

Table 149: Muons in Diethyl ether ((CH₃CH₂)₂O)

$\langle Z/A \rangle$	ρ [g/cm ³]	I [eV]	a	$k = m_s$	x_0	x_1	\bar{C}	δ_0
0.56663	0.714	60.0	0.10550	3.4586	0.2231	2.6745	3.3721	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	8.365				8.365	6.594×10^{-1}	
14.0 MeV	5.616×10^1	6.518				6.518	1.207×10^0	
20.0 MeV	6.802×10^1	5.085				5.086	2.261×10^0	
30.0 MeV	8.509×10^1	3.941				3.941	4.526×10^0	
40.0 MeV	1.003×10^2	3.363				3.363	7.291×10^0	
80.0 MeV	1.527×10^2	2.521				2.521	2.147×10^1	
100. MeV	1.764×10^2	2.370				2.370	2.967×10^1	
140. MeV	2.218×10^2	2.205				2.205	4.725×10^1	
200. MeV	2.868×10^2	2.110				2.110	7.518×10^1	
300. MeV	3.917×10^2	2.072			0.000	2.073	1.231×10^2	
324. MeV	4.161×10^2	2.072			0.000	2.072	<i>Minimum ionization</i>	
400. MeV	4.945×10^2	2.077			0.000	2.078	1.714×10^2	
800. MeV	8.995×10^2	2.152	0.000		0.000	2.153	3.606×10^2	
1.00 GeV	1.101×10^3	2.187	0.000		0.000	2.188	4.527×10^2	
1.40 GeV	1.502×10^3	2.243	0.000		0.001	2.244	6.331×10^2	
2.00 GeV	2.103×10^3	2.306	0.000	0.000	0.001	2.307	8.966×10^2	
3.00 GeV	3.104×10^3	2.377	0.001	0.001	0.001	2.379	1.323×10^3	
4.00 GeV	4.104×10^3	2.426	0.001	0.001	0.002	2.430	1.739×10^3	
8.00 GeV	8.105×10^3	2.539	0.003	0.003	0.004	2.549	3.341×10^3	
10.0 GeV	1.011×10^4	2.573	0.004	0.004	0.005	2.586	4.120×10^3	
14.0 GeV	1.411×10^4	2.623	0.006	0.007	0.007	2.643	5.649×10^3	
20.0 GeV	2.011×10^4	2.674	0.009	0.011	0.009	2.703	7.892×10^3	
30.0 GeV	3.011×10^4	2.728	0.016	0.019	0.014	2.776	1.154×10^4	
40.0 GeV	4.011×10^4	2.765	0.022	0.028	0.018	2.833	1.510×10^4	
80.0 GeV	8.011×10^4	2.851	0.050	0.068	0.035	3.004	2.879×10^4	
100. GeV	1.001×10^5	2.877	0.065	0.089	0.043	3.075	3.537×10^4	
140. GeV	1.401×10^5	2.917	0.097	0.134	0.060	3.208	4.810×10^4	
200. GeV	2.001×10^5	2.959	0.146	0.206	0.085	3.395	6.628×10^4	
300. GeV	3.001×10^5	3.006	0.230	0.328	0.127	3.691	9.451×10^4	
400. GeV	4.001×10^5	3.039	0.318	0.455	0.169	3.981	1.206×10^5	
800. GeV	8.001×10^5	3.120	0.685	0.985	0.341	5.131	2.088×10^5	
1.00 TeV	1.000×10^6	3.146	0.875	1.259	0.429	5.709	2.458×10^5	
1.22 TeV	1.221×10^6	3.170	1.084	1.558	0.527	6.341	<i>Muon critical energy</i>	
1.40 TeV	1.400×10^6	3.187	1.257	1.805	0.608	6.857	3.096×10^5	
2.00 TeV	2.000×10^6	3.230	1.845	2.643	0.881	8.599	3.876×10^5	
3.00 TeV	3.000×10^6	3.279	2.832	4.037	1.350	11.499	4.879×10^5	
4.00 TeV	4.000×10^6	3.315	3.837	5.453	1.827	14.431	5.653×10^5	
8.00 TeV	8.000×10^6	3.403	7.909	11.154	3.815	26.281	7.678×10^5	
10.0 TeV	1.000×10^7	3.432	9.970	14.027	4.839	32.268	8.363×10^5	
14.0 TeV	1.400×10^7	3.476	14.084	19.749	6.951	44.260	9.418×10^5	
20.0 TeV	2.000×10^7	3.523	20.311	28.382	10.196	62.413	1.055×10^6	
30.0 TeV	3.000×10^7	3.578	30.680	42.744	15.832	92.836	1.186×10^6	
40.0 TeV	4.000×10^7	3.618	41.110	57.154	21.619	123.502	1.279×10^6	
80.0 TeV	8.000×10^7	3.716	82.932	114.845	45.921	247.413	1.503×10^6	
100. TeV	1.000×10^8	3.748	103.900	143.725	58.525	309.898	1.576×10^6	