

Working Safely with

³⁵S

Radiation Safety

(216) 368-2906

Sulphur –³⁵ Quick Facts

Low Energy Beta
Emitter

Half Life: 87.4 days

Body badge is not
required
Ring badge is not
required

Safety Precautions:

- Always wear gloves and a lab coat when working with any radioisotope.
- Survey meter with GM probe have a low efficiency for ³⁵S, usually 4-8%. A pancake probe may be sensitive if used within a 1/2 inch of the surface.
- ³⁵S may be difficult to distinguish from ¹⁴C. If both nuclides are being used in the same laboratory, establish controls to ensure they are kept separate.
- Wipe tests should be taken and counted in a Liquid Scintillation Counter for greatest sensitivity when detecting removable surface contamination.
- Waste generated from ³⁵S should be stored in a covered acrylic waste container. Separate solid, liquids, and vial waste.
- ³⁵S labelled compounds in common use are often released as a radioactive contaminant to the air. Charcoal Filter traps should be used to reduce contamination from release of ³⁵S²O.



CASE WESTERN RESERVE UNIVERSITY

Environmental Health and Safety