

Accepted Half-Lives of Commonly Used Radioisotopes

All UAB Radioactive Materials Licensees are **required** to submit inventories to the UAB OH&S Radiation Safety Program quarterly, even if they **do not** possess any Radioactive Materials. When decaying radioisotopes for inventory purposes, please use the accepted half-lives listed below.

Name of Isotope	Half-Life of Isotope
Americium-241	432.2 years
Barium-133	10.74 years
Bismuth-212	60.55 minutes
Cadmium-109	464 days
Calicum-45	163 days
Carbon-11	20.4 minutes
Carbon-14	5,730 years
Cesium-137	30 years
Chlorine-36	301,000 years
Chromium-51	27.704 days
Cobalt-57	270.9 days
Cobalt-58	70.8 days
Cobalt-60	5.271 years
Copper-62	9.74 minutes
Copper-64	12.701 hours
Copper-67	61.86 hours
Fluorine-18	109.8 minutes
Gallium-67	78.26 hours
Gallium-68	68 minutes
Gold-195	183 days
Hydrogen-3	12.35 years
Indium-111	2.83 days
Indium-113m	1.658 hours
Iodine-123	13.2 hours
Iodine-125	60.14 days
Iodine-129	15,700,000 years
Iodine-131	8.04 days
Iron-55	2.7 years
Iron-59	44.529 days
Krypton-81m	13 seconds

Krypton-85	10.72 years
Name of Isotope	Half-Life of Isotope
Lutetium-177	6.71 days
Molybdenum-99	66 hours
Nickel-63	96 years
Phosphorus-32	14.29 days
Phosphorus-33	25.4 days
Plutonium-239	24,065 years
Polonium-210	138.38 days
Radium-226	1600 years
Radon-222	3.8235 days
Rhenium-188	16.98 hours
Rubidium-81	4.58 hours
Selenium-75	119.8 days
Sodium-22	2.602 years
Sodium-24	15 hours
Strontium-85	64.84 days
Strontium-89	50.5 days
Strontium-90	29.12 years
Sulfur-35	87.44 years
Technetium-99	213,000 years
Technetium-99m	6.02 hours
Tin-133	115.1 days
Tungsten-188	69.4 days
Uranium-235	703,800,000 years
Uranium-238	4,468,000,000 years
Xenon-127 3	6.41 days
Xenon-133	5.245 days
Yttrium-90	64 hours
Ytterbium-169	32.01 days
Zirconium-89	78.4 hours