

Table 304: Muons in Fermium

Z	A [g/mol]	ρ [g/cm ³]	I [eV]	a	$k = m_s$	x_0	x_1	\bar{C}	δ_0
100 (Fm)	[257.09510 (5)]	??	994.0	0.26219	3.0000	0.5821	3.0000	6.3868	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	3.586				3.586	1.643×10^0		
14.0 MeV	5.616×10^1	2.881				2.881	2.899×10^0		
20.0 MeV	6.802×10^1	2.308				2.308	5.249×10^0		
30.0 MeV	8.509×10^1	1.834				1.834	1.017×10^1		
40.0 MeV	1.003×10^2	1.589				1.590	1.606×10^1		
80.0 MeV	1.527×10^2	1.231				1.231	4.549×10^1		
100. MeV	1.764×10^2	1.169				1.169	6.220×10^1		
140. MeV	2.218×10^2	1.112				1.112	9.744×10^1		
200. MeV	2.868×10^2	1.090				1.090	1.521×10^2		
213. MeV	3.008×10^2	1.090	0.000			1.090		<i>Minimum ionization</i>	
300. MeV	3.917×10^2	1.103	0.000		0.000	1.103	2.435×10^2		
400. MeV	4.945×10^2	1.129	0.000		0.000	1.130	3.330×10^2		
800. MeV	8.995×10^2	1.223	0.001		0.000	1.225	6.722×10^2		
1.00 GeV	1.101×10^3	1.258	0.002		0.000	1.260	8.331×10^2		
1.40 GeV	1.502×10^3	1.312	0.003		0.000	1.315	1.143×10^3		
2.00 GeV	2.103×10^3	1.369	0.005	0.001	0.001	1.375	1.589×10^3		
3.00 GeV	3.104×10^3	1.432	0.008	0.003	0.001	1.444	2.297×10^3		
4.00 GeV	4.104×10^3	1.474	0.012	0.006	0.001	1.495	2.978×10^3		
8.00 GeV	8.105×10^3	1.569	0.029	0.024	0.003	1.625	5.534×10^3		
10.0 GeV	1.011×10^4	1.596	0.039	0.034	0.004	1.674	6.746×10^3		
14.0 GeV	1.411×10^4	1.636	0.060	0.056	0.005	1.757	9.077×10^3		
20.0 GeV	2.011×10^4	1.674	0.093	0.093	0.007	1.869	1.239×10^4		
30.0 GeV	3.011×10^4	1.715	0.152	0.165	0.011	2.045	1.750×10^4		
40.0 GeV	4.011×10^4	1.742	0.216	0.245	0.014	2.217	2.219×10^4		
80.0 GeV	8.011×10^4	1.802	0.488	0.598	0.027	2.915	3.788×10^4		
100. GeV	1.001×10^5	1.820	0.632	0.788	0.034	3.275	4.435×10^4		
122. GeV	1.222×10^5	1.836	0.793	1.002	0.041	3.674		<i>Muon critical energy</i>	
140. GeV	1.401×10^5	1.847	0.927	1.180	0.047	4.004	5.539×10^4		
200. GeV	2.001×10^5	1.876	1.390	1.803	0.067	5.137	6.860×10^4		
300. GeV	3.001×10^5	1.908	2.178	2.841	0.100	7.029	8.519×10^4		
400. GeV	4.001×10^5	1.931	2.992	3.917	0.134	8.976	9.775×10^4		
800. GeV	8.001×10^5	1.986	6.350	8.331	0.270	16.939	1.297×10^5		
1.00 TeV	1.000×10^6	2.005	8.073	10.588	0.340	21.008	1.403×10^5		
1.40 TeV	1.400×10^6	2.032	11.523	15.089	0.481	29.128	1.564×10^5		
2.00 TeV	2.000×10^6	2.062	16.797	21.958	0.695	41.514	1.735×10^5		
3.00 TeV	3.000×10^6	2.096	25.594	33.369	1.063	62.123	1.931×10^5		
4.00 TeV	4.000×10^6	2.120	34.501	44.900	1.435	82.959	2.070×10^5		
8.00 TeV	8.000×10^6	2.181	70.387	91.246	2.979	166.795	2.403×10^5		
10.0 TeV	1.000×10^7	2.201	88.458	114.540	3.771	208.972	2.510×10^5		
14.0 TeV	1.400×10^7	2.231	124.501	161.020	5.396	293.150	2.671×10^5		
20.0 TeV	2.000×10^7	2.263	178.858	231.034	7.884	420.042	2.841×10^5		
30.0 TeV	3.000×10^7	2.301	269.438	347.508	12.180	631.430	3.034×10^5		
40.0 TeV	4.000×10^7	2.328	360.339	464.250	16.576	843.496	3.170×10^5		
80.0 TeV	8.000×10^7	2.395	723.919	931.531	34.909	1692.757	3.499×10^5		
100. TeV	1.000×10^8	2.417	905.820	1165.380	44.370	2117.990	3.604×10^5		