

Table 152: Muons in Ethane (C₂H₆)

$\langle Z/A \rangle$	ρ [g/cm ³]	I [eV]	a	$k = m_s$	x_0	x_1	\bar{C}	δ_0
0.59861	1.263×10^{-3}	45.4	0.09627	3.6095	1.5090	3.8726	9.0965	0.00
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	9.147				9.147	6.016×10^{-1}	
14.0 MeV	5.616×10^1	7.119				7.119	1.103×10^0	
20.0 MeV	6.802×10^1	5.547				5.548	2.068×10^0	
30.0 MeV	8.509×10^1	4.294				4.294	4.146×10^0	
40.0 MeV	1.003×10^2	3.661				3.661	6.685×10^0	
80.0 MeV	1.527×10^2	2.739				2.739	1.972×10^1	
100. MeV	1.764×10^2	2.573				2.573	2.728×10^1	
140. MeV	2.218×10^2	2.409				2.409	4.342×10^1	
200. MeV	2.868×10^2	2.323				2.323	6.888×10^1	
267. MeV	3.577×10^2	2.304			0.000	2.304	<i>Minimum ionization</i>	
300. MeV	3.917×10^2	2.307			0.000	2.307	1.122×10^2	
400. MeV	4.945×10^2	2.333			0.000	2.333	1.553×10^2	
800. MeV	8.995×10^2	2.478	0.000		0.000	2.479	3.216×10^2	
1.00 GeV	1.101×10^3	2.540	0.000		0.000	2.541	4.012×10^2	
1.40 GeV	1.502×10^3	2.642	0.000		0.001	2.643	5.555×10^2	
2.00 GeV	2.103×10^3	2.757	0.000	0.000	0.001	2.759	7.774×10^2	
3.00 GeV	3.104×10^3	2.892	0.001	0.000	0.001	2.895	1.131×10^3	
4.00 GeV	4.104×10^3	2.979	0.001	0.001	0.002	2.983	1.471×10^3	
8.00 GeV	8.105×10^3	3.158	0.003	0.003	0.004	3.168	2.766×10^3	
10.0 GeV	1.011×10^4	3.210	0.004	0.004	0.005	3.222	3.392×10^3	
14.0 GeV	1.411×10^4	3.283	0.005	0.006	0.007	3.302	4.617×10^3	
20.0 GeV	2.011×10^4	3.355	0.009	0.010	0.009	3.383	6.411×10^3	
30.0 GeV	3.011×10^4	3.428	0.014	0.017	0.014	3.474	9.326×10^3	
40.0 GeV	4.011×10^4	3.476	0.020	0.025	0.018	3.540	1.218×10^4	
80.0 GeV	8.011×10^4	3.580	0.046	0.062	0.035	3.723	2.317×10^4	
100. GeV	1.001×10^5	3.611	0.060	0.081	0.043	3.796	2.849×10^4	
140. GeV	1.401×10^5	3.656	0.088	0.123	0.060	3.927	3.885×10^4	
200. GeV	2.001×10^5	3.702	0.133	0.188	0.085	4.108	5.378×10^4	
300. GeV	3.001×10^5	3.752	0.211	0.300	0.128	4.391	7.732×10^4	
400. GeV	4.001×10^5	3.788	0.292	0.416	0.171	4.666	9.940×10^4	
800. GeV	8.001×10^5	3.874	0.629	0.903	0.345	5.750	1.765×10^5	
1.00 TeV	1.000×10^6	3.901	0.804	1.155	0.433	6.293	2.097×10^5	
1.40 TeV	1.400×10^6	3.944	1.156	1.657	0.614	7.371	2.684×10^5	
1.60 TeV	1.603×10^6	3.961	1.338	1.916	0.707	7.922	<i>Muon critical energy</i>	
2.00 TeV	2.000×10^6	3.989	1.698	2.428	0.889	9.005	3.419×10^5	
3.00 TeV	3.000×10^6	4.042	2.609	3.712	1.363	11.726	4.390×10^5	
4.00 TeV	4.000×10^6	4.080	3.537	5.015	1.845	14.477	5.156×10^5	
8.00 TeV	8.000×10^6	4.172	7.302	10.268	3.855	25.597	7.207×10^5	
10.0 TeV	1.000×10^7	4.203	9.209	12.915	4.890	31.218	7.913×10^5	
14.0 TeV	1.400×10^7	4.250	13.016	18.188	7.026	42.480	9.008×10^5	
20.0 TeV	2.000×10^7	4.300	18.781	26.144	10.309	59.534	1.020×10^6	
30.0 TeV	3.000×10^7	4.358	28.385	39.377	16.013	88.134	1.157×10^6	
40.0 TeV	4.000×10^7	4.400	38.048	52.656	21.871	116.975	1.255×10^6	
80.0 TeV	8.000×10^7	4.503	76.798	105.818	46.487	233.606	1.492×10^6	
100. TeV	1.000×10^8	4.537	96.230	132.432	59.258	292.458	1.569×10^6	