

Table 238: Muons in Propane (C₃H₈)

$\langle Z/A \rangle$	ρ [g/cm ³]	I [eV]	a	$k = m_s$	x_0	x_1	\bar{C}	δ_0
0.58962	1.868×10^{-3}	47.1	0.09916	3.5920	1.4339	3.8011	8.7939	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	8.969				8.969	6.137×10^{-1}	
14.0 MeV	5.616×10^1	6.982				6.982	1.125×10^0	
20.0 MeV	6.802×10^1	5.441				5.441	2.109×10^0	
30.0 MeV	8.509×10^1	4.212				4.213	4.228×10^0	
40.0 MeV	1.003×10^2	3.592				3.592	6.815×10^0	
80.0 MeV	1.527×10^2	2.688				2.688	2.010×10^1	
100. MeV	1.764×10^2	2.525				2.526	2.780×10^1	
140. MeV	2.218×10^2	2.365				2.365	4.424×10^1	
200. MeV	2.868×10^2	2.281				2.281	7.018×10^1	
267. MeV	3.577×10^2	2.262			0.000	2.263	<i>Minimum ionization</i>	
300. MeV	3.917×10^2	2.265			0.000	2.265	1.143×10^2	
400. MeV	4.945×10^2	2.291			0.000	2.291	1.582×10^2	
800. MeV	8.995×10^2	2.434	0.000		0.000	2.435	3.275×10^2	
1.00 GeV	1.101×10^3	2.495	0.000		0.000	2.496	4.086×10^2	
1.40 GeV	1.502×10^3	2.596	0.000		0.001	2.597	5.656×10^2	
2.00 GeV	2.103×10^3	2.709	0.000	0.000	0.001	2.710	7.915×10^2	
3.00 GeV	3.104×10^3	2.838	0.001	0.000	0.001	2.841	1.151×10^3	
4.00 GeV	4.104×10^3	2.916	0.001	0.001	0.002	2.921	1.498×10^3	
8.00 GeV	8.105×10^3	3.088	0.003	0.003	0.004	3.097	2.822×10^3	
10.0 GeV	1.011×10^4	3.138	0.004	0.004	0.005	3.150	3.462×10^3	
14.0 GeV	1.411×10^4	3.208	0.006	0.006	0.007	3.226	4.716×10^3	
20.0 GeV	2.011×10^4	3.276	0.009	0.010	0.009	3.305	6.552×10^3	
30.0 GeV	3.011×10^4	3.347	0.014	0.017	0.014	3.393	9.536×10^3	
40.0 GeV	4.011×10^4	3.394	0.020	0.026	0.018	3.458	1.245×10^4	
80.0 GeV	8.011×10^4	3.494	0.046	0.062	0.035	3.638	2.371×10^4	
100. GeV	1.001×10^5	3.524	0.060	0.082	0.043	3.710	2.915×10^4	
140. GeV	1.401×10^5	3.568	0.089	0.124	0.060	3.841	3.975×10^4	
200. GeV	2.001×10^5	3.612	0.134	0.190	0.085	4.022	5.501×10^4	
300. GeV	3.001×10^5	3.662	0.213	0.302	0.128	4.305	7.903×10^4	
400. GeV	4.001×10^5	3.697	0.294	0.419	0.170	4.581	1.015×10^5	
800. GeV	8.001×10^5	3.781	0.634	0.910	0.344	5.669	1.799×10^5	
1.00 TeV	1.000×10^6	3.809	0.810	1.164	0.432	6.215	2.136×10^5	
1.40 TeV	1.400×10^6	3.851	1.164	1.670	0.613	7.298	2.729×10^5	
1.56 TeV	1.558×10^6	3.864	1.307	1.872	0.685	7.728	<i>Muon critical energy</i>	
2.00 TeV	2.000×10^6	3.895	1.710	2.446	0.888	8.940	3.471×10^5	
3.00 TeV	3.000×10^6	3.947	2.627	3.739	1.361	11.674	4.447×10^5	
4.00 TeV	4.000×10^6	3.984	3.561	5.052	1.842	14.439	5.216×10^5	
8.00 TeV	8.000×10^6	4.076	7.349	10.343	3.847	25.615	7.268×10^5	
10.0 TeV	1.000×10^7	4.106	9.267	13.009	4.881	31.263	7.974×10^5	
14.0 TeV	1.400×10^7	4.152	13.097	18.319	7.012	42.580	9.066×10^5	
20.0 TeV	2.000×10^7	4.201	18.897	26.331	10.288	59.717	1.025×10^6	
30.0 TeV	3.000×10^7	4.258	28.556	39.659	15.979	88.453	1.162×10^6	
40.0 TeV	4.000×10^7	4.299	38.275	53.032	21.824	117.430	1.260×10^6	
80.0 TeV	8.000×10^7	4.401	77.245	106.572	46.380	234.599	1.496×10^6	
100. TeV	1.000×10^8	4.435	96.786	133.376	59.121	293.717	1.572×10^6	