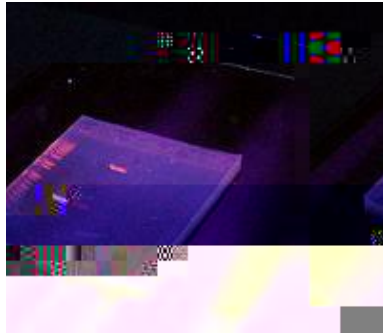





Safer Alternatives to Ethidium Bromide



Different types of dyes are used to stain nucleic acids in the preparation and use of electrophoresis gels. The hazard properties of various products, and hence the disposal requirements, are very different. While some products are completely safe or less toxic, others are mutagenic and require special handling and disposal procedures. As new products become available it is important to clarify the hazard properties and disposal requirements of these dyes.

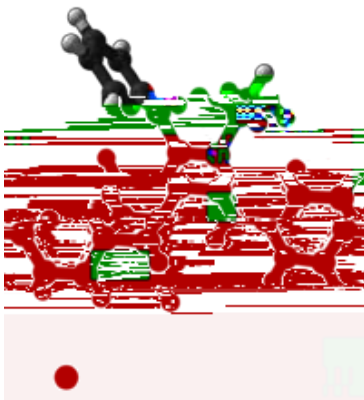
[Photo from: http://en.wikipedia.org/wiki/Ethidium_bromide]

Non-Mutagenic Dyes

SYBR® Safe, GelRed™, GelGreen™, and EvaGreen®. Independent licensed testing laboratories have .

Mutagenic Dyes

The following dyes have been determined to have mutagenic and/or toxic properties: Ethidium Bromide, Methylene







Protocol: Post strain only, in 0.025% (w/v) methylene blue in water.

Detection: Visible light.

Sensitivity: 40-100ng bands are reported to be detectable after de-staining. Some researchers reported that 3.36 to 3.36 µg (100 µl) T5ng