

Muons in soft tissue (ICRU four-component)

	$\langle Z/A \rangle$	ρ [g/cm ³]	I [eV]	a	$k = m_s$	x_0	x_1	\bar{C}	δ_0
	0.54975	1.000	74.9	0.09629	3.4371	0.2377	2.7908	3.5087	0.00
T	p [MeV/c]	Ionization	Brems	Pair prod	Photonucl	Total	CSDA range [g/cm ²]		
10.0 MeV	4.704×10^1	7.890				7.890	7.005×10^{-1}		
14.0 MeV	5.616×10^1	6.154				6.154	1.281×10^0		
20.0 MeV	6.802×10^1	4.806				4.806	2.397×10^0		
30.0 MeV	8.509×10^1	3.729				3.729	4.792×10^0		
40.0 MeV	1.003×10^2	3.184				3.184	7.713×10^0		
80.0 MeV	1.527×10^2	2.390				2.390	2.268×10^1		
100. MeV	1.764×10^2	2.248				2.248	3.132×10^1		
140. MeV	2.218×10^2	2.096				2.096	4.983×10^1		
200. MeV	2.868×10^2	2.007				2.007	7.920×10^1		
300. MeV	3.917×10^2	1.973			0.000	1.973	1.296×10^2		
318. MeV	4.105×10^2	1.972			0.000	1.973	<i>Minimum ionization</i>		
400. MeV	4.945×10^2	1.979			0.000	1.979	1.803×10^2		
800. MeV	8.995×10^2	2.054	0.000		0.000	2.055	3.787×10^2		
1.00 GeV	1.101×10^3	2.088	0.000		0.000	2.089	4.752×10^2		
1.40 GeV	1.502×10^3	2.144	0.000		0.001	2.145	6.640×10^2		
2.00 GeV	2.103×10^3	2.206	0.001	0.000	0.001	2.207	9.395×10^2		
3.00 GeV	3.104×10^3	2.276	0.001	0.001	0.001	2.279	1.385×10^3		
4.00 GeV	4.104×10^3	2.324	0.001	0.001	0.002	2.329	1.819×10^3		
8.00 GeV	8.105×10^3	2.435	0.004	0.003	0.004	2.446	3.489×10^3		
10.0 GeV	1.011×10^4	2.469	0.005	0.005	0.005	2.484	4.301×10^3		
14.0 GeV	1.411×10^4	2.518	0.007	0.008	0.007	2.540	5.892×10^3		
20.0 GeV	2.011×10^4	2.567	0.011	0.013	0.009	2.601	8.225×10^3		
30.0 GeV	3.011×10^4	2.621	0.018	0.022	0.013	2.675	1.201×10^4		
40.0 GeV	4.011×10^4	2.657	0.026	0.033	0.018	2.733	1.571×10^4		
80.0 GeV	8.011×10^4	2.740	0.059	0.079	0.034	2.913	2.986×10^4		
100. GeV	1.001×10^5	2.766	0.077	0.105	0.042	2.990	3.664×10^4		
140. GeV	1.401×10^5	2.804	0.113	0.157	0.059	3.134	4.970×10^4		
200. GeV	2.001×10^5	2.845	0.170	0.241	0.084	3.339	6.824×10^4		
300. GeV	3.001×10^5	2.890	0.269	0.382	0.125	3.667	9.681×10^4		
400. GeV	4.001×10^5	2.923	0.371	0.530	0.167	3.991	1.229×10^5		
800. GeV	8.001×10^5	3.001	0.796	1.145	0.337	5.280	2.098×10^5		
1.00 TeV	1.000×10^6	3.027	1.016	1.463	0.424	5.930	2.455×10^5		
1.04 TeV	1.042×10^6	3.031	1.061	1.528	0.442	6.063	<i>Muon critical energy</i>		
1.40 TeV	1.400×10^6	3.066	1.458	2.095	0.601	7.221	3.066×10^5		
2.00 TeV	2.000×10^6	3.108	2.138	3.065	0.870	9.181	3.801×10^5		
3.00 TeV	3.000×10^6	3.156	3.279	4.678	1.333	12.446	4.733×10^5		
4.00 TeV	4.000×10^6	3.190	4.439	6.314	1.804	15.747	5.446×10^5		
8.00 TeV	8.000×10^6	3.276	9.136	12.903	3.766	29.081	7.287×10^5		
10.0 TeV	1.000×10^7	3.304	11.511	16.221	4.777	35.813	7.906×10^5		
14.0 TeV	1.400×10^7	3.347	16.253	22.833	6.859	49.292	8.854×10^5		
20.0 TeV	2.000×10^7	3.393	23.425	32.807	10.058	69.683	9.873×10^5		
30.0 TeV	3.000×10^7	3.446	35.368	49.401	15.612	103.827	1.104×10^6		
40.0 TeV	4.000×10^7	3.484	47.376	66.048	21.312	138.221	1.187×10^6		
80.0 TeV	8.000×10^7	3.579	95.539	132.694	45.234	277.046	1.388×10^6		
100. TeV	1.000×10^8	3.610	119.690	166.055	57.635	346.992	1.452×10^6		