

Table 113: Muons in Barium fluoride (BaF₂)

$\langle Z/A \rangle$	ρ [g/cm ³]	I [eV]	a	$k = m_s$	x_0	x_1	\bar{C}	δ_0
0.42207	4.893	375.9	0.15991	2.8867	-0.0099	3.3870	5.4116	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	4.793				4.793	1.176×10^0	
14.0 MeV	5.616×10^1	3.776				3.776	2.125×10^0	
20.0 MeV	6.802×10^1	2.976				2.976	3.935×10^0	
30.0 MeV	8.509×10^1	2.331				2.331	7.782×10^0	
40.0 MeV	1.003×10^2	2.003				2.003	1.244×10^1	
80.0 MeV	1.527×10^2	1.523				1.523	3.604×10^1	
100. MeV	1.764×10^2	1.437				1.437	4.959×10^1	
140. MeV	2.218×10^2	1.352				1.352	7.841×10^1	
200. MeV	2.868×10^2	1.310				1.310	1.236×10^2	
256. MeV	3.462×10^2	1.303			0.000	1.303	<i>Minimum ionization</i>	
300. MeV	3.917×10^2	1.305	0.000		0.000	1.306	2.003×10^2	
400. MeV	4.945×10^2	1.322	0.000		0.000	1.323	2.764×10^2	
800. MeV	8.995×10^2	1.403	0.001		0.000	1.404	5.697×10^2	
1.00 GeV	1.101×10^3	1.436	0.001		0.000	1.437	7.105×10^2	
1.40 GeV	1.502×10^3	1.488	0.001	0.000	0.001	1.491	9.835×10^2	
2.00 GeV	2.103×10^3	1.545	0.002	0.001	0.001	1.550	1.378×10^3	
3.00 GeV	3.104×10^3	1.609	0.004	0.003	0.001	1.618	2.009×10^3	
4.00 GeV	4.104×10^3	1.654	0.006	0.005	0.002	1.667	2.617×10^3	
8.00 GeV	8.105×10^3	1.755	0.015	0.015	0.003	1.788	4.925×10^3	
10.0 GeV	1.011×10^4	1.785	0.020	0.021	0.004	1.830	6.030×10^3	
14.0 GeV	1.411×10^4	1.829	0.031	0.033	0.006	1.899	8.174×10^3	
20.0 GeV	2.011×10^4	1.872	0.048	0.054	0.008	1.983	1.126×10^4	
30.0 GeV	3.011×10^4	1.918	0.078	0.095	0.012	2.103	1.616×10^4	
40.0 GeV	4.011×10^4	1.948	0.111	0.139	0.015	2.214	2.079×10^4	
80.0 GeV	8.011×10^4	2.016	0.250	0.334	0.030	2.631	3.733×10^4	
100. GeV	1.001×10^5	2.037	0.324	0.439	0.037	2.838	4.465×10^4	
140. GeV	1.401×10^5	2.067	0.475	0.656	0.051	3.250	5.781×10^4	
200. GeV	2.001×10^5	2.098	0.713	0.999	0.073	3.884	7.469×10^4	
233. GeV	2.327×10^5	2.111	0.843	1.183	0.085	4.223	<i>Muon critical energy</i>	
300. GeV	3.001×10^5	2.133	1.118	1.572	0.110	4.934	9.749×10^4	
400. GeV	4.001×10^5	2.158	1.537	2.167	0.146	6.009	1.158×10^5	
800. GeV	8.001×10^5	2.218	3.268	4.606	0.295	10.389	1.659×10^5	
1.00 TeV	1.000×10^6	2.238	4.157	5.855	0.371	12.622	1.833×10^5	
1.40 TeV	1.400×10^6	2.268	5.940	8.344	0.526	17.079	2.105×10^5	
2.00 TeV	2.000×10^6	2.300	8.668	12.145	0.761	23.874	2.400×10^5	
3.00 TeV	3.000×10^6	2.337	13.223	18.460	1.163	35.184	2.743×10^5	
4.00 TeV	4.000×10^6	2.364	17.839	24.844	1.572	46.620	2.990×10^5	
8.00 TeV	8.000×10^6	2.429	36.453	50.507	3.270	92.659	3.587×10^5	
10.0 TeV	1.000×10^7	2.451	45.834	63.408	4.141	115.835	3.779×10^5	
14.0 TeV	1.400×10^7	2.484	64.546	89.147	5.932	162.110	4.070×10^5	
20.0 TeV	2.000×10^7	2.519	92.781	127.924	8.678	231.904	4.378×10^5	
30.0 TeV	3.000×10^7	2.560	139.787	192.439	13.426	348.213	4.727×10^5	
40.0 TeV	4.000×10^7	2.589	186.965	257.109	18.288	464.952	4.975×10^5	
80.0 TeV	8.000×10^7	2.662	375.962	515.980	38.604	933.210	5.570×10^5	
100. TeV	1.000×10^8	2.686	470.624	645.539	49.102	1167.952	5.761×10^5	