

Table 225: Muons in Polypropylene ($[\text{CH}(\text{CH}_3)\text{CH}_2]_n$)

$\langle Z/A \rangle$	ρ [g/cm ³]	I [eV]	a	$k = m_s$	x_0	x_1	\bar{C}	δ_0
0.55998	0.905	57.4	0.12108	3.4292	0.1452	2.5259	3.0395	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	8.313				8.313	6.632×10^{-1}	
14.0 MeV	5.616×10^1	6.476				6.476	1.214×10^0	
20.0 MeV	6.802×10^1	5.052				5.052	2.275×10^0	
30.0 MeV	8.509×10^1	3.914				3.914	4.556×10^0	
40.0 MeV	1.003×10^2	3.340				3.340	7.340×10^0	
80.0 MeV	1.527×10^2	2.500				2.500	2.162×10^1	
100. MeV	1.764×10^2	2.340				2.340	2.991×10^1	
140. MeV	2.218×10^2	2.176				2.176	4.772×10^1	
200. MeV	2.868×10^2	2.081				2.081	7.603×10^1	
300. MeV	3.917×10^2	2.042			0.000	2.042	1.247×10^2	
328. MeV	4.211×10^2	2.041			0.000	2.041	<i>Minimum ionization</i>	
400. MeV	4.945×10^2	2.045			0.000	2.046	1.737×10^2	
800. MeV	8.995×10^2	2.116	0.000		0.000	2.117	3.660×10^2	
1.00 GeV	1.101×10^3	2.149	0.000		0.000	2.150	4.597×10^2	
1.40 GeV	1.502×10^3	2.204	0.000		0.001	2.205	6.433×10^2	
2.00 GeV	2.103×10^3	2.264	0.000	0.000	0.001	2.266	9.115×10^2	
3.00 GeV	3.104×10^3	2.332	0.001	0.000	0.001	2.335	1.346×10^3	
4.00 GeV	4.104×10^3	2.380	0.001	0.001	0.002	2.384	1.769×10^3	
8.00 GeV	8.105×10^3	2.490	0.003	0.003	0.004	2.499	3.403×10^3	
10.0 GeV	1.011×10^4	2.523	0.004	0.004	0.005	2.536	4.197×10^3	
14.0 GeV	1.411×10^4	2.572	0.006	0.006	0.007	2.591	5.757×10^3	
20.0 GeV	2.011×10^4	2.621	0.009	0.010	0.009	2.650	8.046×10^3	
30.0 GeV	3.011×10^4	2.675	0.015	0.018	0.014	2.721	1.177×10^4	
40.0 GeV	4.011×10^4	2.712	0.021	0.026	0.018	2.777	1.540×10^4	
80.0 GeV	8.011×10^4	2.796	0.047	0.063	0.035	2.942	2.938×10^4	
100. GeV	1.001×10^5	2.823	0.061	0.084	0.043	3.011	3.609×10^4	
140. GeV	1.401×10^5	2.862	0.091	0.126	0.060	3.138	4.910×10^4	
200. GeV	2.001×10^5	2.903	0.137	0.193	0.085	3.318	6.769×10^4	
300. GeV	3.001×10^5	2.949	0.216	0.307	0.127	3.600	9.661×10^4	
400. GeV	4.001×10^5	2.982	0.299	0.427	0.170	3.878	1.234×10^5	
800. GeV	8.001×10^5	3.062	0.644	0.925	0.343	4.974	2.142×10^5	
1.00 TeV	1.000×10^6	3.089	0.822	1.183	0.430	5.525	2.523×10^5	
1.26 TeV	1.259×10^6	3.116	1.054	1.515	0.547	6.232	<i>Muon critical energy</i>	
1.40 TeV	1.400×10^6	3.128	1.182	1.697	0.611	6.618	3.184×10^5	
2.00 TeV	2.000×10^6	3.171	1.736	2.485	0.884	8.277	3.993×10^5	
3.00 TeV	3.000×10^6	3.220	2.665	3.799	1.355	11.039	5.036×10^5	
4.00 TeV	4.000×10^6	3.255	3.612	5.132	1.834	13.833	5.844×10^5	
8.00 TeV	8.000×10^6	3.342	7.450	10.502	3.831	25.126	7.959×10^5	
10.0 TeV	1.000×10^7	3.371	9.393	13.208	4.860	30.833	8.676×10^5	
14.0 TeV	1.400×10^7	3.414	13.272	18.599	6.982	42.267	9.780×10^5	
20.0 TeV	2.000×10^7	3.461	19.144	26.732	10.243	59.581	1.097×10^6	
30.0 TeV	3.000×10^7	3.515	28.924	40.262	15.907	88.608	1.234×10^6	
40.0 TeV	4.000×10^7	3.555	38.762	53.838	21.722	117.877	1.331×10^6	
80.0 TeV	8.000×10^7	3.651	78.203	108.188	46.153	236.196	1.566×10^6	
100. TeV	1.000×10^8	3.683	97.977	135.397	58.825	295.882	1.642×10^6	