

Muons in polyvinylchloride (PVC) $[(\text{CH}_2\text{CHCl})_n]$

$\langle Z/A \rangle$	ρ [g/cm ³]	I [eV]	a	$k = m_s$	x_0	x_1	\bar{C}	δ_0
0.51201	1.300	108.2	0.12438	3.2104	0.1559	2.9415	4.0532	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	6.998				6.998	7.925×10^{-1}	
14.0 MeV	5.616×10^1	5.469				5.469	1.446×10^0	
20.0 MeV	6.802×10^1	4.279				4.279	2.700×10^0	
30.0 MeV	8.509×10^1	3.326				3.326	5.388×10^0	
40.0 MeV	1.003×10^2	2.843				2.843	8.661×10^0	
80.0 MeV	1.527×10^2	2.140				2.140	2.539×10^1	
100. MeV	1.764×10^2	2.009				2.009	3.506×10^1	
140. MeV	2.218×10^2	1.877				1.877	5.575×10^1	
200. MeV	2.868×10^2	1.803				1.803	8.849×10^1	
298. MeV	3.894×10^2	1.779			0.000	1.780		<i>Minimum ionization</i>
300. MeV	3.917×10^2	1.779			0.000	1.780	1.445×10^2	
400. MeV	4.945×10^2	1.790			0.000	1.790	2.005×10^2	
800. MeV	8.995×10^2	1.869	0.000		0.000	1.870	4.192×10^2	
1.00 GeV	1.101×10^3	1.904	0.000		0.000	1.905	5.251×10^2	
1.40 GeV	1.502×10^3	1.960	0.001	0.000	0.001	1.961	7.319×10^2	
2.00 GeV	2.103×10^3	2.021	0.001	0.000	0.001	2.023	1.033×10^3	
3.00 GeV	3.104×10^3	2.090	0.002	0.001	0.001	2.094	1.518×10^3	
4.00 GeV	4.104×10^3	2.138	0.002	0.002	0.002	2.144	1.990×10^3	
8.00 GeV	8.105×10^3	2.247	0.005	0.005	0.004	2.262	3.800×10^3	
10.0 GeV	1.011×10^4	2.280	0.007	0.007	0.005	2.299	4.677×10^3	
14.0 GeV	1.411×10^4	2.327	0.011	0.012	0.006	2.356	6.395×10^3	
20.0 GeV	2.011×10^4	2.374	0.017	0.020	0.009	2.420	8.905×10^3	
30.0 GeV	3.011×10^4	2.425	0.028	0.034	0.013	2.500	1.297×10^4	
40.0 GeV	4.011×10^4	2.459	0.039	0.050	0.017	2.566	1.691×10^4	
80.0 GeV	8.011×10^4	2.537	0.089	0.120	0.033	2.779	3.187×10^4	
100. GeV	1.001×10^5	2.561	0.115	0.158	0.041	2.876	3.894×10^4	
140. GeV	1.401×10^5	2.597	0.169	0.237	0.057	3.061	5.242×10^4	
200. GeV	2.001×10^5	2.634	0.254	0.363	0.081	3.333	7.120×10^4	
300. GeV	3.001×10^5	2.677	0.401	0.574	0.122	3.774	9.937×10^4	
400. GeV	4.001×10^5	2.707	0.552	0.794	0.162	4.215	1.244×10^5	
697. GeV	6.971×10^5	2.765	1.016	1.465	0.285	5.531		<i>Muon critical energy</i>
800. GeV	8.001×10^5	2.780	1.180	1.702	0.328	5.990	2.036×10^5	
1.00 TeV	1.000×10^6	2.804	1.504	2.169	0.412	6.889	2.347×10^5	
1.40 TeV	1.400×10^6	2.840	2.155	3.100	0.584	8.680	2.864×10^5	
2.00 TeV	2.000×10^6	2.879	3.154	4.526	0.845	11.405	3.465×10^5	
3.00 TeV	3.000×10^6	2.924	4.826	6.896	1.294	15.941	4.204×10^5	
4.00 TeV	4.000×10^6	2.956	6.525	9.297	1.751	20.529	4.755×10^5	
8.00 TeV	8.000×10^6	3.036	13.391	18.959	3.651	39.037	6.144×10^5	
10.0 TeV	1.000×10^7	3.062	16.859	23.822	4.629	48.372	6.604×10^5	
14.0 TeV	1.400×10^7	3.102	23.782	33.514	6.643	67.042	7.303×10^5	
20.0 TeV	2.000×10^7	3.145	34.247	48.126	9.735	95.252	8.050×10^5	
30.0 TeV	3.000×10^7	3.194	51.653	72.446	15.097	142.390	8.904×10^5	
40.0 TeV	4.000×10^7	3.230	69.138	96.838	20.597	189.804	9.510×10^5	
80.0 TeV	8.000×10^7	3.318	139.238	194.480	43.652	380.688	1.097×10^6	
100. TeV	1.000×10^8	3.347	174.372	243.353	55.592	476.665	1.144×10^6	