

Muons in ethyl cellulose ($[\text{C}_{12}\text{H}_{22}\text{O}_5]_n$)

	$\langle Z/A \rangle$	ρ [g/cm ³]	I [eV]	a	$k = m_s$	x_0	x_1	\bar{C}	δ_0
	0.54405	1.130	69.3	0.11077	3.4098	0.1683	2.6527	3.2415	0.00
T	p [MeV/c]	Ionization	Brems	Pair prod	Photonucl	Total	CSDA range [g/cm ²]		
10.0 MeV	4.704×10^1	7.886				7.886	7.003×10^{-1}		
14.0 MeV	5.616×10^1	6.149				6.149	1.281×10^0		
20.0 MeV	6.802×10^1	4.801				4.801	2.398×10^0		
30.0 MeV	8.509×10^1	3.723				3.723	4.796×10^0		
40.0 MeV	1.003×10^2	3.178				3.178	7.723×10^0		
80.0 MeV	1.527×10^2	2.385				2.385	2.272×10^1		
100. MeV	1.764×10^2	2.235				2.235	3.140×10^1		
140. MeV	2.218×10^2	2.080				2.080	5.005×10^1		
200. MeV	2.868×10^2	1.990				1.990	7.965×10^1		
300. MeV	3.917×10^2	1.955			0.000	1.955	1.305×10^2		
318. MeV	4.105×10^2	1.954			0.000	1.955	<i>Minimum ionization</i>		
400. MeV	4.945×10^2	1.960			0.000	1.961	1.816×10^2		
800. MeV	8.995×10^2	2.032	0.000		0.000	2.033	3.821×10^2		
1.00 GeV	1.101×10^3	2.065	0.000		0.000	2.066	4.796×10^2		
1.40 GeV	1.502×10^3	2.120	0.000		0.001	2.121	6.706×10^2		
2.00 GeV	2.103×10^3	2.179	0.001	0.000	0.001	2.181	9.494×10^2		
3.00 GeV	3.104×10^3	2.247	0.001	0.001	0.001	2.250	1.400×10^3		
4.00 GeV	4.104×10^3	2.294	0.001	0.001	0.002	2.299	1.840×10^3		
8.00 GeV	8.105×10^3	2.403	0.003	0.003	0.004	2.413	3.533×10^3		
10.0 GeV	1.011×10^4	2.436	0.004	0.004	0.005	2.449	4.355×10^3		
14.0 GeV	1.411×10^4	2.484	0.006	0.007	0.007	2.504	5.970×10^3		
20.0 GeV	2.011×10^4	2.532	0.010	0.011	0.009	2.563	8.337×10^3		
30.0 GeV	3.011×10^4	2.584	0.016	0.020	0.014	2.634	1.218×10^4		
40.0 GeV	4.011×10^4	2.620	0.023	0.029	0.018	2.690	1.594×10^4		
80.0 GeV	8.011×10^4	2.702	0.053	0.071	0.034	2.861	3.033×10^4		
100. GeV	1.001×10^5	2.728	0.069	0.094	0.043	2.933	3.723×10^4		
140. GeV	1.401×10^5	2.766	0.101	0.141	0.059	3.068	5.056×10^4		
200. GeV	2.001×10^5	2.806	0.153	0.216	0.084	3.259	6.953×10^4		
300. GeV	3.001×10^5	2.851	0.241	0.344	0.126	3.562	9.887×10^4		
400. GeV	4.001×10^5	2.883	0.333	0.477	0.168	3.861	1.258×10^5		
800. GeV	8.001×10^5	2.961	0.717	1.031	0.339	5.048	2.161×10^5		
1.00 TeV	1.000×10^6	2.986	0.915	1.318	0.426	5.645	2.536×10^5		
1.12 TeV	1.119×10^6	2.999	1.033	1.487	0.479	5.998	<i>Muon critical energy</i>		
1.40 TeV	1.400×10^6	3.025	1.314	1.889	0.604	6.832	3.179×10^5		
2.00 TeV	2.000×10^6	3.066	1.928	2.764	0.875	8.634	3.959×10^5		
3.00 TeV	3.000×10^6	3.114	2.957	4.221	1.341	11.634	4.953×10^5		
4.00 TeV	4.000×10^6	3.148	4.005	5.700	1.815	14.668	5.717×10^5		
8.00 TeV	8.000×10^6	3.232	8.249	11.655	3.789	26.926	7.700×10^5		
10.0 TeV	1.000×10^7	3.260	10.396	14.654	4.806	33.117	8.369×10^5		
14.0 TeV	1.400×10^7	3.302	14.681	20.631	6.903	45.517	9.395×10^5		
20.0 TeV	2.000×10^7	3.348	21.165	29.646	10.124	64.283	1.050×10^6		
30.0 TeV	3.000×10^7	3.401	31.962	44.645	15.717	95.725	1.177×10^6		
40.0 TeV	4.000×10^7	3.439	42.818	59.694	21.458	127.409	1.267×10^6		
80.0 TeV	8.000×10^7	3.533	86.347	119.940	45.559	255.379	1.484×10^6		
100. TeV	1.000×10^8	3.564	108.169	150.100	58.056	319.888	1.554×10^6		