

**Table 111: Muons in B-100 Bone-equivalent plastic**

$\langle Z/A \rangle$	$\rho$ [g/cm <sup>3</sup> ]	$I$ [eV]	$a$	$k = m_s$	$x_0$	$x_1$	$\bar{C}$	$\delta_0$
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 <sup>2</sup> /g]	Photonucl	Total	CSDA range [g/cm <sup>2</sup> ]	
10.0 MeV	$4.704 \times 10^1$	7.435				7.435	$7.443 \times 10^{-1}$	
14.0 MeV	$5.616 \times 10^1$	5.803				5.803	$1.360 \times 10^0$	
20.0 MeV	$6.802 \times 10^1$	4.535				4.535	$2.543 \times 10^0$	
30.0 MeV	$8.509 \times 10^1$	3.521				3.521	$5.080 \times 10^0$	
40.0 MeV	$1.003 \times 10^2$	3.008				3.008	$8.173 \times 10^0$	
80.0 MeV	$1.527 \times 10^2$	2.256				2.256	$2.401 \times 10^1$	
100. MeV	$1.764 \times 10^2$	2.115				2.115	$3.319 \times 10^1$	
140. MeV	$2.218 \times 10^2$	1.971				1.971	$5.287 \times 10^1$	
200. MeV	$2.868 \times 10^2$	1.889				1.889	$8.408 \times 10^1$	
300. MeV	$3.917 \times 10^2$	1.859			0.000	1.859	$1.376 \times 10^2$	
314. MeV	$4.065 \times 10^2$	1.859			0.000	1.859	<i>Minimum ionization</i>	
400. MeV	$4.945 \times 10^2$	1.866			0.000	1.866	$1.913 \times 10^2$	
800. MeV	$8.995 \times 10^2$	1.940	0.000		0.000	1.940	$4.016 \times 10^2$	
1.00 GeV	$1.101 \times 10^3$	1.973	0.000		0.000	1.974	$5.037 \times 10^2$	
1.40 GeV	$1.502 \times 10^3$	2.027	0.000	0.000	0.001	2.028	$7.036 \times 10^2$	
2.00 GeV	$2.103 \times 10^3$	2.086	0.001	0.000	0.001	2.088	$9.949 \times 10^2$	
3.00 GeV	$3.104 \times 10^3$	2.153	0.001	0.001	0.001	2.157	$1.466 \times 10^3$	
4.00 GeV	$4.104 \times 10^3$	2.200	0.002	0.001	0.002	2.205	$1.924 \times 10^3$	
8.00 GeV	$8.105 \times 10^3$	2.308	0.004	0.004	0.004	2.320	$3.687 \times 10^3$	
10.0 GeV	$1.011 \times 10^4$	2.341	0.006	0.006	0.005	2.357	$4.542 \times 10^3$	
14.0 GeV	$1.411 \times 10^4$	2.388	0.008	0.009	0.007	2.412	$6.218 \times 10^3$	
20.0 GeV	$2.011 \times 10^4$	2.436	0.013	0.015	0.009	2.473	$8.673 \times 10^3$	
30.0 GeV	$3.011 \times 10^4$	2.487	0.021	0.026	0.013	2.548	$1.265 \times 10^4$	
40.0 GeV	$4.011 \times 10^4$	2.522	0.030	0.039	0.017	2.609	$1.653 \times 10^4$	
80.0 GeV	$8.011 \times 10^4$	2.602	0.069	0.093	0.034	2.798	$3.131 \times 10^4$	
100. GeV	$1.001 \times 10^5$	2.627	0.090	0.123	0.042	2.881	$3.835 \times 10^4$	
140. GeV	$1.401 \times 10^5$	2.663	0.132	0.184	0.058	3.038	$5.187 \times 10^4$	
200. GeV	$2.001 \times 10^5$	2.702	0.199	0.282	0.083	3.266	$7.091 \times 10^4$	
300. GeV	$3.001 \times 10^5$	2.746	0.313	0.447	0.124	3.630	$9.993 \times 10^4$	
400. GeV	$4.001 \times 10^5$	2.777	0.432	0.619	0.165	3.993	$1.262 \times 10^5$	
800. GeV	$8.001 \times 10^5$	2.852	0.925	1.332	0.334	5.444	$2.116 \times 10^5$	
877. GeV	$8.772 \times 10^5$	2.863	1.023	1.473	0.367	5.725	<i>Muon critical energy</i>	
1.00 TeV	$1.000 \times 10^6$	2.877	1.180	1.700	0.420	6.176	$2.461 \times 10^5$	
1.40 TeV	$1.400 \times 10^6$	2.914	1.692	2.432	0.595	7.634	$3.043 \times 10^5$	
2.00 TeV	$2.000 \times 10^6$	2.954	2.479	3.554	0.862	9.849	$3.733 \times 10^5$	
3.00 TeV	$3.000 \times 10^6$	3.001	3.796	5.420	1.321	13.539	$4.596 \times 10^5$	
4.00 TeV	$4.000 \times 10^6$	3.034	5.136	7.311	1.788	17.269	$5.248 \times 10^5$	
8.00 TeV	$8.000 \times 10^6$	3.116	10.556	14.927	3.730	32.330	$6.914 \times 10^5$	
10.0 TeV	$1.000 \times 10^7$	3.143	13.296	18.761	4.731	39.931	$7.470 \times 10^5$	
14.0 TeV	$1.400 \times 10^7$	3.184	18.764	26.404	6.792	55.143	$8.319 \times 10^5$	
20.0 TeV	$2.000 \times 10^7$	3.228	27.031	37.928	9.958	78.146	$9.228 \times 10^5$	
30.0 TeV	$3.000 \times 10^7$	3.279	40.792	57.102	15.452	116.625	$1.027 \times 10^6$	
40.0 TeV	$4.000 \times 10^7$	3.316	54.620	76.334	21.091	155.362	$1.101 \times 10^6$	
80.0 TeV	$8.000 \times 10^7$	3.407	110.058	153.330	44.748	311.543	$1.279 \times 10^6$	
100. TeV	$1.000 \times 10^8$	3.437	137.844	191.873	57.009	390.162	$1.337 \times 10^6$	