

Table 052: Muons in Tellurium

Z	A [g/mol]	ρ [g/cm ³]	I [eV]	a	$k = m_s$	x_0	x_1	\bar{C}	δ_0
52 (Te)	127.60 (3)	6.240	485.0	0.13815	3.0354	0.3296	3.4418	5.7131	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	4.398				4.398	1.296×10^0		
14.0 MeV	5.616×10^1	3.479				3.479	2.328×10^0		
20.0 MeV	6.802×10^1	2.752				2.752	4.288×10^0		
30.0 MeV	8.509×10^1	2.162				2.162	8.442×10^0		
40.0 MeV	1.003×10^2	1.860				1.860	1.346×10^1		
80.0 MeV	1.527×10^2	1.419				1.419	3.882×10^1		
100. MeV	1.764×10^2	1.341				1.341	5.335×10^1		
140. MeV	2.218×10^2	1.266				1.266	8.419×10^1		
200. MeV	2.868×10^2	1.231				1.231	1.324×10^2		
243. MeV	3.325×10^2	1.227				1.227	<i>Minimum ionization</i>		
300. MeV	3.917×10^2	1.232	0.000		0.000	1.232	2.138×10^2		
400. MeV	4.945×10^2	1.251	0.000		0.000	1.251	2.944×10^2		
800. MeV	8.995×10^2	1.334	0.001		0.000	1.335	6.035×10^2		
1.00 GeV	1.101×10^3	1.367	0.001		0.000	1.368	7.514×10^2		
1.40 GeV	1.502×10^3	1.419	0.002	0.000	0.001	1.421	1.038×10^3		
2.00 GeV	2.103×10^3	1.475	0.003	0.001	0.001	1.480	1.451×10^3		
3.00 GeV	3.104×10^3	1.538	0.005	0.003	0.001	1.548	2.111×10^3		
4.00 GeV	4.104×10^3	1.582	0.007	0.005	0.002	1.596	2.747×10^3		
8.00 GeV	8.105×10^3	1.681	0.017	0.017	0.003	1.718	5.153×10^3		
10.0 GeV	1.011×10^4	1.710	0.023	0.023	0.004	1.761	6.302×10^3		
14.0 GeV	1.411×10^4	1.752	0.035	0.038	0.005	1.831	8.529×10^3		
20.0 GeV	2.011×10^4	1.794	0.054	0.062	0.008	1.918	1.173×10^4		
30.0 GeV	3.011×10^4	1.839	0.088	0.107	0.011	2.046	1.677×10^4		
40.0 GeV	4.011×10^4	1.868	0.124	0.157	0.015	2.165	2.152×10^4		
80.0 GeV	8.011×10^4	1.934	0.280	0.377	0.029	2.621	3.828×10^4		
100. GeV	1.001×10^5	1.953	0.363	0.495	0.036	2.849	4.560×10^4		
140. GeV	1.401×10^5	1.983	0.533	0.739	0.050	3.306	5.862×10^4		
200. GeV	2.001×10^5	2.013	0.799	1.126	0.071	4.010	7.509×10^4		
202. GeV	2.017×10^5	2.013	0.806	1.135	0.072	4.028	<i>Muon critical energy</i>		
300. GeV	3.001×10^5	2.047	1.254	1.771	0.107	5.179	9.698×10^4		
400. GeV	4.001×10^5	2.071	1.724	2.440	0.142	6.378	1.144×10^5		
800. GeV	8.001×10^5	2.129	3.664	5.183	0.288	11.265	1.610×10^5		
1.00 TeV	1.000×10^6	2.148	4.661	6.587	0.362	13.758	1.770×10^5		
1.40 TeV	1.400×10^6	2.177	6.659	9.386	0.512	18.735	2.018×10^5		
2.00 TeV	2.000×10^6	2.208	9.716	13.658	0.741	26.323	2.287×10^5		
3.00 TeV	3.000×10^6	2.243	14.819	20.757	1.132	38.953	2.598×10^5		
4.00 TeV	4.000×10^6	2.269	19.991	27.932	1.530	51.724	2.820×10^5		
8.00 TeV	8.000×10^6	2.332	40.844	56.774	3.179	103.131	3.357×10^5		
10.0 TeV	1.000×10^7	2.353	51.352	71.272	4.026	129.005	3.530×10^5		
14.0 TeV	1.400×10^7	2.385	72.313	100.200	5.763	180.663	3.791×10^5		
20.0 TeV	2.000×10^7	2.419	103.940	143.778	8.426	258.564	4.067×10^5		
30.0 TeV	3.000×10^7	2.459	156.591	216.283	13.027	388.361	4.380×10^5		
40.0 TeV	4.000×10^7	2.487	209.432	288.960	17.736	518.616	4.602×10^5		
80.0 TeV	8.000×10^7	2.557	421.117	579.876	37.396	1040.948	5.136×10^5		
100. TeV	1.000×10^8	2.580	527.140	725.470	47.550	1302.742	5.307×10^5		