Muons in carbon (amorphous) (C)

Z	A [g/mol]	ρ [g/cm^3]	I [eV]	a	$k = m_s$	x_0	x_1	$\overline{C}$	δ_0
6 (C)	12.0107(8)	2.000	78.0	0.20240	3.0036	-0.0351	2.4860	2.9925	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	7.117				7.117	7.771×10^{-1}
14.0 MeV	5.616×10^1	5.550				5.551	1.420×10^0
20.0 MeV	6.802×10^1	4.332				4.332	2.658×10^0
30.0 MeV	8.509×10^1	3.357				3.357	5.317×10^0
40.0 MeV	1.003×10^2	2.862				2.862	8.564×10^0
80.0 MeV	1.527×10^2	2.129				2.129	2.529×10^1
100. MeV	1.764×10^2	1.994				1.994	3.502×10^1
140. MeV	2.218×10^2	1.857				1.857	5.591×10^1
200. MeV	2.868×10^2	1.778				1.779	8.905×10^1
300. MeV	3.917×10^2	1.749			0.000	1.749	1.459×10^2
313. MeV	4.055×10^2	1.749			0.000	1.749	*Minimum ionization*
400. MeV	4.945×10^2	1.755			0.000	1.756	2.030×10^2
800. MeV	8.995×10^2	1.824	0.000		0.000	1.825	4.266×10^2
1.00 GeV	1.101×10^3	1.855	0.000		0.000	1.856	5.353×10^2
1.40 GeV	1.502×10^3	1.906	0.000		0.001	1.907	7.478×10^2
2.00 GeV	2.103×10^3	1.961	0.000	0.000	0.001	1.963	1.058×10^3
3.00 GeV	3.104×10^3	2.025	0.001	0.001	0.001	2.028	1.558×10^3
4.00 GeV	4.104×10^3	2.069	0.001	0.001	0.002	2.073	2.046×10^3
8.00 GeV	8.105×10^3	2.169	0.003	0.003	0.004	2.179	3.922×10^3
10.0 GeV	1.011×10^4	2.200	0.004	0.004	0.005	2.212	4.832×10^3
14.0 GeV	1.411×10^4	2.243	0.006	0.007	0.007	2.263	6.619×10^3
20.0 GeV	2.011×10^4	2.288	0.010	0.011	0.009	2.318	9.237×10^3
30.0 GeV	3.011×10^4	2.336	0.016	0.019	0.013	2.384	1.349×10^4
40.0 GeV	4.011×10^4	2.368	0.022	0.028	0.018	2.436	1.764×10^4
80.0 GeV	8.011×10^4	2.444	0.050	0.068	0.034	2.596	3.351×10^4
100. GeV	1.001×10^5	2.467	0.065	0.089	0.042	2.665	4.112×10^4
140. GeV	1.401×10^5	2.502	0.097	0.134	0.059	2.792	5.577×10^4
200. GeV	2.001×10^5	2.539	0.145	0.206	0.084	2.974	7.659×10^4
300. GeV	3.001×10^5	2.580	0.230	0.327	0.125	3.262	1.087×10^5
400. GeV	4.001×10^5	2.610	0.317	0.453	0.167	3.547	1.381×10^5
800. GeV	8.001×10^5	2.681	0.681	0.981	0.338	4.681	2.359×10^5
1.00 TeV	1.000×10^6	2.705	0.869	1.254	0.424	5.252	2.762×10^5
1.06 TeV	1.060×10^6	2.711	0.925	1.335	0.451	5.422	*Muon critical energy*
1.40 TeV	1.400×10^6	2.740	1.248	1.797	0.602	6.387	3.452×10^5
2.00 TeV	2.000×10^6	2.778	1.830	2.630	0.871	8.109	4.284×10^5
3.00 TeV	3.000×10^6	2.822	2.806	4.016	1.335	10.979	5.340×10^5
4.00 TeV	4.000×10^6	2.853	3.799	5.422	1.807	13.882	6.148×10^5
8.00 TeV	8.000×10^6	2.931	7.821	11.088	3.773	25.613	8.238×10^5
10.0 TeV	1.000×10^7	2.956	9.855	13.942	4.785	31.539	8.940×10^5
14.0 TeV	1.400×10^7	2.995	13.913	19.628	6.871	43.408	1.002×10^6
20.0 TeV	2.000×10^7	3.037	20.052	28.206	10.076	61.371	1.117×10^6
30.0 TeV	3.000×10^7	3.085	30.273	42.478	15.640	91.476	1.250×10^6
40.0 TeV	4.000×10^7	3.120	40.549	56.796	21.350	121.816	1.344×10^6
80.0 TeV	8.000×10^7	3.206	81.720	114.122	45.316	244.366	1.572×10^6
100. TeV	1.000×10^8	3.235	102.350	142.820	57.740	306.145	1.645×10^6