

Muons in polyvinyltoluene [(2-CH₃C₆H₄CHCH₂)_n]

$\langle Z/A \rangle$	ρ [g/cm ³]	I [eV]	a	$k = m_s$	x_0	x_1	$\overline{C}$	δ_0
0.54141	1.032	64.7	0.16101	3.2393	0.1464	2.4855	3.1997	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	7.917				7.917	6.971×10^{-1}	
14.0 MeV	5.616×10^1	6.171				6.171	1.275×10^0	
20.0 MeV	6.802×10^1	4.816				4.816	2.389×10^0	
30.0 MeV	8.509×10^1	3.734				3.734	4.780×10^0	
40.0 MeV	1.003×10^2	3.187				3.187	7.698×10^0	
80.0 MeV	1.527×10^2	2.388				2.388	2.266×10^1	
100. MeV	1.764×10^2	2.237				2.237	3.133×10^1	
140. MeV	2.218×10^2	2.082				2.082	4.996×10^1	
200. MeV	2.868×10^2	1.992				1.992	7.954×10^1	
300. MeV	3.917×10^2	1.957			0.000	1.957	1.303×10^2	
325. MeV	4.171×10^2	1.956			0.000	1.956	<i>Minimum ionization</i>	
400. MeV	4.945×10^2	1.962			0.000	1.962		
800. MeV	8.995×10^2	2.033	0.000		0.000	2.034	3.817×10^2	
1.00 GeV	1.101×10^3	2.066	0.000		0.000	2.067	4.792×10^2	
1.40 GeV	1.502×10^3	2.120	0.000		0.001	2.121	6.702×10^2	
2.00 GeV	2.103×10^3	2.179	0.000	0.000	0.001	2.181	9.489×10^2	
3.00 GeV	3.104×10^3	2.246	0.001	0.001	0.001	2.249	1.400×10^3	
4.00 GeV	4.104×10^3	2.293	0.001	0.001	0.002	2.297	1.840×10^3	
8.00 GeV	8.105×10^3	2.400	0.003	0.003	0.004	2.410	3.534×10^3	
10.0 GeV	1.011×10^4	2.433	0.004	0.004	0.005	2.445	4.358×10^3	
14.0 GeV	1.411×10^4	2.480	0.006	0.006	0.007	2.499	5.975×10^3	
20.0 GeV	2.011×10^4	2.528	0.009	0.010	0.009	2.557	8.347×10^3	
30.0 GeV	3.011×10^4	2.580	0.015	0.018	0.014	2.627	1.220×10^4	
40.0 GeV	4.011×10^4	2.615	0.021	0.027	0.018	2.681	1.597×10^4	
80.0 GeV	8.011×10^4	2.697	0.048	0.065	0.035	2.845	3.043×10^4	
100. GeV	1.001×10^5	2.722	0.063	0.086	0.043	2.914	3.737×10^4	
140. GeV	1.401×10^5	2.760	0.093	0.129	0.060	3.042	5.080×10^4	
200. GeV	2.001×10^5	2.800	0.140	0.198	0.084	3.223	6.995×10^4	
300. GeV	3.001×10^5	2.845	0.222	0.315	0.126	3.509	9.967×10^4	
400. GeV	4.001×10^5	2.877	0.306	0.438	0.169	3.790	1.271×10^5	
800. GeV	8.001×10^5	2.954	0.659	0.948	0.341	4.902	2.196×10^5	
1.00 TeV	1.000×10^6	2.980	0.841	1.212	0.428	5.461	2.583×10^5	
1.19 TeV	1.195×10^6	3.000	1.019	1.466	0.515	6.000	<i>Muon critical energy</i>	
1.40 TeV	1.400×10^6	3.018	1.209	1.738	0.607	6.572		
2.00 TeV	2.000×10^6	3.059	1.774	2.544	0.879	8.257	4.062×10^5	
3.00 TeV	3.000×10^6	3.106	2.723	3.888	1.347	11.064	5.105×10^5	
4.00 TeV	4.000×10^6	3.141	3.689	5.251	1.823	13.904	5.910×10^5	
8.00 TeV	8.000×10^6	3.225	7.602	10.742	3.807	25.376	8.009×10^5	
10.0 TeV	1.000×10^7	3.252	9.582	13.509	4.829	31.173	8.719×10^5	
14.0 TeV	1.400×10^7	3.294	13.534	19.021	6.936	42.786	9.810×10^5	
20.0 TeV	2.000×10^7	3.340	19.515	27.336	10.175	60.366	1.098×10^6	
30.0 TeV	3.000×10^7	3.392	29.475	41.170	15.798	89.835	1.233×10^6	
40.0 TeV	4.000×10^7	3.430	39.492	55.050	21.570	119.543	1.330×10^6	
80.0 TeV	8.000×10^7	3.523	79.646	110.620	45.811	239.601	1.561×10^6	
100. TeV	1.000×10^8	3.554	99.773	138.440	58.382	300.149	1.636×10^6	