Radionuclide Safety Data Sheet

F-18	Radionuclide:	Fluorine-18			Half-life
	Atomic Number	9	Atomic Weight	18	1.83 hours

Annual Limit on Intake (Bq)			
Ingestion	All compounds: 4.0E+08	**Inhalation**	All compounds: 2.2E+08

Radiation Characteristics

Principal Emissions	Maximum Energy (MeV)	Dose Rate at 1 m (mSv/h/GBq)	Shielding
Gamma	0.511	0.188	HVL lead: 6 mm

Detection and Measurement

Method of detection:	G-M detectors, scintillation detector or ion-chamber
Dosimetry:	External: Whole body

Protective Measures

Critical organs: Stomach (ingestion), lung (inhalation)
Hazards: External and internal exposure. Contamination
Exposure routes: Ingestion, inhalation, puncture, wound, skin contamination/absorption
Recommended Protective Clothing: Wear appropriate protective clothing such as laboratory coats, coveralls, gloves, safety glasses/goggles. Always use appropriate tools and avoid direct hand contact. Store F-18 behind lead shielding

Sources and application of F-18

F-18 is an artificially made radionuclide and used in medical diagnostic and therapeutic purposes