

Muons in polyvinyl alcohol [(C₂H₃-O-H)_n]

$\langle Z/A \rangle$	ρ [g/cm ³]	I [eV]	a	$k = m_s$	x_0	x_1	\bar{C}	δ_0
0.54480	1.300	69.7	0.11178	3.3893	0.1401	2.6315	3.1115	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	7.891				7.891	6.999×10^{-1}	
14.0 MeV	5.616×10^1	6.153				6.153	1.280×10^0	
20.0 MeV	6.802×10^1	4.804				4.804	2.396×10^0	
30.0 MeV	8.509×10^1	3.726				3.726	4.793×10^0	
40.0 MeV	1.003×10^2	3.181				3.181	7.717×10^0	
80.0 MeV	1.527×10^2	2.383				2.384	2.270×10^1	
100. MeV	1.764×10^2	2.231				2.232	3.140×10^1	
140. MeV	2.218×10^2	2.076				2.076	5.007×10^1	
200. MeV	2.868×10^2	1.986				1.986	7.974×10^1	
300. MeV	3.917×10^2	1.950			0.000	1.950	1.307×10^2	
324. MeV	4.161×10^2	1.949			0.000	1.949	<i>Minimum ionization</i>	
400. MeV	4.945×10^2	1.955			0.000	1.955	1.820×10^2	
800. MeV	8.995×10^2	2.026	0.000		0.000	2.026	3.830×10^2	
1.00 GeV	1.101×10^3	2.059	0.000		0.000	2.059	4.809×10^2	
1.40 GeV	1.502×10^3	2.112	0.000		0.001	2.113	6.725×10^2	
2.00 GeV	2.103×10^3	2.172	0.001	0.000	0.001	2.173	9.523×10^2	
3.00 GeV	3.104×10^3	2.239	0.001	0.001	0.001	2.242	1.405×10^3	
4.00 GeV	4.104×10^3	2.286	0.001	0.001	0.002	2.291	1.846×10^3	
8.00 GeV	8.105×10^3	2.395	0.003	0.003	0.004	2.405	3.545×10^3	
10.0 GeV	1.011×10^4	2.428	0.004	0.004	0.005	2.441	4.370×10^3	
14.0 GeV	1.411×10^4	2.475	0.006	0.007	0.007	2.496	5.990×10^3	
20.0 GeV	2.011×10^4	2.524	0.010	0.011	0.009	2.555	8.364×10^3	
30.0 GeV	3.011×10^4	2.576	0.017	0.020	0.014	2.627	1.222×10^4	
40.0 GeV	4.011×10^4	2.612	0.023	0.030	0.018	2.683	1.599×10^4	
80.0 GeV	8.011×10^4	2.694	0.053	0.072	0.034	2.854	3.042×10^4	
100. GeV	1.001×10^5	2.720	0.069	0.095	0.043	2.927	3.734×10^4	
140. GeV	1.401×10^5	2.758	0.102	0.142	0.059	3.062	5.070×10^4	
200. GeV	2.001×10^5	2.798	0.154	0.218	0.084	3.254	6.969×10^4	
300. GeV	3.001×10^5	2.843	0.244	0.347	0.126	3.560	9.906×10^4	
400. GeV	4.001×10^5	2.875	0.337	0.481	0.168	3.861	1.260×10^5	
800. GeV	8.001×10^5	2.953	0.723	1.041	0.339	5.056	2.163×10^5	
1.00 TeV	1.000×10^6	2.978	0.923	1.330	0.426	5.658	2.536×10^5	
1.11 TeV	1.108×10^6	2.990	1.031	1.485	0.474	5.980	<i>Muon critical energy</i>	
1.40 TeV	1.400×10^6	3.017	1.326	1.906	0.604	6.854	3.178×10^5	
2.00 TeV	2.000×10^6	3.058	1.946	2.789	0.875	8.668	3.955×10^5	
3.00 TeV	3.000×10^6	3.106	2.984	4.260	1.340	11.691	4.945×10^5	
4.00 TeV	4.000×10^6	3.140	4.041	5.751	1.814	14.747	5.705×10^5	
8.00 TeV	8.000×10^6	3.225	8.323	11.759	3.788	27.095	7.676×10^5	
10.0 TeV	1.000×10^7	3.253	10.490	14.785	4.804	33.332	8.341×10^5	
14.0 TeV	1.400×10^7	3.295	14.813	20.815	6.899	45.822	9.360×10^5	
20.0 TeV	2.000×10^7	3.341	21.354	29.910	10.119	64.725	1.046×10^6	
30.0 TeV	3.000×10^7	3.394	32.247	45.043	15.709	96.393	1.171×10^6	
40.0 TeV	4.000×10^7	3.432	43.200	60.225	21.447	128.304	1.261×10^6	
80.0 TeV	8.000×10^7	3.526	87.118	121.006	45.535	257.184	1.477×10^6	
100. TeV	1.000×10^8	3.557	109.135	151.433	58.024	322.149	1.546×10^6	