause serious burns or other injuries to the person handling the reagent or others in the immediate area.

In addition, all combustible materials, including paper products, should not be allowed to come in contact with any pyrophoric reagent at any time.

III. HANDLING

Pyrophoric reagents can be handled and stored safely as long as all exposure to atmospheric oxygen and moisture is avoided. Solids must be transferred under an inert atmosphere in an efficient glove box. Liquids may be safely transferred without the use of a glove box by employing techniques and equipment discussed in our Technical Information Bulletin AL-134.

Again, users must have read and understood the accompanying Technical Bulletin AL-134 (call us immediately for a copy if yours has been misplaced), before attempting to handle liquid pyrophoric reagents.

Glass bottles of pyrophoric reagents should not be handled or stored unprotected. The metal can shipped with each bottle should be retained as a protective container for each bottle for transporting and storage (see Fig. 3 and 4).

NOTE: The metal can in which each bottle is shipped should be retained as a protective container for transporting and storing the bottle of reagent.

(OVER)
AtmosBag—A controlled-atmosphere chamber

The Aldrich AtmosBag is a 0.003-in. gauge PE bag that can be sealed, purged, and inflated with an appropriate inert gas, creating a portable, convenient, and inexpensive “glove box” for handling air- and moisture-sensitive, as well as toxic, materials. Other applications include dust-free operations, controlled-atmosphere habitat, and, for the ethylene oxide-treated AtmosBag, immunological and microbiological studies. Small AtmosBags have one inlet per side. Includes instructions.

Two-hand AtmosBag

<table>
<thead>
<tr>
<th>Size</th>
<th>Uninflated dimensions (in.)</th>
<th>Inflated volume (in.³)</th>
<th>Cat. No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>S</td>
<td>12 Opening, 27 Width, 30 Length</td>
<td>3,000 (50L)</td>
<td>Z11,283-6</td>
</tr>
<tr>
<td>M</td>
<td>24 Opening, 39 Width, 48 Length</td>
<td>17,000 (280L)</td>
<td>Z11,282-8</td>
</tr>
<tr>
<td>L</td>
<td>36 Opening, 51 Width, 58 Length</td>
<td>32,000 (520L)</td>
<td>Z10,608-9</td>
</tr>
</tbody>
</table>

Ethylene oxide-treated

<table>
<thead>
<tr>
<th>Cat. No.</th>
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<tbody>
<tr>
<td>Z11,836-2</td>
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<tr>
<td>Z11,835-4</td>
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</tbody>
</table>

Accessories

Sealing tape
PP, 3in. x 60yd. Z10,692-5

Bench-top base
Rigid PE, 1/8 in. thick. Keeps AtmosBag in place. Fits inside respective bag. S: 11 x 16in. Z11,286-0
L: 24 x 34½in. Z10,691-7

Cotton glove liners
Medium weight 100% cotton form-fitting, disposable style. Ambidextrous. Each package contains 12 pairs. 8in. L. S/M: Z11,833-8
M/L: Z11,834-6

Lattice rods
Aluminum. ½ o.d. x 11½ in. L. Sections screw together for extra height. Z22,566-5

CAUTION: Always handle toxic materials in a hood or other controlled system to prevent and protect against exposure in case of leakage. All products made of PE may tear, break, or puncture. To assure that air-sensitive materials do not become exposed to air, follow instructions on package; also test and monitor AtmosBag for leaks before and during use.

This hazard sheet must remain with the container at all times. If you have any questions, please contact us.