Muons in praseodymium (Pr)

Z	A [g/mol]	ρ [g/cm^3]	I [eV]	a	$k = m_s$	x_0	x_1	$\overline{C}$	δ_0
59 (Pr)	140.90766(2)	6.773	535.0	0.23265	2.7331	0.2313	3.2753	5.8003	0.14

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	4.435				4.435	1.288×10^0
14.0 MeV	5.616×10^1	3.513				3.513	2.311×10^0
20.0 MeV	6.802×10^1	2.781				2.781	4.251×10^0
30.0 MeV	8.509×10^1	2.186				2.186	8.360×10^0
40.0 MeV	1.003×10^2	1.882				1.882	1.332×10^1
80.0 MeV	1.527×10^2	1.436				1.436	3.839×10^1
100. MeV	1.764×10^2	1.356				1.356	5.275×10^1
140. MeV	2.218×10^2	1.282				1.282	8.322×10^1
200. MeV	2.868×10^2	1.247				1.248	1.308×10^2
239. MeV	3.285×10^2	1.243	0.000			1.244	*Minimum ionization*
300. MeV	3.917×10^2	1.249	0.000		0.000	1.249	2.111×10^2
400. MeV	4.945×10^2	1.268	0.000		0.000	1.269	2.906×10^2
800. MeV	8.995×10^2	1.355	0.001		0.000	1.356	5.951×10^2
1.00 GeV	1.101×10^3	1.389	0.001		0.000	1.391	7.407×10^2
1.40 GeV	1.502×10^3	1.443	0.002	0.000	0.001	1.446	1.022×10^3
2.00 GeV	2.103×10^3	1.502	0.003	0.001	0.001	1.508	1.428×10^3
3.00 GeV	3.104×10^3	1.568	0.005	0.003	0.001	1.579	2.075×10^3
4.00 GeV	4.104×10^3	1.614	0.008	0.006	0.002	1.630	2.698×10^3
8.00 GeV	8.105×10^3	1.717	0.020	0.019	0.003	1.759	5.051×10^3
10.0 GeV	1.011×10^4	1.748	0.026	0.026	0.004	1.805	6.173×10^3
14.0 GeV	1.411×10^4	1.792	0.040	0.043	0.005	1.881	8.343×10^3
20.0 GeV	2.011×10^4	1.836	0.062	0.070	0.007	1.976	1.145×10^4
30.0 GeV	3.011×10^4	1.882	0.102	0.122	0.011	2.118	1.634×10^4
40.0 GeV	4.011×10^4	1.913	0.143	0.179	0.015	2.251	2.092×10^4
80.0 GeV	8.011×10^4	1.980	0.324	0.430	0.029	2.764	3.692×10^4
100. GeV	1.001×10^5	2.000	0.420	0.566	0.036	3.023	4.384×10^4
140. GeV	1.401×10^5	2.030	0.616	0.845	0.050	3.542	5.605×10^4
183. GeV	1.827×10^5	2.053	0.833	1.156	0.065	4.108	*Muon critical energy*
200. GeV	2.001×10^5	2.061	0.924	1.286	0.071	4.343	7.133×10^4
300. GeV	3.001×10^5	2.096	1.448	2.024	0.106	5.675	9.143×10^4
400. GeV	4.001×10^5	2.120	1.991	2.788	0.141	7.042	1.072×10^5
800. GeV	8.001×10^5	2.180	4.229	5.922	0.285	12.618	1.491×10^5
1.00 TeV	1.000×10^6	2.200	5.379	7.525	0.359	15.464	1.634×10^5
1.40 TeV	1.400×10^6	2.229	7.684	10.722	0.508	21.145	1.854×10^5
2.00 TeV	2.000×10^6	2.261	11.209	15.600	0.734	29.806	2.092×10^5
3.00 TeV	3.000×10^6	2.298	17.093	23.707	1.123	44.222	2.366×10^5
4.00 TeV	4.000×10^6	2.324	23.055	31.899	1.517	58.797	2.562×10^5
8.00 TeV	8.000×10^6	2.389	47.088	64.830	3.151	117.460	3.033×10^5
10.0 TeV	1.000×10^7	2.411	59.197	81.383	3.990	146.982	3.185×10^5
14.0 TeV	1.400×10^7	2.443	83.351	114.411	5.712	205.918	3.414×10^5
20.0 TeV	2.000×10^7	2.478	119.792	164.162	8.350	294.784	3.656×10^5
30.0 TeV	3.000×10^7	2.519	180.457	246.940	12.907	442.825	3.931×10^5
40.0 TeV	4.000×10^7	2.548	241.336	329.913	17.571	591.370	4.126×10^5
80.0 TeV	8.000×10^7	2.621	485.210	662.036	37.038	1186.907	4.594×10^5
100. TeV	1.000×10^8	2.644	607.350	828.250	47.090	1485.336	4.744×10^5