

Table 219: Muons in Polycarbonate (Lexan, [OC₆H₄C(CH₃)₂C₆H₄OCO]_n)

	$\langle Z/A \rangle$	ρ [g/cm ³]	I [eV]	a	$k = m_s$	x_0	x_1	\bar{C}	δ_0
	0.52697	1.200	73.1	0.12860	3.3288	0.1606	2.6225	3.3201	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	7.586				7.586	7.283×10^{-1}		
14.0 MeV	5.616×10^1	5.917				5.917	1.332×10^0		
20.0 MeV	6.802×10^1	4.620				4.621	2.492×10^0		
30.0 MeV	8.509×10^1	3.584				3.584	4.984×10^0		
40.0 MeV	1.003×10^2	3.060				3.060	8.023×10^0		
80.0 MeV	1.527×10^2	2.297				2.297	2.359×10^1		
100. MeV	1.764×10^2	2.152				2.152	3.261×10^1		
140. MeV	2.218×10^2	2.004				2.004	5.196×10^1		
200. MeV	2.868×10^2	1.919				1.919	8.268×10^1		
300. MeV	3.917×10^2	1.886			0.000	1.887	1.354×10^2		
318. MeV	4.105×10^2	1.886			0.000	1.886	<i>Minimum ionization</i>		
400. MeV	4.945×10^2	1.892			0.000	1.892	1.884×10^2		
800. MeV	8.995×10^2	1.963	0.000		0.000	1.964	3.959×10^2		
1.00 GeV	1.101×10^3	1.996	0.000		0.000	1.997	4.969×10^2		
1.40 GeV	1.502×10^3	2.049	0.000		0.001	2.050	6.945×10^2		
2.00 GeV	2.103×10^3	2.107	0.001	0.000	0.001	2.109	9.828×10^2		
3.00 GeV	3.104×10^3	2.174	0.001	0.001	0.001	2.177	1.449×10^3		
4.00 GeV	4.104×10^3	2.220	0.001	0.001	0.002	2.224	1.903×10^3		
8.00 GeV	8.105×10^3	2.325	0.003	0.003	0.004	2.335	3.653×10^3		
10.0 GeV	1.011×10^4	2.357	0.004	0.004	0.005	2.370	4.503×10^3		
14.0 GeV	1.411×10^4	2.403	0.006	0.007	0.007	2.423	6.171×10^3		
20.0 GeV	2.011×10^4	2.450	0.010	0.011	0.009	2.481	8.617×10^3		
30.0 GeV	3.011×10^4	2.501	0.016	0.020	0.014	2.550	1.259×10^4		
40.0 GeV	4.011×10^4	2.535	0.023	0.029	0.018	2.605	1.647×10^4		
80.0 GeV	8.011×10^4	2.615	0.052	0.070	0.034	2.771	3.133×10^4		
100. GeV	1.001×10^5	2.640	0.067	0.092	0.043	2.842	3.846×10^4		
140. GeV	1.401×10^5	2.677	0.099	0.138	0.059	2.973	5.221×10^4		
200. GeV	2.001×10^5	2.715	0.150	0.211	0.084	3.160	7.178×10^4		
300. GeV	3.001×10^5	2.759	0.236	0.336	0.126	3.457	1.020×10^5		
400. GeV	4.001×10^5	2.790	0.326	0.466	0.168	3.750	1.298×10^5		
800. GeV	8.001×10^5	2.865	0.701	1.009	0.339	4.914	2.227×10^5		
1.00 TeV	1.000×10^6	2.890	0.895	1.290	0.425	5.500	2.611×10^5		
1.10 TeV	1.104×10^6	2.901	0.995	1.434	0.472	5.802	<i>Muon critical energy</i>		
1.40 TeV	1.400×10^6	2.927	1.285	1.848	0.603	6.664	3.271×10^5		
2.00 TeV	2.000×10^6	2.967	1.885	2.705	0.874	8.431	4.070×10^5		
3.00 TeV	3.000×10^6	3.014	2.891	4.131	1.339	11.375	5.087×10^5		
4.00 TeV	4.000×10^6	3.047	3.915	5.577	1.812	14.351	5.869×10^5		
8.00 TeV	8.000×10^6	3.129	8.062	11.404	3.784	26.378	7.894×10^5		
10.0 TeV	1.000×10^7	3.155	10.159	14.340	4.799	32.454	8.576×10^5		
14.0 TeV	1.400×10^7	3.197	14.345	20.188	6.892	44.622	9.623×10^5		
20.0 TeV	2.000×10^7	3.241	20.679	29.010	10.108	63.038	1.075×10^6		
30.0 TeV	3.000×10^7	3.292	31.225	43.689	15.690	93.896	1.204×10^6		
40.0 TeV	4.000×10^7	3.329	41.828	58.415	21.421	124.993	1.296×10^6		
80.0 TeV	8.000×10^7	3.419	84.332	117.373	45.476	250.600	1.518×10^6		
100. TeV	1.000×10^8	3.449	105.635	146.887	57.948	313.919	1.589×10^6		