

Muons in polyvinylidene chloride (Saran) $[(C_2H_2Cl_2)_n]$

	$\langle Z/A \rangle$	ρ [g/cm ³]	I [eV]	a	$k = m_s$	x_0	x_1	\bar{C}	δ_0
	0.49513	1.700	134.3	0.15466	3.1020	0.1314	2.9009	4.2506	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	6.569				6.569	8.463×10^{-1}		
14.0 MeV	5.616×10^1	5.140				5.140	1.542×10^0		
20.0 MeV	6.802×10^1	4.026				4.026	2.876×10^0		
30.0 MeV	8.509×10^1	3.132				3.132	5.731×10^0		
40.0 MeV	1.003×10^2	2.680				2.680	9.204×10^0		
80.0 MeV	1.527×10^2	2.020				2.020	2.693×10^1		
100. MeV	1.764×10^2	1.898				1.898	3.717×10^1		
140. MeV	2.218×10^2	1.776				1.776	5.906×10^1		
200. MeV	2.868×10^2	1.709				1.709	9.363×10^1		
288. MeV	3.788×10^2	1.690			0.000	1.690	<i>Minimum ionization</i>		
300. MeV	3.917×10^2	1.690			0.000	1.690	1.526×10^2		
400. MeV	4.945×10^2	1.702			0.000	1.702	2.116×10^2		
800. MeV	8.995×10^2	1.782	0.000		0.000	1.783	4.412×10^2		
1.00 GeV	1.101×10^3	1.817	0.000		0.000	1.817	5.523×10^2		
1.40 GeV	1.502×10^3	1.872	0.001	0.000	0.001	1.873	7.689×10^2		
2.00 GeV	2.103×10^3	1.932	0.001	0.000	0.001	1.935	1.084×10^3		
3.00 GeV	3.104×10^3	2.000	0.002	0.001	0.001	2.005	1.591×10^3		
4.00 GeV	4.104×10^3	2.047	0.003	0.002	0.002	2.054	2.083×10^3		
8.00 GeV	8.105×10^3	2.154	0.006	0.006	0.004	2.170	3.972×10^3		
10.0 GeV	1.011×10^4	2.186	0.008	0.008	0.005	2.207	4.885×10^3		
14.0 GeV	1.411×10^4	2.232	0.012	0.014	0.006	2.265	6.673×10^3		
20.0 GeV	2.011×10^4	2.278	0.019	0.022	0.009	2.329	9.284×10^3		
30.0 GeV	3.011×10^4	2.327	0.032	0.039	0.013	2.411	1.350×10^4		
40.0 GeV	4.011×10^4	2.360	0.045	0.057	0.017	2.479	1.759×10^4		
80.0 GeV	8.011×10^4	2.435	0.101	0.137	0.033	2.706	3.301×10^4		
100. GeV	1.001×10^5	2.459	0.131	0.180	0.041	2.810	4.026×10^4		
140. GeV	1.401×10^5	2.493	0.192	0.270	0.056	3.012	5.401×10^4		
200. GeV	2.001×10^5	2.530	0.289	0.412	0.080	3.311	7.300×10^4		
300. GeV	3.001×10^5	2.571	0.454	0.652	0.120	3.797	1.012×10^5		
400. GeV	4.001×10^5	2.600	0.625	0.900	0.160	4.286	1.260×10^5		
603. GeV	6.031×10^5	2.642	0.982	1.418	0.242	5.284	<i>Muon critical energy</i>		
800. GeV	8.001×10^5	2.671	1.335	1.927	0.323	6.257	2.028×10^5		
1.00 TeV	1.000×10^6	2.694	1.701	2.454	0.406	7.256	2.324×10^5		
1.40 TeV	1.400×10^6	2.729	2.437	3.506	0.576	9.248	2.811×10^5		
2.00 TeV	2.000×10^6	2.766	3.565	5.116	0.834	12.281	3.373×10^5		
3.00 TeV	3.000×10^6	2.810	5.451	7.793	1.276	17.331	4.055×10^5		
4.00 TeV	4.000×10^6	2.841	7.367	10.502	1.727	22.438	4.561×10^5		
8.00 TeV	8.000×10^6	2.918	15.110	21.406	3.599	43.034	5.826×10^5		
10.0 TeV	1.000×10^7	2.943	19.019	26.893	4.563	53.419	6.242×10^5		
14.0 TeV	1.400×10^7	2.982	26.824	37.830	6.545	74.181	6.875×10^5		
20.0 TeV	2.000×10^7	3.023	38.617	54.316	9.588	105.545	7.550×10^5		
30.0 TeV	3.000×10^7	3.071	58.230	81.759	14.863	157.924	8.319×10^5		
40.0 TeV	4.000×10^7	3.106	77.929	109.281	20.272	210.587	8.866×10^5		
80.0 TeV	8.000×10^7	3.191	156.900	219.450	42.928	422.470	1.018×10^6		
100. TeV	1.000×10^8	3.219	196.479	274.592	54.657	528.948	1.060×10^6		