

Muons in b-100 Bone-equivalent plastic

	$\langle Z/A \rangle$	ρ [g/cm ³]	I [eV]	a	$k = m_s$	x_0	x_1	\bar{C}	δ_0
	0.52740	1.450	85.9	0.05268	3.7365	0.1252	3.0420	3.4528	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	7.435				7.435	7.443×10^{-1}		
14.0 MeV	5.616×10^1	5.803				5.803	1.360×10^0		
20.0 MeV	6.802×10^1	4.535				4.535	2.543×10^0		
30.0 MeV	8.509×10^1	3.521				3.521	5.080×10^0		
40.0 MeV	1.003×10^2	3.008				3.008	8.173×10^0		
80.0 MeV	1.527×10^2	2.256				2.256	2.401×10^1		
100. MeV	1.764×10^2	2.115				2.115	3.319×10^1		
140. MeV	2.218×10^2	1.971				1.971	5.287×10^1		
200. MeV	2.868×10^2	1.889				1.889	8.408×10^1		
300. MeV	3.917×10^2	1.859			0.000	1.859	1.376×10^2		
314. MeV	4.065×10^2	1.859			0.000	1.859	<i>Minimum ionization</i>		
400. MeV	4.945×10^2	1.866			0.000	1.866	1.913×10^2		
800. MeV	8.995×10^2	1.940	0.000		0.000	1.940	4.016×10^2		
1.00 GeV	1.101×10^3	1.973	0.000		0.000	1.974	5.037×10^2		
1.40 GeV	1.502×10^3	2.027	0.000	0.000	0.001	2.028	7.036×10^2		
2.00 GeV	2.103×10^3	2.086	0.001	0.000	0.001	2.088	9.949×10^2		
3.00 GeV	3.104×10^3	2.153	0.001	0.001	0.001	2.157	1.466×10^3		
4.00 GeV	4.104×10^3	2.200	0.002	0.001	0.002	2.205	1.924×10^3		
8.00 GeV	8.105×10^3	2.308	0.004	0.004	0.004	2.320	3.687×10^3		
10.0 GeV	1.011×10^4	2.341	0.006	0.006	0.005	2.357	4.542×10^3		
14.0 GeV	1.411×10^4	2.388	0.008	0.009	0.007	2.412	6.218×10^3		
20.0 GeV	2.011×10^4	2.436	0.013	0.015	0.009	2.473	8.673×10^3		
30.0 GeV	3.011×10^4	2.487	0.021	0.026	0.013	2.548	1.265×10^4		
40.0 GeV	4.011×10^4	2.522	0.030	0.039	0.017	2.609	1.653×10^4		
80.0 GeV	8.011×10^4	2.602	0.069	0.093	0.034	2.798	3.131×10^4		
100. GeV	1.001×10^5	2.627	0.090	0.123	0.042	2.881	3.835×10^4		
140. GeV	1.401×10^5	2.663	0.132	0.184	0.058	3.038	5.187×10^4		
200. GeV	2.001×10^5	2.702	0.199	0.282	0.083	3.266	7.091×10^4		
300. GeV	3.001×10^5	2.746	0.313	0.447	0.124	3.630	9.993×10^4		
400. GeV	4.001×10^5	2.777	0.432	0.619	0.165	3.993	1.262×10^5		
800. GeV	8.001×10^5	2.852	0.925	1.332	0.334	5.444	2.116×10^5		
877. GeV	8.772×10^5	2.863	1.023	1.473	0.367	5.725	<i>Muon critical energy</i>		
1.00 TeV	1.000×10^6	2.877	1.180	1.700	0.420	6.176	2.461×10^5		
1.40 TeV	1.400×10^6	2.914	1.692	2.432	0.595	7.634	3.043×10^5		
2.00 TeV	2.000×10^6	2.954	2.479	3.554	0.862	9.849	3.733×10^5		
3.00 TeV	3.000×10^6	3.001	3.796	5.420	1.321	13.539	4.596×10^5		
4.00 TeV	4.000×10^6	3.034	5.136	7.311	1.788	17.269	5.248×10^5		
8.00 TeV	8.000×10^6	3.116	10.556	14.927	3.730	32.330	6.914×10^5		
10.0 TeV	1.000×10^7	3.143	13.296	18.761	4.731	39.931	7.470×10^5		
14.0 TeV	1.400×10^7	3.184	18.764	26.404	6.792	55.143	8.319×10^5		
20.0 TeV	2.000×10^7	3.228	27.031	37.928	9.958	78.146	9.228×10^5		
30.0 TeV	3.000×10^7	3.279	40.792	57.102	15.452	116.625	1.027×10^6		
40.0 TeV	4.000×10^7	3.316	54.620	76.334	21.091	155.362	1.101×10^6		
80.0 TeV	8.000×10^7	3.407	110.058	153.330	44.748	311.543	1.279×10^6		
100. TeV	1.000×10^8	3.437	137.844	191.873	57.009	390.162	1.337×10^6		