

Muons in polyvinyl pyrrolidone [(C₆H₉NO)_n]

$\langle Z/A \rangle$	ρ [g/cm ³]	I [eV]	a	$k = m_s$	x_0	x_1	\bar{C}	δ_0
0.53984	1.250	67.7	0.12504	3.3326	0.1324	2.5867	3.1017	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	7.849				7.849	7.035×10^{-1}	
14.0 MeV	5.616×10^1	6.119				6.119	1.287×10^0	
20.0 MeV	6.802×10^1	4.777				4.777	2.409×10^0	
30.0 MeV	8.509×10^1	3.704				3.704	4.820×10^0	
40.0 MeV	1.003×10^2	3.162				3.162	7.761×10^0	
80.0 MeV	1.527×10^2	2.368				2.368	2.284×10^1	
100. MeV	1.764×10^2	2.217				2.217	3.159×10^1	
140. MeV	2.218×10^2	2.062				2.062	5.039×10^1	
200. MeV	2.868×10^2	1.972				1.972	8.026×10^1	
300. MeV	3.917×10^2	1.937			0.000	1.937	1.316×10^2	
324. MeV	4.161×10^2	1.936			0.000	1.936	<i>Minimum ionization</i>	
400. MeV	4.945×10^2	1.941			0.000	1.942	1.832×10^2	
800. MeV	8.995×10^2	2.012	0.000		0.000	2.012	3.856×10^2	
1.00 GeV	1.101×10^3	2.044	0.000		0.000	2.045	4.842×10^2	
1.40 GeV	1.502×10^3	2.097	0.000		0.001	2.099	6.772×10^2	
2.00 GeV	2.103×10^3	2.156	0.001	0.000	0.001	2.158	9.589×10^2	
3.00 GeV	3.104×10^3	2.223	0.001	0.001	0.001	2.226	1.415×10^3	
4.00 GeV	4.104×10^3	2.270	0.001	0.001	0.002	2.274	1.859×10^3	
8.00 GeV	8.105×10^3	2.377	0.003	0.003	0.004	2.387	3.570×10^3	
10.0 GeV	1.011×10^4	2.410	0.004	0.004	0.005	2.423	4.402×10^3	
14.0 GeV	1.411×10^4	2.457	0.006	0.007	0.007	2.477	6.034×10^3	
20.0 GeV	2.011×10^4	2.505	0.010	0.011	0.009	2.535	8.427×10^3	
30.0 GeV	3.011×10^4	2.557	0.016	0.019	0.014	2.606	1.231×10^4	
40.0 GeV	4.011×10^4	2.592	0.023	0.028	0.018	2.661	1.611×10^4	
80.0 GeV	8.011×10^4	2.673	0.051	0.069	0.034	2.829	3.066×10^4	
100. GeV	1.001×10^5	2.699	0.067	0.091	0.043	2.900	3.765×10^4	
140. GeV	1.401×10^5	2.737	0.099	0.137	0.059	3.032	5.113×10^4	
200. GeV	2.001×10^5	2.776	0.149	0.210	0.084	3.219	7.033×10^4	
300. GeV	3.001×10^5	2.821	0.235	0.334	0.126	3.517	1.000×10^5	
400. GeV	4.001×10^5	2.853	0.324	0.464	0.168	3.809	1.273×10^5	
800. GeV	8.001×10^5	2.930	0.698	1.004	0.339	4.971	2.190×10^5	
1.00 TeV	1.000×10^6	2.955	0.890	1.283	0.426	5.555	2.570×10^5	
1.13 TeV	1.133×10^6	2.969	1.018	1.466	0.485	5.939	<i>Muon critical energy</i>	
1.40 TeV	1.400×10^6	2.993	1.279	1.839	0.605	6.716	3.224×10^5	
2.00 TeV	2.000×10^6	3.035	1.877	2.691	0.876	8.479	4.018×10^5	
3.00 TeV	3.000×10^6	3.082	2.879	4.110	1.342	11.414	5.031×10^5	
4.00 TeV	4.000×10^6	3.116	3.899	5.550	1.817	14.382	5.810×10^5	
8.00 TeV	8.000×10^6	3.200	8.032	11.351	3.793	26.375	7.833×10^5	
10.0 TeV	1.000×10^7	3.227	10.123	14.273	4.811	32.434	8.516×10^5	
14.0 TeV	1.400×10^7	3.269	14.295	20.094	6.909	44.568	9.564×10^5	
20.0 TeV	2.000×10^7	3.314	20.609	28.877	10.134	62.934	1.069×10^6	
30.0 TeV	3.000×10^7	3.367	31.123	43.487	15.733	93.710	1.199×10^6	
40.0 TeV	4.000×10^7	3.405	41.696	58.146	21.480	124.727	1.291×10^6	
80.0 TeV	8.000×10^7	3.498	84.082	116.834	45.609	250.023	1.513×10^6	
100. TeV	1.000×10^8	3.528	105.331	146.213	58.121	313.193	1.584×10^6	