

Working Safely with

^{33}P

Radiation Safety

(216) 368-2906

Phosphorus 33 Quick Facts

Principal emission:
0.249 MeV beta

Half Life: 25.4 days

Shielding: 1 cm
acrylic

Body badge:
required
Ring badge:
required when
using >0.5 mCi

Safety Precautions:

- Always wear gloves and a lab coat when working with any radioisotope.
- Work should be carried out behind 1 cm thick acrylic shielding
- ^{33}P is easily detected by a survey meter. Check your hands often for contamination when working with ^{32}P and immediately dispose of contaminated gloves. Survey your work area, floor, equipment and yourself for contamination after every experiment.
- Waste generated from ^{33}P should be stored in a covered acrylic waste container. Separate solid, liquids, and vial waste.
- Waste generated from ^{32}P should be stored in a covered acrylic waste container. Keep solid, liquids, and vial waste separately. Lead sheets can be added to the exterior of the waste container to block any secondary