RADIONUCLIDE DATA SHEET
Curium

Cm-244 96 protons 148 neutrons

Radiation: **Decay mode:** Alpha

Major Alpha:

E (MeV)	# per 100 dis
5.805	76.9
5.763	23.1
5.664	0.02

Major Gammas:

E (MeV)	# per 100 dis
0.043	0.026
0.099	1.42E-3
0.153	1.05E-3

Max. Beta Range in air N/A cm or N/A ft
Max. Beta Range in water N/A cm

Avg. gamma E = 0.05 MeV

Half – life: 18.1 years

Gamma constant: 0.619E-4mR/hr per mCi at 30 cm

Radiological data:

Min. Ingestion ALI: 3μCi equals 5rem TEDE (Whole Body)
1μCi equals 50rem CEDE (Bone surf)

Min. Inhalation ALI: 3μCi equals 5rem TEDE (Whole Body)
0.01μCi equals 50rem CEDE (Bone surf)

Doses:

Skin Dose: Reported for 1 μCi over 10 cm^2 of skin
1.18 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	0.1 μCi
Containers require labeling when greater than	0.001 μCi
Rooms require posting when there is greater than	0.01 μCi
Contamination lasting more than 24 hrs require NRC notification when greater than	0.05 μCi