Table 212: Muons in Octane (C_8H_{18})

$\langle Z/A \rangle$	ρ [g/cm^3]	I [eV]	a	$k = m_s$	x_0	x_1	$\overline{C}$	δ_0
0.57778	0.703	54.7	0.11387	3.4776	0.1882	2.5664	3.1834	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	8.629				8.629	6.387×10^{-1}
14.0 MeV	5.616×10^1	6.721				6.721	1.170×10^0
20.0 MeV	6.802×10^1	5.242				5.242	2.192×10^0
30.0 MeV	8.509×10^1	4.060				4.060	4.390×10^0
40.0 MeV	1.003×10^2	3.464				3.464	7.074×10^0
80.0 MeV	1.527×10^2	2.595				2.595	2.084×10^1
100. MeV	1.764×10^2	2.433				2.433	2.882×10^1
140. MeV	2.218×10^2	2.263				2.264	4.595×10^1
200. MeV	2.868×10^2	2.165				2.165	7.316×10^1
300. MeV	3.917×10^2	2.124			0.000	2.125	1.199×10^2
328. MeV	4.211×10^2	2.123			0.000	2.124	*Minimum ionization*
400. MeV	4.945×10^2	2.129			0.000	2.129	1.670×10^2
800. MeV	8.995×10^2	2.203	0.000		0.000	2.203	3.518×10^2
1.00 GeV	1.101×10^3	2.237	0.000		0.000	2.238	4.418×10^2
1.40 GeV	1.502×10^3	2.293	0.000		0.001	2.295	6.183×10^2
2.00 GeV	2.103×10^3	2.356	0.000	0.000	0.001	2.357	8.760×10^2
3.00 GeV	3.104×10^3	2.427	0.001	0.000	0.001	2.430	1.293×10^3
4.00 GeV	4.104×10^3	2.476	0.001	0.001	0.002	2.480	1.701×10^3
8.00 GeV	8.105×10^3	2.590	0.003	0.003	0.004	2.599	3.271×10^3
10.0 GeV	1.011×10^4	2.625	0.004	0.004	0.005	2.637	4.035×10^3
14.0 GeV	1.411×10^4	2.675	0.006	0.006	0.007	2.693	5.535×10^3
20.0 GeV	2.011×10^4	2.726	0.009	0.010	0.009	2.754	7.736×10^3
30.0 GeV	3.011×10^4	2.781	0.014	0.018	0.014	2.827	1.132×10^4
40.0 GeV	4.011×10^4	2.819	0.020	0.026	0.018	2.884	1.482×10^4
80.0 GeV	8.011×10^4	2.906	0.047	0.063	0.035	3.051	2.828×10^4
100. GeV	1.001×10^5	2.934	0.061	0.083	0.043	3.121	3.476×10^4
140. GeV	1.401×10^5	2.974	0.090	0.125	0.060	3.249	4.732×10^4
200. GeV	2.001×10^5	3.016	0.136	0.192	0.085	3.429	6.528×10^4
300. GeV	3.001×10^5	3.064	0.215	0.305	0.127	3.712	9.330×10^4
400. GeV	4.001×10^5	3.098	0.297	0.424	0.170	3.989	1.193×10^5
800. GeV	8.001×10^5	3.181	0.640	0.919	0.343	5.083	2.079×10^5
1.00 TeV	1.000×10^6	3.208	0.817	1.176	0.431	5.632	2.452×10^5
1.31 TeV	1.312×10^6	3.241	1.096	1.573	0.572	6.482	*Muon critical energy*
1.40 TeV	1.400×10^6	3.249	1.175	1.686	0.611	6.722	3.102×10^5
2.00 TeV	2.000×10^6	3.293	1.726	2.470	0.886	8.375	3.900×10^5
3.00 TeV	3.000×10^6	3.344	2.650	3.776	1.357	11.127	4.932×10^5
4.00 TeV	4.000×10^6	3.380	3.592	5.101	1.837	13.911	5.735×10^5
8.00 TeV	8.000×10^6	3.470	7.411	10.441	3.837	25.159	7.843×10^5
10.0 TeV	1.000×10^7	3.499	9.345	13.131	4.868	30.843	8.560×10^5
14.0 TeV	1.400×10^7	3.544	13.205	18.491	6.993	42.233	9.664×10^5
20.0 TeV	2.000×10^7	3.592	19.049	26.577	10.260	59.479	1.086×10^6
30.0 TeV	3.000×10^7	3.648	28.782	40.029	15.935	88.395	1.223×10^6
40.0 TeV	4.000×10^7	3.689	38.574	53.527	21.761	117.551	1.320×10^6
80.0 TeV	8.000×10^7	3.789	77.834	107.565	46.240	235.427	1.556×10^6
100. TeV	1.000×10^8	3.821	97.517	134.617	58.939	294.895	1.632×10^6