Muons in liquid propane (C_3H_8)

$\langle Z/A \rangle$	ρ [g/cm^3]	I [eV]	a	$k = m_s$	x_0	x_1	$\overline{C}$	δ_0
0.58962	0.493	52.0	0.10329	3.5620	0.2564	2.6271	3.4162	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	8.861				8.861	6.217×10^{-1}
14.0 MeV	5.616×10^1	6.900				6.900	1.139×10^0
20.0 MeV	6.802×10^1	5.380				5.380	2.135×10^0
30.0 MeV	8.509×10^1	4.167				4.167	4.277×10^0
40.0 MeV	1.003×10^2	3.554				3.554	6.892×10^0
80.0 MeV	1.527×10^2	2.661				2.661	2.032×10^1
100. MeV	1.764×10^2	2.501				2.501	2.809×10^1
140. MeV	2.218×10^2	2.333				2.333	4.472×10^1
200. MeV	2.868×10^2	2.232				2.232	7.111×10^1
300. MeV	3.917×10^2	2.192			0.000	2.192	1.165×10^2
325. MeV	4.171×10^2	2.191			0.000	2.191	*Minimum ionization*
400. MeV	4.945×10^2	2.197			0.000	2.197	1.621×10^2
800. MeV	8.995×10^2	2.274	0.000		0.000	2.274	3.411×10^2
1.00 GeV	1.101×10^3	2.310	0.000		0.000	2.310	4.283×10^2
1.40 GeV	1.502×10^3	2.368	0.000		0.001	2.369	5.992×10^2
2.00 GeV	2.103×10^3	2.432	0.000	0.000	0.001	2.434	8.489×10^2
3.00 GeV	3.104×10^3	2.505	0.001	0.000	0.001	2.508	1.253×10^3
4.00 GeV	4.104×10^3	2.556	0.001	0.001	0.002	2.560	1.648×10^3
8.00 GeV	8.105×10^3	2.673	0.003	0.003	0.004	2.682	3.170×10^3
10.0 GeV	1.011×10^4	2.708	0.004	0.004	0.005	2.721	3.910×10^3
14.0 GeV	1.411×10^4	2.760	0.006	0.006	0.007	2.778	5.364×10^3
20.0 GeV	2.011×10^4	2.812	0.009	0.010	0.009	2.840	7.498×10^3
30.0 GeV	3.011×10^4	2.869	0.014	0.017	0.014	2.914	1.097×10^4
40.0 GeV	4.011×10^4	2.907	0.020	0.026	0.018	2.971	1.437×10^4
80.0 GeV	8.011×10^4	2.996	0.046	0.062	0.035	3.140	2.744×10^4
100. GeV	1.001×10^5	3.024	0.060	0.082	0.043	3.210	3.374×10^4
140. GeV	1.401×10^5	3.065	0.089	0.124	0.060	3.338	4.596×10^4
200. GeV	2.001×10^5	3.108	0.134	0.190	0.085	3.518	6.346×10^4
300. GeV	3.001×10^5	3.157	0.213	0.302	0.128	3.800	9.080×10^4
400. GeV	4.001×10^5	3.192	0.294	0.419	0.170	4.076	1.162×10^5
800. GeV	8.001×10^5	3.277	0.634	0.910	0.344	5.164	2.032×10^5
1.00 TeV	1.000×10^6	3.304	0.810	1.164	0.432	5.710	2.400×10^5
1.36 TeV	1.360×10^6	3.342	1.129	1.619	0.595	6.685	*Muon critical energy*
1.40 TeV	1.400×10^6	3.346	1.164	1.670	0.613	6.793	3.041×10^5
2.00 TeV	2.000×10^6	3.391	1.710	2.446	0.888	8.435	3.833×10^5
3.00 TeV	3.000×10^6	3.442	2.627	3.739	1.361	11.170	4.860×10^5
4.00 TeV	4.000×10^6	3.479	3.561	5.052	1.842	13.935	5.660×10^5
8.00 TeV	8.000×10^6	3.571	7.349	10.343	3.847	25.110	7.769×10^5
10.0 TeV	1.000×10^7	3.601	9.267	13.009	4.881	30.758	8.487×10^5
14.0 TeV	1.400×10^7	3.647	13.097	18.319	7.012	42.075	9.595×10^5
20.0 TeV	2.000×10^7	3.696	18.897	26.331	10.288	59.212	1.079×10^6
30.0 TeV	3.000×10^7	3.753	28.556	39.659	15.979	87.948	1.217×10^6
40.0 TeV	4.000×10^7	3.795	38.275	53.032	21.824	116.925	1.315×10^6
80.0 TeV	8.000×10^7	3.896	77.245	106.572	46.380	234.095	1.552×10^6
100. TeV	1.000×10^8	3.930	96.786	133.376	59.121	293.212	1.629×10^6