

Working Safely with



Radiation Safety

(216) 368-2906

Hydrogen 3 Quick Facts

Principal emission:
0.0186 MeV beta

Half Life:
12.32 years

Shielding:
None required

Body badge:
None required

Ring badge:
Non required

Safety Precautions:

- Many tritiated compounds can readily penetrate gloves and skin. Wear two pairs of gloves and change the outer pair periodically to reduce cross contamination.
- Major concern is internal exposure.
- ^3H can not be monitored during it's use, with a GM survey meter. Conduct a wipe test of work areas and equipment surfaces and count the wipes in a Liquid Scintillation Counter.
- ^3H waste does not require special shielding .
- ^3H and ^{14}C waste may be combined but must be segregated from short-lived waste.
- A urine sample must be submitted to the RSOF for bioassay if work requires >10 mCi or if intake of ^3H labeled compound is suspected.
- Tritiated metabolic product may be released and tritiated water can accumulate upon storage. Open stock vials in the fume hood.