

Table 099: Muons in A-150 tissue-equivalent plastic

$\langle Z/A \rangle$	ρ [g/cm ³]	I [eV]	a	$k = m_s$	x_0	x_1	\bar{C}	δ_0
0.54903	1.127	65.1	0.10783	3.4442	0.1329	2.6234	3.1100	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	8.022				8.022	6.880×10^{-1}	
14.0 MeV	5.616×10^1	6.253				6.253	1.259×10^0	
20.0 MeV	6.802×10^1	4.881				4.881	2.357×10^0	
30.0 MeV	8.509×10^1	3.784				3.784	4.717×10^0	
40.0 MeV	1.003×10^2	3.230				3.230	7.596×10^0	
80.0 MeV	1.527×10^2	2.418				2.418	2.236×10^1	
100. MeV	1.764×10^2	2.264				2.264	3.093×10^1	
140. MeV	2.218×10^2	2.106				2.106	4.933×10^1	
200. MeV	2.868×10^2	2.015				2.015	7.857×10^1	
300. MeV	3.917×10^2	1.978			0.000	1.979	1.288×10^2	
324. MeV	4.161×10^2	1.978			0.000	1.978	<i>Minimum ionization</i>	
400. MeV	4.945×10^2	1.983			0.000	1.983	1.793×10^2	
800. MeV	8.995×10^2	2.054	0.000		0.000	2.055	3.776×10^2	
1.00 GeV	1.101×10^3	2.087	0.000		0.000	2.088	4.741×10^2	
1.40 GeV	1.502×10^3	2.141	0.000		0.001	2.142	6.631×10^2	
2.00 GeV	2.103×10^3	2.201	0.000	0.000	0.001	2.203	9.391×10^2	
3.00 GeV	3.104×10^3	2.269	0.001	0.001	0.001	2.272	1.386×10^3	
4.00 GeV	4.104×10^3	2.316	0.001	0.001	0.002	2.320	1.821×10^3	
8.00 GeV	8.105×10^3	2.425	0.003	0.003	0.004	2.435	3.499×10^3	
10.0 GeV	1.011×10^4	2.458	0.004	0.004	0.005	2.471	4.314×10^3	
14.0 GeV	1.411×10^4	2.506	0.006	0.007	0.007	2.526	5.914×10^3	
20.0 GeV	2.011×10^4	2.555	0.010	0.011	0.009	2.585	8.261×10^3	
30.0 GeV	3.011×10^4	2.607	0.016	0.019	0.014	2.656	1.207×10^4	
40.0 GeV	4.011×10^4	2.643	0.022	0.028	0.018	2.712	1.580×10^4	
80.0 GeV	8.011×10^4	2.726	0.051	0.069	0.035	2.881	3.008×10^4	
100. GeV	1.001×10^5	2.752	0.066	0.091	0.043	2.952	3.694×10^4	
140. GeV	1.401×10^5	2.791	0.098	0.136	0.059	3.085	5.019×10^4	
200. GeV	2.001×10^5	2.831	0.148	0.209	0.084	3.272	6.907×10^4	
300. GeV	3.001×10^5	2.876	0.234	0.332	0.126	3.569	9.832×10^4	
400. GeV	4.001×10^5	2.909	0.323	0.461	0.168	3.861	1.252×10^5	
800. GeV	8.001×10^5	2.987	0.694	0.998	0.340	5.019	2.158×10^5	
1.00 TeV	1.000×10^6	3.013	0.886	1.276	0.427	5.602	2.535×10^5	
1.16 TeV	1.159×10^6	3.030	1.038	1.494	0.498	6.060	<i>Muon critical energy</i>	
1.40 TeV	1.400×10^6	3.052	1.273	1.828	0.606	6.759	3.185×10^5	
2.00 TeV	2.000×10^6	3.093	1.867	2.676	0.878	8.515	3.974×10^5	
3.00 TeV	3.000×10^6	3.142	2.865	4.088	1.346	11.440	4.984×10^5	
4.00 TeV	4.000×10^6	3.176	3.880	5.520	1.821	14.398	5.761×10^5	
8.00 TeV	8.000×10^6	3.261	7.995	11.290	3.803	26.350	7.785×10^5	
10.0 TeV	1.000×10^7	3.289	10.077	14.197	4.824	32.387	8.468×10^5	
14.0 TeV	1.400×10^7	3.332	14.232	19.988	6.928	44.481	9.518×10^5	
20.0 TeV	2.000×10^7	3.378	20.520	28.725	10.162	62.785	1.065×10^6	
30.0 TeV	3.000×10^7	3.431	30.991	43.259	15.777	93.459	1.195×10^6	
40.0 TeV	4.000×10^7	3.470	41.521	57.841	21.542	124.374	1.287×10^6	
80.0 TeV	8.000×10^7	3.564	83.733	116.221	45.750	249.269	1.510×10^6	
100. TeV	1.000×10^8	3.596	104.894	145.447	58.303	312.240	1.581×10^6	