

Shipment of Hydrogen Peroxide Samples

Technical Data Sheet

Introduction

Often a need arises which requires the shipment of laboratory quantities of hydrogen peroxide for testing off-site, product evaluation or any of a number of other reasons. Hydrogen peroxide solutions are hazardous, and their packaging and shipment is therefore regulated by the Department of Transportation. Solvay Chemicals can provide the advice and may be able to provide the packaging materials to safely ship samples of hydrogen peroxide. For more information, contact your nearest Solvay Chemicals Regional Manager.

Note: Hydrogen Peroxide solutions greater than 8% (w/w) are considered a hazardous material according to current DOT definitions. Therefore, any person that packages or offers hydrogen peroxide for shipment must be trained in accordance with 49CFR Part 172 Subpart H. These instructions are meant only to serve as a guide, and do not constitute official training under Hazardous Material Regulations 49CFR.

Hydrogen Peroxide Sample Packaging

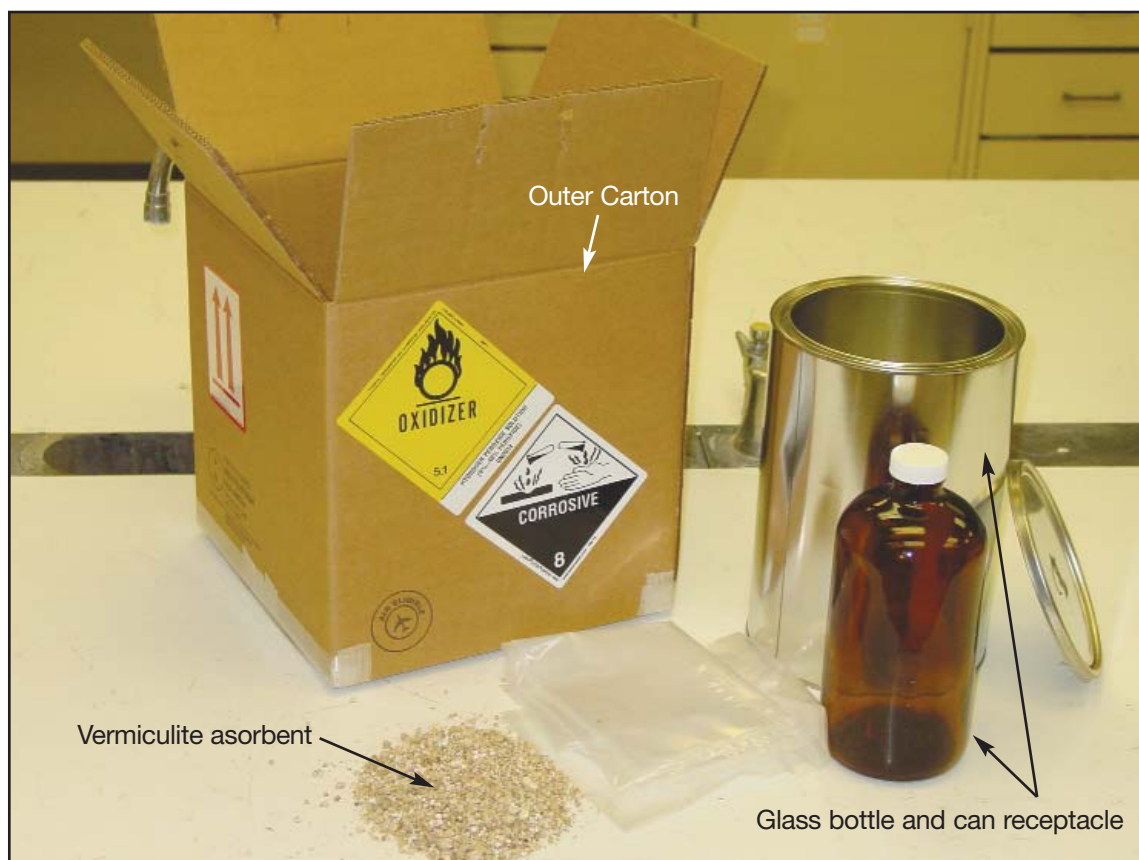
Any solution of hydrogen peroxide intended for shipment should be relatively clean and stable. Although a few bubbles adhering to the side of the bottle are normal for hydrogen peroxide, active bubbling is an indication of potential instability. Never attempt to ship a sample of hydrogen peroxide that is unstable or appears to be bubbling excessively. Unstable hydrogen peroxide is much more likely to leak from the vented container and cause a hazard.

Even though most hydrogen peroxide samples will be categorized as packing group II or III, Solvay Chemicals recommends the use of combination packaging which conforms to the packaging instructions for hazardous liquids in packing group I (CFR49 173.201). In addition, Solvay Chemicals recommends the use of a vermiculite based absorbent material within the combination packaging. Vermiculite is a common, mineral based, non-combustible absorbent material which is suitable for absorbing spilled hydrogen peroxide solutions.

The combination packaging shown in the illustration must be assembled and used according to the instructions enclosed with the kit. Assembly of a kit such as this one involves bagging the sample bottle, enclosing it inside the metal can with absorbent, then bagging and enclosing the metal can inside the carton with absorbent. The kit is intended to provide multiple layers of containment and absorbent in the event of a leak during transit. Any deviation from the instructions or substitution of materials in a kit may nullify its DOT certification as performance tested packaging. Solvay Chemicals may be able to help by providing these materials, or by recommending a supplier.



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Marking, Labeling, and Shipping Papers

Once assembled, the package must be labeled with the appropriate primary and subsidiary hazard labels, marked with the proper shipping name of the hazardous material, and accompanied by shipping papers describing the package(s). DOT Regulations (49CFR) should be consulted for specifics on how to properly mark, label, and prepare shipping papers. Many shipping companies can provide labeling, and shipping paper templates for shipments of hazardous materials. If a sample kit provided by Solvay Chemicals is used, refer to the enclosed instructions and use the labels and markings provided.

Hydrogen Peroxide Sample Shipments

Solvay Chemical's policies only permit hydrogen peroxide to be shipped via ground freight. In addition, the packaging materials provided by Solvay Chemicals are only intended for ground shipments and are not approved for air shipments. Although regulations may indicate that hydrogen peroxide shipments are permitted by air, the specific hazards associated with strong oxidizers such as hydrogen peroxide make it inadvisable. Solvay Chemicals does not recommend shipping hydrogen peroxide via air freight **under any circumstances**.

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Hydrogen peroxide samples destined for analysis at Solvay's La Porte facility should be addressed as follows:

Solvay Chemicals, Inc.
Attn. Applications Laboratory
1130 Battleground Road
La Porte, TX 77571

When properly packaged and labeled, hydrogen peroxide can be safely shipped using ground freight. For more information on hydrogen peroxide safety, handling and shipping information, consult the appropriate Solvay Chemicals MSDS or contact your nearest Solvay Chemicals Regional Manager. All Solvay Chemicals MSDS's are available on the internet at www.solvaychemicals.us.

Before using, read Material Safety Data Sheet (MSDS) for this chemical.

**Solvay Chemicals, Inc.
24 hour Emergency Phone Number - 800-424-9300 (CHEMTREC[®])**

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