

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	3.546	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	1.771	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	8.599	2.113×10^5		
1.40 TeV	1.400×10^6	2.730	3.228	4.641	0.561	11.162	2.520×10^5		
2.00 TeV	2.000×10^6	2.767	4.719	6.767	0.812	15.065	2.982×10^5		
3.00 TeV	3.000×10^6	2.810	7.211	10.299	1.243	21.563	3.534×10^5		
4.00 TeV	4.000×10^6	2.840	9.740	13.874	1.680	28.135	3.938×10^5		
8.00 TeV	8.000×10^6	2.916	19.954	28.253	3.499	54.622	4.941×10^5		
10.0 TeV	1.000×10^7	2.941	25.108	35.486	4.434	67.969	5.268×10^5		
14.0 TeV	1.400×10^7	2.978	35.398	49.914	6.356	94.647	5.765×10^5		
20.0 TeV	2.000×10^7	3.019	50.942	71.658	9.306	134.926	6.293×10^5		
30.0 TeV	3.000×10^7	3.066	76.787	107.836	14.414	202.105	6.895×10^5		
40.0 TeV	4.000×10^7	3.100	102.737	144.112	19.650	269.600	7.322×10^5		
80.0 TeV	8.000×10^7	3.184	206.767	289.333	41.557	540.842	8.349×10^5		
100. TeV	1.000×10^8	3.212	258.900	362.020	52.890	677.022	8.678×10^5		