



**The following document is the new procedure for handling Ethidium Bromide at the University of Rhode Island. If you have any questions please contact Safety & Risk Mgt.**

Waste Stream	Description	Waste Management Practices
<b>Buffer Solutions</b>	Typically contain very small concentrations of ethidium bromide (less than 0.01% by wt.)	May be discharged to sinks.
<b>Gels</b>	Typically contain small amounts of ethidium bromide.	Collect in waste containers. Keep waste containers in secondary containment, closed when not in use and labeled with a <b>Hazardous Waste label</b> distributed by SRM. Store containers in hazardous waste accumulation area. Fax a chemical pickup form to SRM when the container is full.
<b>Filtration Systems</b>	Typically contain relatively higher concentrations of ethidium bromide (>1% by wt.)	The spent filters must be collected in waste containers. Keep waste containers in secondary containment, closed when not in use and labeled with a <b>Hazardous Waste label</b> distributed by SRM. Store containers in hazardous waste accumulation area. Fax a chemical pickup form to SRM when the container is full
<b>Stock Solutions</b>	Typically contain relatively higher concentrations of ethidium bromide (~1% by wt.)	Collect in waste containers. Keep waste containers in secondary containment, closed when not in use and labeled with a <b>Hazardous Waste label</b> distributed by SRM. Store containers in hazardous waste accumulation area. Fax a chemical pickup form to SRM when the container is full.
<b>Crystals and Powders</b>	Typically concentrated or pure ethidium bromide.	Collect in waste containers. Keep waste containers in secondary containment, closed when not in use and labeled with a <b>Hazardous Waste label</b> distributed by SRM. Store containers in hazardous waste accumulation area. Fax a chemical pickup form to SRM when the container is full.
<b>Contaminated Debris</b>	Includes ethidium bromide contaminated debris (e.g. gloves, mats, tips, spill clean-up waste, etc.)	Collect waste in <b>CLEAR</b> 4mm plastic bags. Double bag if necessary. Bags must remain closed when not in use and labeled with a <b>Hazardous Waste label</b> distributed by SRM. Fax a chemical pickup form to SRM when the container is full.

Ethidium Bromide is commonly used as a non-radioactive marker for identifying and visualizing nucleic acid bands in electrophoresis and other methods of gel-based nucleic acid separation. Although it's an effective tool its hazardous properties require safe handling and disposal procedures. A Standard Operating Procedure for the safe use of ethidium bromide may be found in the Chemical Safety section of our web page. <http://www.uri.edu/safety>