

§ 173.434 Activity-mass relationships for uranium and natural thorium.

The table of activity-mass relationships for uranium and natural thorium are as follows:

Thorium and uranium enrichment ¹ (Wt% ²³⁵ U present)	Specific activity			
	TBq/gram	Grams/Tbq	Ci/gram	Grams/Ci
0.45 (depleted)	1.9×10^{-8}	5.4×10^7	5.0×10^{-7}	2.0×10^6
0.72 (natural)	2.6×10^{-8}	3.8×10^7	7.1×10^{-7}	1.4×10^6
1.0	2.8×10^{-8}	3.6×10^7	7.6×10^{-7}	1.3×10^6
1.5	3.7×10^{-8}	2.7×10^7	1.0×10^{-6}	1.0×10^6
5.0	1.0×10^{-7}	1.0×10^7	2.7×10^{-6}	3.7×10^5
10.0	1.8×10^{-7}	5.6×10^6	4.8×10^{-6}	2.1×10^5
20.0	3.7×10^{-7}	2.7×10^6	1.0×10^{-5}	1.0×10^5
35.0	7.4×10^{-7}	1.4×10^6	2.0×10^{-5}	5.0×10^4
50.0	9.3×10^{-7}	1.1×10^6	2.5×10^{-5}	4.0×10^4
90.0	2.1×10^{-6}	4.7×10^5	5.8×10^{-5}	1.7×10^4
93.0	2.6×10^{-6}	3.9×10^5	7.0×10^{-5}	1.4×10^4
95.0	3.4×10^{-6}	3.0×10^5	9.1×10^{-5}	1.1×10^4
Natural thorium	8.1×10^{-9}	1.2×10^8	2.2×10^{-7}	4.6×10^6

¹The figures for uranium include representative values for the activity of uranium-234 which is concentrated during the enrichment process. The activity for thorium includes the equilibrium concentration of thorium-228.

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