

Muons in potassium (K)

Z	A [g/mol]	ρ [g/cm ³]	I [eV]	a	$k = m_s$	x_0	x_1	\bar{C}	δ_0
19 (K)	39.0983(1)	0.862	190.0	0.19827	2.9233	0.3851	3.1724	5.6423	0.10

T	p [MeV/c]	Ionization	Brems	Pair prod [MeV cm ² /g]	Photonucl	Total	CSDA range [g/cm ²]
10.0 MeV	4.704×10^1	6.123				6.123	9.134×10^{-1}
14.0 MeV	5.616×10^1	4.803				4.803	1.659×10^0
20.0 MeV	6.802×10^1	3.770				3.770	3.084×10^0
30.0 MeV	8.509×10^1	2.939				2.939	6.130×10^0
40.0 MeV	1.003×10^2	2.518				2.518	9.829×10^0
80.0 MeV	1.527×10^2	1.903				1.903	2.867×10^1
100. MeV	1.764×10^2	1.794				1.794	3.952×10^1
140. MeV	2.218×10^2	1.687				1.687	6.262×10^1
200. MeV	2.868×10^2	1.633				1.633	9.891×10^1
260. MeV	3.496×10^2	1.623			0.000	1.623	<i>Minimum ionization</i>
300. MeV	3.917×10^2	1.625			0.000	1.625	1.604×10^2
400. MeV	4.945×10^2	1.644	0.000		0.000	1.645	2.216×10^2
800. MeV	8.995×10^2	1.739	0.000		0.000	1.740	4.579×10^2
1.00 GeV	1.101×10^3	1.778	0.001		0.000	1.779	5.716×10^2
1.40 GeV	1.502×10^3	1.839	0.001	0.000	0.001	1.841	7.925×10^2
2.00 GeV	2.103×10^3	1.905	0.001	0.001	0.001	1.909	1.112×10^3
3.00 GeV	3.104×10^3	1.980	0.002	0.002	0.001	1.986	1.625×10^3
4.00 GeV	4.104×10^3	2.032	0.003	0.003	0.002	2.040	2.122×10^3
8.00 GeV	8.105×10^3	2.147	0.008	0.008	0.004	2.167	4.017×10^3
10.0 GeV	1.011×10^4	2.182	0.011	0.011	0.004	2.209	4.931×10^3
14.0 GeV	1.411×10^4	2.231	0.017	0.018	0.006	2.272	6.715×10^3
20.0 GeV	2.011×10^4	2.280	0.026	0.030	0.008	2.345	9.313×10^3
30.0 GeV	3.011×10^4	2.331	0.042	0.052	0.012	2.439	1.349×10^4
40.0 GeV	4.011×10^4	2.366	0.059	0.076	0.016	2.518	1.753×10^4
80.0 GeV	8.011×10^4	2.442	0.134	0.183	0.032	2.791	3.259×10^4
100. GeV	1.001×10^5	2.465	0.174	0.241	0.039	2.920	3.959×10^4
140. GeV	1.401×10^5	2.499	0.256	0.360	0.055	3.170	5.273×10^4
200. GeV	2.001×10^5	2.535	0.384	0.549	0.078	3.547	7.062×10^4
300. GeV	3.001×10^5	2.575	0.604	0.867	0.117	4.163	9.662×10^4
400. GeV	4.001×10^5	2.604	0.831	1.197	0.156	4.788	1.190×10^5
472. GeV	4.718×10^5	2.620	0.997	1.439	0.184	5.241	<i>Muon critical energy</i>
800. GeV	8.001×10^5	2.673	1.772	2.555	0.315	7.315	1.861×10^5
1.00 TeV	1.000×10^6	2.696	2.256	3.251	0.396	8.600	2.113×10^5
1.40 TeV	1.400×10^6	2.730	3.229	4.642	0.561	11.163	2.520×10^5
2.00 TeV	2.000×10^6	2.767	4.719	6.767	0.812	15.066	2.981×10^5
3.00 TeV	3.000×10^6	2.810	7.212	10.300	1.243	21.565	3.533×10^5
4.00 TeV	4.000×10^6	2.840	9.741	13.875	1.680	28.137	3.938×10^5
8.00 TeV	8.000×10^6	2.916	19.956	28.255	3.499	54.626	4.940×10^5
10.0 TeV	1.000×10^7	2.941	25.110	35.489	4.434	67.974	5.268×10^5
14.0 TeV	1.400×10^7	2.978	35.401	49.912	6.356	94.649	5.764×10^5
20.0 TeV	2.000×10^7	3.019	50.946	71.648	9.306	134.920	6.293×10^5
30.0 TeV	3.000×10^7	3.066	76.793	107.832	14.414	202.106	6.894×10^5
40.0 TeV	4.000×10^7	3.100	102.745	144.116	19.650	269.612	7.321×10^5
80.0 TeV	8.000×10^7	3.184	206.783	289.362	41.557	540.887	8.348×10^5
100. TeV	1.000×10^8	3.212	258.920	362.060	52.890	677.082	8.678×10^5