Table 221: Muons in Polyethylene ($[CH_2CH_2]_n$)

$\langle Z/A \rangle$	ρ [g/cm^3]	I [eV]	a	$k = m_s$	x_0	x_1	$\overline{C}$	δ_0
0.57034	0.890	57.4	0.12108	3.4292	0.1489	2.5296	3.0563	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	8.467				8.467	6.512×10^{-1}
14.0 MeV	5.616×10^1	6.596				6.596	1.192×10^0
20.0 MeV	6.802×10^1	5.145				5.145	2.234×10^0
30.0 MeV	8.509×10^1	3.987				3.987	4.473×10^0
40.0 MeV	1.003×10^2	3.401				3.401	7.206×10^0
80.0 MeV	1.527×10^2	2.547				2.547	2.123×10^1
100. MeV	1.764×10^2	2.384				2.384	2.936×10^1
140. MeV	2.218×10^2	2.217				2.217	4.685×10^1
200. MeV	2.868×10^2	2.120				2.120	7.463×10^1
300. MeV	3.917×10^2	2.080			0.000	2.081	1.224×10^2
328. MeV	4.211×10^2	2.079			0.000	2.079	*Minimum ionization*
400. MeV	4.945×10^2	2.084			0.000	2.084	1.704×10^2
800. MeV	8.995×10^2	2.157	0.000		0.000	2.157	3.592×10^2
1.00 GeV	1.101×10^3	2.190	0.000		0.000	2.191	4.512×10^2
1.40 GeV	1.502×10^3	2.246	0.000		0.001	2.247	6.313×10^2
2.00 GeV	2.103×10^3	2.307	0.000	0.000	0.001	2.309	8.946×10^2
3.00 GeV	3.104×10^3	2.377	0.001	0.000	0.001	2.380	1.321×10^3
4.00 GeV	4.104×10^3	2.425	0.001	0.001	0.002	2.430	1.736×10^3
8.00 GeV	8.105×10^3	2.537	0.003	0.003	0.004	2.547	3.340×10^3
10.0 GeV	1.011×10^4	2.571	0.004	0.004	0.005	2.584	4.119×10^3
14.0 GeV	1.411×10^4	2.621	0.006	0.006	0.007	2.640	5.650×10^3
20.0 GeV	2.011×10^4	2.671	0.009	0.010	0.009	2.700	7.896×10^3
30.0 GeV	3.011×10^4	2.726	0.015	0.018	0.014	2.772	1.155×10^4
40.0 GeV	4.011×10^4	2.763	0.021	0.026	0.018	2.828	1.512×10^4
80.0 GeV	8.011×10^4	2.849	0.047	0.063	0.035	2.995	2.884×10^4
100. GeV	1.001×10^5	2.876	0.061	0.084	0.043	3.065	3.544×10^4
140. GeV	1.401×10^5	2.916	0.091	0.126	0.060	3.193	4.822×10^4
200. GeV	2.001×10^5	2.958	0.137	0.193	0.085	3.373	6.650×10^4
300. GeV	3.001×10^5	3.005	0.216	0.307	0.127	3.656	9.496×10^4
400. GeV	4.001×10^5	3.039	0.299	0.427	0.170	3.934	1.213×10^5
800. GeV	8.001×10^5	3.121	0.644	0.925	0.343	5.032	2.110×10^5
1.00 TeV	1.000×10^6	3.147	0.822	1.183	0.430	5.583	2.487×10^5
1.28 TeV	1.282×10^6	3.177	1.075	1.544	0.557	6.354	*Muon critical energy*
1.40 TeV	1.400×10^6	3.188	1.182	1.697	0.611	6.677	3.141×10^5
2.00 TeV	2.000×10^6	3.231	1.736	2.485	0.884	8.337	3.944×10^5
3.00 TeV	3.000×10^6	3.281	2.665	3.799	1.355	11.100	4.980×10^5
4.00 TeV	4.000×10^6	3.317	3.612	5.132	1.834	13.895	5.784×10^5
8.00 TeV	8.000×10^6	3.405	7.450	10.502	3.831	25.189	7.892×10^5
10.0 TeV	1.000×10^7	3.434	9.393	13.208	4.860	30.897	8.607×10^5
14.0 TeV	1.400×10^7	3.479	13.272	18.599	6.982	42.332	9.709×10^5
20.0 TeV	2.000×10^7	3.527	19.144	26.732	10.243	59.646	1.090×10^6
30.0 TeV	3.000×10^7	3.582	28.924	40.262	15.907	88.675	1.226×10^6
40.0 TeV	4.000×10^7	3.622	38.762	53.838	21.722	117.944	1.324×10^6
80.0 TeV	8.000×10^7	3.720	78.203	108.188	46.153	236.265	1.559×10^6
100. TeV	1.000×10^8	3.753	97.977	135.397	58.825	295.952	1.634×10^6