Table 308: Muons in Rutherfordium

Z	A [g/mol]	ρ [g/cm^3]	I [eV]	a	$k = m_s$	x_0	x_1	$\overline{C}$	δ_0
104 (Rf)	[261.10877]	??	1047.0	0.26794	3.0000	0.6082	3.0000	6.4670	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	3.618				3.618	1.636×10^0
14.0 MeV	5.616×10^1	2.912				2.912	2.879×10^0
20.0 MeV	6.802×10^1	2.337				2.337	5.201×10^0
30.0 MeV	8.509×10^1	1.860				1.860	1.006×10^1
40.0 MeV	1.003×10^2	1.613				1.613	1.586×10^1
80.0 MeV	1.527×10^2	1.251				1.251	4.484×10^1
100. MeV	1.764×10^2	1.188				1.188	6.128×10^1
140. MeV	2.218×10^2	1.130				1.130	9.595×10^1
200. MeV	2.868×10^2	1.109				1.109	1.497×10^2
209. MeV	2.968×10^2	1.109	0.000			1.109	*Minimum ionization*
300. MeV	3.917×10^2	1.123	0.000		0.000	1.123	2.395×10^2
400. MeV	4.945×10^2	1.150	0.000		0.000	1.151	3.275×10^2
800. MeV	8.995×10^2	1.248	0.001		0.000	1.249	6.601×10^2
1.00 GeV	1.101×10^3	1.284	0.002		0.000	1.286	8.178×10^2
1.40 GeV	1.502×10^3	1.339	0.003		0.000	1.343	1.122×10^3
2.00 GeV	2.103×10^3	1.398	0.005	0.000	0.001	1.405	1.558×10^3
3.00 GeV	3.104×10^3	1.463	0.009	0.003	0.001	1.477	2.251×10^3
4.00 GeV	4.104×10^3	1.507	0.013	0.006	0.001	1.528	2.916×10^3
8.00 GeV	8.105×10^3	1.604	0.031	0.025	0.003	1.664	5.415×10^3
10.0 GeV	1.011×10^4	1.633	0.042	0.035	0.004	1.714	6.598×10^3
14.0 GeV	1.411×10^4	1.673	0.064	0.059	0.005	1.801	8.873×10^3
20.0 GeV	2.011×10^4	1.713	0.099	0.097	0.007	1.917	1.210×10^4
30.0 GeV	3.011×10^4	1.755	0.162	0.173	0.011	2.102	1.708×10^4
40.0 GeV	4.011×10^4	1.782	0.229	0.257	0.014	2.284	2.164×10^4
80.0 GeV	8.011×10^4	1.843	0.518	0.628	0.027	3.019	3.683×10^4
100. GeV	1.001×10^5	1.862	0.672	0.829	0.034	3.398	4.308×10^4
119. GeV	1.188×10^5	1.876	0.817	1.020	0.040	3.755	*Muon critical energy*
140. GeV	1.401×10^5	1.890	0.986	1.242	0.047	4.167	5.369×10^4
200. GeV	2.001×10^5	1.919	1.477	1.898	0.067	5.363	6.636×10^4
300. GeV	3.001×10^5	1.952	2.315	2.992	0.100	7.361	8.223×10^4
400. GeV	4.001×10^5	1.976	3.180	4.127	0.134	9.418	9.421×10^4
800. GeV	8.001×10^5	2.033	6.747	8.778	0.270	17.830	1.246×10^5
1.00 TeV	1.000×10^6	2.051	8.578	11.157	0.339	22.127	1.346×10^5
1.40 TeV	1.400×10^6	2.079	12.243	15.901	0.480	30.705	1.499×10^5
2.00 TeV	2.000×10^6	2.110	17.844	23.140	0.694	43.790	1.662×10^5
3.00 TeV	3.000×10^6	2.145	27.187	35.166	1.061	65.561	1.848×10^5
4.00 TeV	4.000×10^6	2.170	36.647	47.320	1.433	87.573	1.979×10^5
8.00 TeV	8.000×10^6	2.232	74.757	96.166	2.974	176.131	2.295×10^5
10.0 TeV	1.000×10^7	2.252	93.947	120.716	3.765	220.682	2.396×10^5
14.0 TeV	1.400×10^7	2.283	132.222	169.703	5.387	309.598	2.548×10^5
20.0 TeV	2.000×10^7	2.316	189.944	243.494	7.872	443.629	2.709×10^5
30.0 TeV	3.000×10^7	2.355	286.131	366.251	12.161	666.900	2.892×10^5
40.0 TeV	4.000×10^7	2.383	382.657	489.291	16.549	890.881	3.021×10^5
80.0 TeV	8.000×10^7	2.451	768.729	981.778	34.853	1787.814	3.332×10^5
100. TeV	1.000×10^8	2.474	961.880	1228.240	44.300	2236.896	3.432×10^5