

Muons in n-butyl alcohol (C₄H₉OH)

$\langle Z/A \rangle$	ρ [g/cm ³]	I [eV]	a	$k = m_s$	x_0	x_1	\bar{C}	δ_0
0.56663	0.810	59.9	0.10081	3.5139	0.1937	2.6439	3.2425	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	8.367				8.367	6.592×10^{-1}	
14.0 MeV	5.616×10^1	6.520				6.520	1.207×10^0	
20.0 MeV	6.802×10^1	5.086				5.087	2.261×10^0	
30.0 MeV	8.509×10^1	3.942				3.942	4.525×10^0	
40.0 MeV	1.003×10^2	3.364				3.364	7.289×10^0	
80.0 MeV	1.527×10^2	2.521				2.521	2.147×10^1	
100. MeV	1.764×10^2	2.366				2.366	2.967×10^1	
140. MeV	2.218×10^2	2.201				2.201	4.728×10^1	
200. MeV	2.868×10^2	2.106				2.106	7.526×10^1	
300. MeV	3.917×10^2	2.068			0.000	2.068	1.233×10^2	
324. MeV	4.161×10^2	2.067			0.000	2.067	<i>Minimum ionization</i>	
400. MeV	4.945×10^2	2.072			0.000	2.073	1.717×10^2	
800. MeV	8.995×10^2	2.146	0.000		0.000	2.146	3.614×10^2	
1.00 GeV	1.101×10^3	2.180	0.000		0.000	2.181	4.538×10^2	
1.40 GeV	1.502×10^3	2.236	0.000		0.001	2.237	6.348×10^2	
2.00 GeV	2.103×10^3	2.297	0.000	0.000	0.001	2.299	8.992×10^2	
3.00 GeV	3.104×10^3	2.368	0.001	0.001	0.001	2.371	1.327×10^3	
4.00 GeV	4.104×10^3	2.416	0.001	0.001	0.002	2.421	1.744×10^3	
8.00 GeV	8.105×10^3	2.529	0.003	0.003	0.004	2.538	3.353×10^3	
10.0 GeV	1.011×10^4	2.563	0.004	0.004	0.005	2.576	4.135×10^3	
14.0 GeV	1.411×10^4	2.612	0.006	0.007	0.007	2.632	5.671×10^3	
20.0 GeV	2.011×10^4	2.663	0.009	0.011	0.009	2.692	7.923×10^3	
30.0 GeV	3.011×10^4	2.717	0.016	0.019	0.014	2.765	1.159×10^4	
40.0 GeV	4.011×10^4	2.754	0.022	0.028	0.018	2.822	1.516×10^4	
80.0 GeV	8.011×10^4	2.840	0.050	0.068	0.035	2.993	2.890×10^4	
100. GeV	1.001×10^5	2.866	0.065	0.089	0.043	3.064	3.551×10^4	
140. GeV	1.401×10^5	2.906	0.097	0.134	0.060	3.197	4.828×10^4	
200. GeV	2.001×10^5	2.948	0.146	0.206	0.085	3.384	6.652×10^4	
300. GeV	3.001×10^5	2.995	0.230	0.328	0.127	3.680	9.484×10^4	
400. GeV	4.001×10^5	3.028	0.318	0.455	0.169	3.970	1.210×10^5	
800. GeV	8.001×10^5	3.109	0.685	0.985	0.341	5.120	2.095×10^5	
1.00 TeV	1.000×10^6	3.135	0.875	1.259	0.429	5.698	2.465×10^5	
1.22 TeV	1.216×10^6	3.159	1.080	1.553	0.525	6.318	<i>Muon critical energy</i>	
1.40 TeV	1.400×10^6	3.176	1.257	1.805	0.608	6.846	3.104×10^5	
2.00 TeV	2.000×10^6	3.219	1.845	2.643	0.881	8.588	3.885×10^5	
3.00 TeV	3.000×10^6	3.268	2.832	4.037	1.350	11.488	4.889×10^5	
4.00 TeV	4.000×10^6	3.304	3.837	5.453	1.827	14.420	5.664×10^5	
8.00 TeV	8.000×10^6	3.392	7.909	11.154	3.815	26.270	7.690×10^5	
10.0 TeV	1.000×10^7	3.421	9.970	14.027	4.839	32.257	8.376×10^5	
14.0 TeV	1.400×10^7	3.465	14.084	19.749	6.951	44.249	9.430×10^5	
20.0 TeV	2.000×10^7	3.512	20.311	28.382	10.196	62.402	1.057×10^6	
30.0 TeV	3.000×10^7	3.567	30.680	42.744	15.832	92.825	1.187×10^6	
40.0 TeV	4.000×10^7	3.607	41.110	57.154	21.619	123.491	1.280×10^6	
80.0 TeV	8.000×10^7	3.705	82.932	114.845	45.921	247.402	1.505×10^6	
100. TeV	1.000×10^8	3.737	103.900	143.725	58.525	309.887	1.577×10^6	