

Table 107: Muons in Amber (C₁₀H₁₆O)

$\langle Z/A \rangle$	ρ [g/cm ³]	I [eV]	a	$k = m_s$	x_0	x_1	\bar{C}	δ_0
0.55179	1.100	63.2	0.11934	3.4098	0.1335	2.5610	3.0701	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	8.093				8.093	6.818×10^{-1}	
14.0 MeV	5.616×10^1	6.308				6.308	1.248×10^0	
20.0 MeV	6.802×10^1	4.922				4.922	2.337×10^0	
30.0 MeV	8.509×10^1	3.816				3.816	4.677×10^0	
40.0 MeV	1.003×10^2	3.256				3.256	7.532×10^0	
80.0 MeV	1.527×10^2	2.438				2.438	2.217×10^1	
100. MeV	1.764×10^2	2.282				2.282	3.068×10^1	
140. MeV	2.218×10^2	2.123				2.123	4.893×10^1	
200. MeV	2.868×10^2	2.030				2.031	7.794×10^1	
300. MeV	3.917×10^2	1.993			0.000	1.994	1.278×10^2	
324. MeV	4.161×10^2	1.993			0.000	1.993	<i>Minimum ionization</i>	
400. MeV	4.945×10^2	1.998			0.000	1.998	1.779×10^2	
800. MeV	8.995×10^2	2.069	0.000		0.000	2.069	3.748×10^2	
1.00 GeV	1.101×10^3	2.102	0.000		0.000	2.103	4.706×10^2	
1.40 GeV	1.502×10^3	2.156	0.000		0.001	2.157	6.583×10^2	
2.00 GeV	2.103×10^3	2.215	0.000	0.000	0.001	2.217	9.325×10^2	
3.00 GeV	3.104×10^3	2.283	0.001	0.001	0.001	2.286	1.376×10^3	
4.00 GeV	4.104×10^3	2.331	0.001	0.001	0.002	2.335	1.809×10^3	
8.00 GeV	8.105×10^3	2.439	0.003	0.003	0.004	2.449	3.477×10^3	
10.0 GeV	1.011×10^4	2.472	0.004	0.004	0.005	2.485	4.287×10^3	
14.0 GeV	1.411×10^4	2.521	0.006	0.006	0.007	2.540	5.878×10^3	
20.0 GeV	2.011×10^4	2.569	0.009	0.011	0.009	2.599	8.212×10^3	
30.0 GeV	3.011×10^4	2.622	0.015	0.019	0.014	2.670	1.201×10^4	
40.0 GeV	4.011×10^4	2.658	0.022	0.027	0.018	2.725	1.571×10^4	
80.0 GeV	8.011×10^4	2.742	0.049	0.066	0.035	2.892	2.993×10^4	
100. GeV	1.001×10^5	2.768	0.064	0.088	0.043	2.963	3.676×10^4	
140. GeV	1.401×10^5	2.806	0.095	0.132	0.060	3.093	4.997×10^4	
200. GeV	2.001×10^5	2.847	0.143	0.202	0.084	3.277	6.881×10^4	
300. GeV	3.001×10^5	2.892	0.226	0.322	0.127	3.567	9.805×10^4	
400. GeV	4.001×10^5	2.925	0.313	0.447	0.169	3.853	1.250×10^5	
800. GeV	8.001×10^5	3.004	0.673	0.967	0.341	4.985	2.160×10^5	
1.00 TeV	1.000×10^6	3.030	0.859	1.237	0.428	5.554	2.540×10^5	
1.19 TeV	1.194×10^6	3.050	1.040	1.496	0.515	6.101	<i>Muon critical energy</i>	
1.40 TeV	1.400×10^6	3.069	1.234	1.773	0.607	6.684	3.196×10^5	
2.00 TeV	2.000×10^6	3.111	1.811	2.596	0.879	8.398	3.995×10^5	
3.00 TeV	3.000×10^6	3.159	2.780	3.966	1.348	11.253	5.020×10^5	
4.00 TeV	4.000×10^6	3.194	3.766	5.357	1.824	14.141	5.812×10^5	
8.00 TeV	8.000×10^6	3.279	7.761	10.958	3.809	25.809	7.875×10^5	
10.0 TeV	1.000×10^7	3.308	9.783	13.780	4.832	31.704	8.573×10^5	
14.0 TeV	1.400×10^7	3.351	13.819	19.403	6.940	43.513	9.646×10^5	
20.0 TeV	2.000×10^7	3.397	19.927	27.884	10.181	61.389	1.080×10^6	
30.0 TeV	3.000×10^7	3.450	30.098	41.995	15.807	91.351	1.213×10^6	
40.0 TeV	4.000×10^7	3.489	40.328	56.153	21.584	121.554	1.307×10^6	
80.0 TeV	8.000×10^7	3.584	81.338	112.834	45.842	243.598	1.535×10^6	
100. TeV	1.000×10^8	3.615	101.896	141.209	58.422	305.142	1.609×10^6	