

Working Safely

^{125}I

Radiation Safety

(216) 368-2906

Iodine 125 Quick Facts

Principal emission:
0.035 MeV gamma

Half Life:
60.14 days

Shielding:
3mm thick lead

Body badge:
required

Ring badge:
required if using >
1mCi

Bioassay:
required when using
>1.0 mCi

Safety Precautions:

- Always wear gloves and a lab coat when working with any radioisotope.
- Due to ^{125}I affinity for the thyroid gland it is an internal exposure hazard. Obtain a thyroid scan before and after performing an iodination. The second scan needs to be completed within 24 hours after the iodination.
- Use a survey meter with a sodium iodide probe to detect ^{125}I . Count wipes in a Liquid Scintillation Counter or in the Gamma Counter to detect removable contamination.
- Waste generated from ^{125}I should be shielded with 3 mm lead shielding.
- Waste generated from ^{125}I should be stored in a covered acrylic waste container. Separate solid, liquids, and vial waste.



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Environmental Health and Safety