

Guidelines for Ethidium Bromide Disposal

I. Purpose:

The purpose of this guideline is to define requirements for appropriate disposal of ethidium bromide. Items such as gels, buffers, and other materials that may contain or be contaminated with ethidium bromide must be disposed of properly.

II. Introduction:

Although ethidium bromide is not regulated as a hazardous waste, it has mutagenic properties that may present a human health hazard if it is placed in the trash or poured down the sanitary sewer system. The following procedures should be used when disposing of ethidium bromide solutions, gels, and ethidium bromide contaminated materials.

III. Disposal Guidelines

a. Ethidium Bromide Solutions

- Do not discard ethidium bromide gels or ethidium bromide solutions containing organic solvents or alcohol down the sewer.
- All aqueous solutions containing ethidium bromide must be treated (S&S extractor with charcoal filter or the Green Bag method) prior to sewer disposal. These solutions must NOT be released to the sanitary sewer prior to treatment.

b. Gels containing Ethidium Bromide

- Place gels in sturdy plastic bags within the designated containers.
- Other types of gels that do not contain ethidium bromide (acrylamide, agarose) can also be handled in this manner.

c. Gloves and Contaminated Materials

- Gloves and paper towels that are visibly contaminated with ethidium bromide should be placed in a sturdy plastic bag (DO NOT USE red biohazardous bags) or plastic container (i.e., plastic bottle). The bag or container should be labeled with a hazardous chemical waste label.
- Dispose through the VAPHS chemical waste disposal program.

d. Glassware

- Test tubes contaminated with ethidium bromide should be emptied prior to disposal. Dispose of the liquid according to the above procedures.
- Visibly contaminated test tubes should be washed with bleach prior to disposal in a broken glass container.

e. Sharps

- Contaminated needles and other Sharps contaminated with ethidium bromide should be disposed into their own Sharps container.

- A hazardous chemical waste label must then be placed over the label on the Sharps container to identify the contents as chemical waste and not biological waste.

*Please Note: No hazardous materials should be poured down the drain or placed into the regular trash.

Contact the Safety Department (412-954-4902) with any questions regarding chemical waste disposal. For information on the designated containers to collect the ethidium bromide gel waste, contact the Biosafety Officer for Research 412-954-5342