



RADIONUCLIDE DATA SHEET
Indium



In-111 49 protons 62 neutrons

Radiation: Decay mode: Electron Capture

Major Gammas:

Table with 2 columns: E (MeV) and # per 100 dis. Rows: 0.245 (94), 0.171 (90.84), 0.150 (0.003)

Max. Beta Range in air N/A cm or N/A ft Avg. gamma E = 0.209 MeV
Max. Beta Range in water N/A cm

Half-life: 2.8047 days

Gamma constant: 1.38 mR/hr per mCi at 30 cm

Radiological data: Min. Ingestion ALI: 4000µCi equals 5rem TEDE (Whole Body)

Min. Inhalation ALI: 6000µCi equals 5rem TEDE (Whole Body)

Doses:

Skin Dose: Reported for 1 µCi over 10 cm² of skin 28.7 mrad/hr (gamma dose)
Point Source: 0 mrad/hr (beta dose)
Disk Source: 0 mrad/hr (beta dose)

Shielding data: Max. range for beta: Plastic = N/A cm Aluminum = N/A cm
Tenth Value Thickness for average gamma: Concrete = cm Lead = cm

Detection Information: Usable Detectors listed with estimated efficiencies (Use efficiencies listed on instrument when available)

Ludlum 3 with pancake probe at 1 cm: % Liq. Scint. Counter: %
Ludlum 3 with NaI probe near surface: % Gamma Counter: %

Action Quantities:

Bench top quantity must be less than 40000 µCi
Containers require labeling when greater than 100 µCi
Rooms require posting when there is greater than 1000 µCi
Contamination lasting more than 24 hrs require NRC notification when greater than 20000 µCi