

Muons in polyimide film [(C₂₂H₁₀N₂O₅)_n]

	$\langle Z/A \rangle$	ρ [g/cm ³]	I [eV]	a	$k = m_s$	x_0	x_1	\bar{C}	δ_0
	0.51264	1.420	79.6	0.15972	3.1921	0.1509	2.5631	3.3497	0.00
T	p [MeV/c]	Ionization	Brems	Pair prod	Photonucl	Total	CSDA range [g/cm ²]		
				[MeV cm ² /g]					
10.0 MeV	4.704×10^1	7.299				7.299			7.576×10^{-1}
14.0 MeV	5.616×10^1	5.695				5.695			1.385×10^0
20.0 MeV	6.802×10^1	4.449				4.449			2.590×10^0
30.0 MeV	8.509×10^1	3.453				3.453			5.177×10^0
40.0 MeV	1.003×10^2	2.949				2.949			8.332×10^0
80.0 MeV	1.527×10^2	2.214				2.214			2.448×10^1
100. MeV	1.764×10^2	2.074				2.074			3.384×10^1
140. MeV	2.218×10^2	1.932				1.932			5.392×10^1
200. MeV	2.868×10^2	1.851				1.851			8.577×10^1
300. MeV	3.917×10^2	1.820				1.820			1.404×10^2
314. MeV	4.065×10^2	1.820				1.820			<i>Minimum ionization</i>
400. MeV	4.945×10^2	1.826				1.827			1.953×10^2
800. MeV	8.995×10^2	1.897	0.000		0.000	1.898			4.102×10^2
1.00 GeV	1.101×10^3	1.929	0.000		0.000	1.930			5.147×10^2
1.40 GeV	1.502×10^3	1.981	0.000		0.001	1.982			7.191×10^2
2.00 GeV	2.103×10^3	2.038	0.001	0.000	0.001	2.040			1.017×10^3
3.00 GeV	3.104×10^3	2.103	0.001	0.001	0.001	2.106			1.499×10^3
4.00 GeV	4.104×10^3	2.148	0.001	0.001	0.002	2.152			1.969×10^3
8.00 GeV	8.105×10^3	2.251	0.003	0.003	0.004	2.261			3.776×10^3
10.0 GeV	1.011×10^4	2.282	0.004	0.004	0.005	2.295			4.654×10^3
14.0 GeV	1.411×10^4	2.327	0.006	0.007	0.007	2.347			6.376×10^3
20.0 GeV	2.011×10^4	2.373	0.010	0.011	0.009	2.403			8.901×10^3
30.0 GeV	3.011×10^4	2.422	0.017	0.020	0.013	2.472			1.300×10^4
40.0 GeV	4.011×10^4	2.455	0.023	0.029	0.018	2.526			1.700×10^4
80.0 GeV	8.011×10^4	2.533	0.053	0.072	0.034	2.692			3.231×10^4
100. GeV	1.001×10^5	2.557	0.069	0.094	0.042	2.763			3.964×10^4
140. GeV	1.401×10^5	2.593	0.102	0.142	0.059	2.896			5.378×10^4
200. GeV	2.001×10^5	2.630	0.154	0.217	0.084	3.085			7.385×10^4
300. GeV	3.001×10^5	2.673	0.242	0.345	0.125	3.386			1.048×10^5
400. GeV	4.001×10^5	2.703	0.335	0.479	0.167	3.684			1.331×10^5
800. GeV	8.001×10^5	2.776	0.719	1.035	0.337	4.868			2.272×10^5
1.00 TeV	1.000×10^6	2.800	0.917	1.323	0.424	5.465			2.660×10^5
1.05 TeV	1.050×10^6	2.806	0.966	1.393	0.446	5.611			<i>Muon critical energy</i>
1.40 TeV	1.400×10^6	2.837	1.317	1.896	0.601	6.651			3.322×10^5
2.00 TeV	2.000×10^6	2.876	1.932	2.773	0.870	8.451			4.121×10^5
3.00 TeV	3.000×10^6	2.921	2.962	4.235	1.334	11.451			5.134×10^5
4.00 TeV	4.000×10^6	2.953	4.010	5.717	1.805	14.485			5.909×10^5
8.00 TeV	8.000×10^6	3.032	8.253	11.688	3.768	26.742			7.910×10^5
10.0 TeV	1.000×10^7	3.059	10.399	14.695	4.779	32.932			8.583×10^5
14.0 TeV	1.400×10^7	3.099	14.682	20.687	6.862	45.330			9.614×10^5
20.0 TeV	2.000×10^7	3.141	21.159	29.726	10.063	64.090			1.072×10^6
30.0 TeV	3.000×10^7	3.191	31.945	44.764	15.620	95.520			1.199×10^6
40.0 TeV	4.000×10^7	3.227	42.788	59.852	21.322	127.189			1.290×10^6
80.0 TeV	8.000×10^7	3.315	86.250	120.255	45.255	255.076			1.507×10^6
100. TeV	1.000×10^8	3.345	108.033	150.493	57.661	319.532			1.577×10^6