

Muons in gel in photographic emulsion

	$\langle Z/A \rangle$	ρ [g/cm ³]	I [eV]	a	$k = m_s$	x_0	x_1	\bar{C}	δ_0
	0.53973	1.291	74.8	0.10102	3.4418	0.1709	2.7058	3.2687	0.00
T	p [MeV/c]	Ionization	Brems	Pair prod	Photonucl	Total	CSDA range [g/cm ²]		
				[MeV cm ² /g]					
10.0 MeV	4.704×10^1	7.747				7.747		7.134×10^{-1}	
14.0 MeV	5.616×10^1	6.043				6.043		1.304×10^0	
20.0 MeV	6.802×10^1	4.719				4.719		2.441×10^0	
30.0 MeV	8.509×10^1	3.661				3.661		4.880×10^0	
40.0 MeV	1.003×10^2	3.126				3.126		7.855×10^0	
80.0 MeV	1.527×10^2	2.347				2.347		2.309×10^1	
100. MeV	1.764×10^2	2.200				2.200		3.191×10^1	
140. MeV	2.218×10^2	2.048				2.048		5.085×10^1	
200. MeV	2.868×10^2	1.960				1.960		8.091×10^1	
300. MeV	3.917×10^2	1.926			0.000	1.926		1.325×10^2	
318. MeV	4.105×10^2	1.926			0.000	1.926			<i>Minimum ionization</i>
400. MeV	4.945×10^2	1.932			0.000	1.932		1.844×10^2	
800. MeV	8.995×10^2	2.004	0.000		0.000	2.004		3.877×10^2	
1.00 GeV	1.101×10^3	2.037	0.000		0.000	2.038		4.867×10^2	
1.40 GeV	1.502×10^3	2.091	0.000		0.001	2.092		6.803×10^2	
2.00 GeV	2.103×10^3	2.150	0.001	0.000	0.001	2.152		9.629×10^2	
3.00 GeV	3.104×10^3	2.218	0.001	0.001	0.001	2.221		1.420×10^3	
4.00 GeV	4.104×10^3	2.265	0.001	0.001	0.002	2.269		1.865×10^3	
8.00 GeV	8.105×10^3	2.373	0.003	0.003	0.004	2.383		3.580×10^3	
10.0 GeV	1.011×10^4	2.406	0.004	0.004	0.005	2.419		4.412×10^3	
14.0 GeV	1.411×10^4	2.453	0.007	0.007	0.007	2.474		6.046×10^3	
20.0 GeV	2.011×10^4	2.501	0.010	0.012	0.009	2.533		8.441×10^3	
30.0 GeV	3.011×10^4	2.553	0.017	0.021	0.014	2.605		1.233×10^4	
40.0 GeV	4.011×10^4	2.589	0.024	0.031	0.018	2.662		1.613×10^4	
80.0 GeV	8.011×10^4	2.670	0.055	0.075	0.034	2.835		3.066×10^4	
100. GeV	1.001×10^5	2.696	0.072	0.098	0.043	2.909		3.763×10^4	
140. GeV	1.401×10^5	2.733	0.106	0.148	0.059	3.047		5.106×10^4	
200. GeV	2.001×10^5	2.773	0.160	0.226	0.084	3.243		7.014×10^4	
300. GeV	3.001×10^5	2.818	0.253	0.360	0.126	3.556		9.957×10^4	
400. GeV	4.001×10^5	2.850	0.349	0.499	0.167	3.865		1.265×10^5	
800. GeV	8.001×10^5	2.927	0.749	1.078	0.338	5.092		2.164×10^5	
1.00 TeV	1.000×10^6	2.952	0.956	1.377	0.425	5.710		2.535×10^5	
1.07 TeV	1.068×10^6	2.959	1.026	1.478	0.455	5.919			<i>Muon critical energy</i>
1.40 TeV	1.400×10^6	2.990	1.373	1.973	0.602	6.939		3.169×10^5	
2.00 TeV	2.000×10^6	3.031	2.013	2.887	0.872	8.804		3.936×10^5	
3.00 TeV	3.000×10^6	3.079	3.087	4.408	1.337	11.910		4.909×10^5	
4.00 TeV	4.000×10^6	3.113	4.180	5.950	1.809	15.052		5.654×10^5	
8.00 TeV	8.000×10^6	3.196	8.606	12.163	3.776	27.742		7.582×10^5	
10.0 TeV	1.000×10^7	3.224	10.845	15.292	4.790	34.151		8.231×10^5	
14.0 TeV	1.400×10^7	3.266	15.312	21.527	6.878	46.984		9.225×10^5	
20.0 TeV	2.000×10^7	3.311	22.072	30.932	10.087	66.402		1.029×10^6	
30.0 TeV	3.000×10^7	3.363	33.326	46.580	15.657	98.927		1.152×10^6	
40.0 TeV	4.000×10^7	3.401	44.642	62.279	21.375	131.697		1.239×10^6	
80.0 TeV	8.000×10^7	3.494	90.017	125.128	45.375	264.014		1.450×10^6	
100. TeV	1.000×10^8	3.525	112.766	156.589	57.818	330.698		1.517×10^6	