Table 177: Muons in n-Heptane C_7H_{16}

$\langle Z/A \rangle$	ρ [g/cm^3]	I [eV]	a	$k = m_s$	x_0	x_1	$\overline{C}$	δ_0
0.57992	0.684	54.4	0.11255	3.4885	0.1928	2.5706	3.1978	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	8.667				8.667	6.359×10^{-1}
14.0 MeV	5.616×10^1	6.750				6.750	1.164×10^0
20.0 MeV	6.802×10^1	5.264				5.264	2.183×10^0
30.0 MeV	8.509×10^1	4.078				4.078	4.371×10^0
40.0 MeV	1.003×10^2	3.479				3.479	7.044×10^0
80.0 MeV	1.527×10^2	2.606				2.606	2.076×10^1
100. MeV	1.764×10^2	2.444				2.444	2.870×10^1
140. MeV	2.218×10^2	2.274				2.274	4.574×10^1
200. MeV	2.868×10^2	2.175				2.175	7.283×10^1
300. MeV	3.917×10^2	2.134			0.000	2.135	1.194×10^2
328. MeV	4.211×10^2	2.133			0.000	2.134	*Minimum ionization*
400. MeV	4.945×10^2	2.139			0.000	2.139	1.662×10^2
800. MeV	8.995×10^2	2.213	0.000		0.000	2.213	3.502×10^2
1.00 GeV	1.101×10^3	2.247	0.000		0.000	2.248	4.398×10^2
1.40 GeV	1.502×10^3	2.304	0.000		0.001	2.305	6.154×10^2
2.00 GeV	2.103×10^3	2.367	0.000	0.000	0.001	2.368	8.720×10^2
3.00 GeV	3.104×10^3	2.438	0.001	0.000	0.001	2.441	1.287×10^3
4.00 GeV	4.104×10^3	2.488	0.001	0.001	0.002	2.492	1.693×10^3
8.00 GeV	8.105×10^3	2.602	0.003	0.003	0.004	2.611	3.256×10^3
10.0 GeV	1.011×10^4	2.637	0.004	0.004	0.005	2.649	4.016×10^3
14.0 GeV	1.411×10^4	2.687	0.006	0.006	0.007	2.706	5.510×10^3
20.0 GeV	2.011×10^4	2.738	0.009	0.010	0.009	2.767	7.701×10^3
30.0 GeV	3.011×10^4	2.794	0.014	0.018	0.014	2.840	1.127×10^4
40.0 GeV	4.011×10^4	2.832	0.020	0.026	0.018	2.896	1.475×10^4
80.0 GeV	8.011×10^4	2.919	0.047	0.063	0.035	3.064	2.816×10^4
100. GeV	1.001×10^5	2.947	0.061	0.083	0.043	3.134	3.461×10^4
140. GeV	1.401×10^5	2.987	0.090	0.125	0.060	3.262	4.711×10^4
200. GeV	2.001×10^5	3.030	0.136	0.191	0.085	3.442	6.501×10^4
300. GeV	3.001×10^5	3.078	0.215	0.305	0.128	3.725	9.292×10^4
400. GeV	4.001×10^5	3.112	0.297	0.424	0.170	4.003	1.188×10^5
800. GeV	8.001×10^5	3.195	0.639	0.918	0.343	5.096	2.071×10^5
1.00 TeV	1.000×10^6	3.222	0.817	1.175	0.431	5.645	2.444×10^5
1.32 TeV	1.319×10^6	3.256	1.101	1.580	0.575	6.512	*Muon critical energy*
1.40 TeV	1.400×10^6	3.263	1.174	1.685	0.612	6.734	3.092×10^5
2.00 TeV	2.000×10^6	3.307	1.725	2.468	0.886	8.386	3.889×10^5
3.00 TeV	3.000×10^6	3.358	2.648	3.773	1.358	11.137	4.921×10^5
4.00 TeV	4.000×10^6	3.395	3.589	5.097	1.838	13.919	5.722×10^5
8.00 TeV	8.000×10^6	3.485	7.406	10.432	3.838	25.161	7.830×10^5
10.0 TeV	1.000×10^7	3.514	9.338	13.120	4.869	30.842	8.547×10^5
14.0 TeV	1.400×10^7	3.559	13.195	18.476	6.995	42.226	9.651×10^5
20.0 TeV	2.000×10^7	3.608	19.035	26.556	10.263	59.462	1.084×10^6
30.0 TeV	3.000×10^7	3.664	28.762	39.997	15.939	88.362	1.221×10^6
40.0 TeV	4.000×10^7	3.705	38.547	53.483	21.767	117.503	1.319×10^6
80.0 TeV	8.000×10^7	3.805	77.782	107.477	46.253	235.317	1.555×10^6
100. TeV	1.000×10^8	3.838	97.453	134.508	58.955	294.753	1.631×10^6