Radioactive Half-life T\(\frac{1}{2}\): 5730 years

Principal Emission: 0.156 MeV beta (maximum)

Monitoring for Contamination: Thin end-window Geiger-Müller detector

Biological Monitoring: Urine samples
Breath measurements (CO\(_2\))

Annual Limit on Intake (ALI) by Ingestion: 7.4 x 10\(^7\) Bq (~2.0 mCi) (Labelled Organic Compounds)

Maximum Range in Air: 24 cm

Maximum Range in Water: 0.28 mm

Shielding: 1 cm Perspex (Plexiglas)
Thinner Perspex (Plexiglas) down to 3 mm, although adequate to reduce doses, does not have good mechanical properties.

Special Considerations: There is a possibility that some organic compounds can be absorbed through gloves. Care needs to be taken not to generate carbon dioxide which could be inhaled.

HANDLING PRECAUTIONS

- Wear protective clothing, gloves and safety glasses.
- Avoid contact with eyes, skin and clothing.
- Do not pipette radioactive solutions by mouth.
- Work in a well ventilated area, volatile materials should be contained in a chemical fume hood.
- Monitor area regularly to avoid contamination; use a GM Detector or wipe test.
- Wash hands and monitor before leaving a radioactive area.
- Use only disposable towels and tissues; dispose of as radioactive waste.

STORAGE PRECAUTIONS

- Contain Radioactive Material in designated area.
- Label Radioactive Material clearly, indicate: Nuclide, total activity, date.
- Observe recommended storage temperatures and conditions.
- Observe posting and sign requirements for all storage areas.

SPILL OR LEAK PROCEDURE

- Cordon off area of contamination.
- Notify Radiation Safety Officer.
- Determine type and amount of contamination.
- Decontaminate the area from the outer edge by wiping or scrubbing.
- Monitor area to be certain decontamination is complete.
- Dispose of radioactive waste according to statutory requirements.