Ethidium Bromide (EtBr) is used in biochemical laboratories as a marker or stain for identifying nucleic acids in electrophoresis gels. Since EtBr is widely used at Caltech, EtBr safety precautions and the proper management of EtBr waste are very important.

**Safety Precautions**

Researchers using Ethidium Bromide should follow these safety procedures:

- **Wear Proper Protective Equipment** including a lab coat, closed-toed shoes, Nitrile gloves (or other appropriate chemically resistant gloves), and safety glasses.
- **Wash Your Hands** after removing gloves.
- **Do Not Eat or Drink** in areas where Ethidium Bromide is being used.

**Disposal Procedures**

- **Aqueous Solutions:** All Ethidium Bromide solutions, including buffers, must be either:
  - disposed of as a hazardous waste or
  - rendered non-toxic at the end of the experimental protocol
    - Use an extraction/absorption system, such as the Schleicher and Schuell kit.
      - This method uses an activated charcoal filtration system, which traps the Ethidium Bromide.
      - The filtrate from the operation may be placed down the drain after testing with an ultraviolet light to observe whether any Ethidium Bromide is still present in the filtrate.
      - Once the filter is saturated, the charcoal filter must be disposed of as a hazardous waste.
- **Electrophoresis Gels:** All gels, filters, and other solids containing more than 0.1% EtBr must be disposed of as a hazardous waste. Laboratory personnel can place them in a sealed bag or request a 5 gallon poly container from the EH&S office.

If you have a specific question regarding waste being generated in your work area, please contact the EH&S Office at ext. 6727 or via email at safety@caltech.edu.