

**Table 084: Muons in Polonium**

Z	A [g/mol]	$\rho$ [g/cm <sup>3</sup> ]	I [eV]	a	$k = m_s$	$x_0$	$x_1$	$\bar{C}$	$\delta_0$
84 (Po)	[208.98243 (2)]	9.320	830.0	0.09282	3.1830	0.4267	3.8293	6.4003	0.14
T	p [MeV/c]	Ionization	Brems	Pair prod [MeV cm <sup>2</sup> /g]	Photonucl	Total	CSDA range [g/cm <sup>2</sup> ]		
10.0 MeV	$4.704 \times 10^1$	3.877				3.877	$1.503 \times 10^0$		
14.0 MeV	$5.616 \times 10^1$	3.098				3.098	$2.667 \times 10^0$		
20.0 MeV	$6.802 \times 10^1$	2.471				2.471	$4.858 \times 10^0$		
30.0 MeV	$8.509 \times 10^1$	1.956				1.956	$9.464 \times 10^0$		
40.0 MeV	$1.003 \times 10^2$	1.691				1.691	$1.500 \times 10^1$		
80.0 MeV	$1.527 \times 10^2$	1.302				1.302	$4.275 \times 10^1$		
100. MeV	$1.764 \times 10^2$	1.234				1.234	$5.856 \times 10^1$		
140. MeV	$2.218 \times 10^2$	1.170				1.170	$9.199 \times 10^1$		
200. MeV	$2.868 \times 10^2$	1.142				1.142	$1.441 \times 10^2$		
222. MeV	$3.104 \times 10^2$	1.141	0.000			1.141	<i>Minimum ionization</i>		
300. MeV	$3.917 \times 10^2$	1.150	0.000		0.000	1.150	$2.315 \times 10^2$		
400. MeV	$4.945 \times 10^2$	1.172	0.000		0.000	1.173	$3.176 \times 10^2$		
800. MeV	$8.995 \times 10^2$	1.261	0.001		0.000	1.262	$6.458 \times 10^2$		
1.00 GeV	$1.101 \times 10^3$	1.295	0.002		0.000	1.297	$8.020 \times 10^2$		
1.40 GeV	$1.502 \times 10^3$	1.349	0.002		0.001	1.352	$1.104 \times 10^3$		
2.00 GeV	$2.103 \times 10^3$	1.407	0.004	0.001	0.001	1.413	$1.537 \times 10^3$		
3.00 GeV	$3.104 \times 10^3$	1.472	0.007	0.003	0.001	1.485	$2.226 \times 10^3$		
4.00 GeV	$4.104 \times 10^3$	1.517	0.011	0.007	0.002	1.536	$2.888 \times 10^3$		
8.00 GeV	$8.105 \times 10^3$	1.619	0.026	0.023	0.003	1.671	$5.374 \times 10^3$		
10.0 GeV	$1.011 \times 10^4$	1.649	0.035	0.032	0.004	1.720	$6.553 \times 10^3$		
14.0 GeV	$1.411 \times 10^4$	1.693	0.053	0.052	0.005	1.804	$8.822 \times 10^3$		
20.0 GeV	$2.011 \times 10^4$	1.736	0.082	0.087	0.007	1.913	$1.205 \times 10^4$		
30.0 GeV	$3.011 \times 10^4$	1.782	0.135	0.153	0.011	2.081	$1.706 \times 10^4$		
40.0 GeV	$4.011 \times 10^4$	1.813	0.190	0.225	0.014	2.243	$2.168 \times 10^4$		
80.0 GeV	$8.011 \times 10^4$	1.880	0.430	0.545	0.028	2.884	$3.737 \times 10^4$		
100. GeV	$1.001 \times 10^5$	1.900	0.557	0.718	0.034	3.211	$4.394 \times 10^4$		
139. GeV	$1.395 \times 10^5$	1.930	0.814	1.068	0.048	3.861	<i>Muon critical energy</i>		
140. GeV	$1.401 \times 10^5$	1.930	0.817	1.074	0.048	3.870	$5.528 \times 10^4$		
200. GeV	$2.001 \times 10^5$	1.960	1.225	1.637	0.068	4.892	$6.904 \times 10^4$		
300. GeV	$3.001 \times 10^5$	1.994	1.920	2.578	0.102	6.597	$8.659 \times 10^4$		
400. GeV	$4.001 \times 10^5$	2.018	2.638	3.553	0.136	8.348	$1.000 \times 10^5$		
800. GeV	$8.001 \times 10^5$	2.076	5.601	7.550	0.276	15.504	$1.347 \times 10^5$		
1.00 TeV	$1.000 \times 10^6$	2.095	7.121	9.595	0.346	19.158	$1.463 \times 10^5$		
1.40 TeV	$1.400 \times 10^6$	2.123	10.167	13.671	0.490	26.453	$1.640 \times 10^5$		
2.00 TeV	$2.000 \times 10^6$	2.154	14.823	19.891	0.709	37.579	$1.829 \times 10^5$		
3.00 TeV	$3.000 \times 10^6$	2.189	22.592	30.225	1.084	56.091	$2.046 \times 10^5$		
4.00 TeV	$4.000 \times 10^6$	2.214	30.460	40.669	1.464	74.808	$2.199 \times 10^5$		
8.00 TeV	$8.000 \times 10^6$	2.277	62.164	82.641	3.039	150.123	$2.569 \times 10^5$		
10.0 TeV	$1.000 \times 10^7$	2.297	78.133	103.736	3.847	188.015	$2.688 \times 10^5$		
14.0 TeV	$1.400 \times 10^7$	2.328	109.983	145.829	5.505	263.647	$2.867 \times 10^5$		
20.0 TeV	$2.000 \times 10^7$	2.362	158.022	209.234	8.044	377.664	$3.056 \times 10^5$		
30.0 TeV	$3.000 \times 10^7$	2.401	237.997	314.721	12.430	567.550	$3.271 \times 10^5$		
40.0 TeV	$4.000 \times 10^7$	2.429	318.241	420.450	16.917	758.039	$3.423 \times 10^5$		
80.0 TeV	$8.000 \times 10^7$	2.498	639.637	843.657	35.637	1521.432	$3.788 \times 10^5$		
100. TeV	$1.000 \times 10^8$	2.521	800.580	1055.450	45.300	1903.853	$3.905 \times 10^5$		