

Table 231: Muons in Polyvinyl butyral [C₈H₁₃O₂]_n

	$\langle Z/A \rangle$	ρ [g/cm ³]	I [eV]	a	$k = m_s$	x_0	x_1	\bar{C}	δ_0
	0.54537	1.120	67.2	0.11544	3.3983	0.1555	2.6186	3.1865	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	7.936				7.937	6.957×10^{-1}		
14.0 MeV	5.616×10^1	6.188				6.188	1.273×10^0		
20.0 MeV	6.802×10^1	4.830				4.830	2.383×10^0		
30.0 MeV	8.509×10^1	3.745				3.745	4.767×10^0		
40.0 MeV	1.003×10^2	3.197				3.197	7.676×10^0		
80.0 MeV	1.527×10^2	2.398				2.398	2.258×10^1		
100. MeV	1.764×10^2	2.245				2.245	3.123×10^1		
140. MeV	2.218×10^2	2.089				2.089	4.979×10^1		
200. MeV	2.868×10^2	1.999				1.999	7.926×10^1		
300. MeV	3.917×10^2	1.963			0.000	1.963	1.299×10^2		
325. MeV	4.171×10^2	1.962			0.000	1.963	<i>Minimum ionization</i>		
400. MeV	4.945×10^2	1.968			0.000	1.968	1.808×10^2		
800. MeV	8.995×10^2	2.040	0.000		0.000	2.040	3.805×10^2		
1.00 GeV	1.101×10^3	2.073	0.000		0.000	2.074	4.777×10^2		
1.40 GeV	1.502×10^3	2.127	0.000		0.001	2.128	6.680×10^2		
2.00 GeV	2.103×10^3	2.186	0.001	0.000	0.001	2.188	9.459×10^2		
3.00 GeV	3.104×10^3	2.254	0.001	0.001	0.001	2.257	1.395×10^3		
4.00 GeV	4.104×10^3	2.301	0.001	0.001	0.002	2.306	1.833×10^3		
8.00 GeV	8.105×10^3	2.410	0.003	0.003	0.004	2.420	3.522×10^3		
10.0 GeV	1.011×10^4	2.443	0.004	0.004	0.005	2.456	4.342×10^3		
14.0 GeV	1.411×10^4	2.490	0.006	0.007	0.007	2.510	5.952×10^3		
20.0 GeV	2.011×10^4	2.539	0.010	0.011	0.009	2.569	8.314×10^3		
30.0 GeV	3.011×10^4	2.591	0.016	0.019	0.014	2.640	1.215×10^4		
40.0 GeV	4.011×10^4	2.627	0.023	0.028	0.018	2.696	1.590×10^4		
80.0 GeV	8.011×10^4	2.709	0.051	0.069	0.034	2.865	3.027×10^4		
100. GeV	1.001×10^5	2.735	0.067	0.091	0.043	2.936	3.716×10^4		
140. GeV	1.401×10^5	2.773	0.099	0.137	0.059	3.069	5.048×10^4		
200. GeV	2.001×10^5	2.813	0.149	0.210	0.084	3.257	6.946×10^4		
300. GeV	3.001×10^5	2.858	0.235	0.335	0.126	3.554	9.883×10^4		
400. GeV	4.001×10^5	2.890	0.325	0.464	0.168	3.848	1.259×10^5		
800. GeV	8.001×10^5	2.968	0.698	1.004	0.340	5.011	2.167×10^5		
1.00 TeV	1.000×10^6	2.994	0.891	1.284	0.427	5.596	2.544×10^5		
1.15 TeV	1.146×10^6	3.009	1.032	1.486	0.492	6.019	<i>Muon critical energy</i>		
1.40 TeV	1.400×10^6	3.032	1.281	1.840	0.605	6.759	3.194×10^5		
2.00 TeV	2.000×10^6	3.074	1.879	2.693	0.877	8.523	3.983×10^5		
3.00 TeV	3.000×10^6	3.122	2.882	4.114	1.344	11.462	4.991×10^5		
4.00 TeV	4.000×10^6	3.156	3.904	5.555	1.818	14.434	5.767×10^5		
8.00 TeV	8.000×10^6	3.241	8.042	11.361	3.796	26.441	7.785×10^5		
10.0 TeV	1.000×10^7	3.269	10.136	14.286	4.816	32.507	8.466×10^5		
14.0 TeV	1.400×10^7	3.311	14.315	20.113	6.916	44.656	9.511×10^5		
20.0 TeV	2.000×10^7	3.357	20.639	28.903	10.144	63.044	1.064×10^6		
30.0 TeV	3.000×10^7	3.410	31.170	43.528	15.749	93.857	1.193×10^6		
40.0 TeV	4.000×10^7	3.448	41.760	58.201	21.503	124.911	1.285×10^6		
80.0 TeV	8.000×10^7	3.542	84.215	116.944	45.660	250.361	1.507×10^6		
100. TeV	1.000×10^8	3.573	105.498	146.351	58.187	313.609	1.578×10^6		