Table 305: Muons in Mendelevium

Z	A [g/mol]	ρ [g/cm^3]	I [eV]	a	$k = m_s$	x_0	x_1	$\overline{C}$	δ_0
101 (Md)	[258.09843 (3)]	??	1007.0	0.26360	3.0000	0.5886	3.0000	6.4068	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	3.594				3.595	1.641×10^0
14.0 MeV	5.616×10^1	2.889				2.889	2.893×10^0
20.0 MeV	6.802×10^1	2.316				2.316	5.236×10^0
30.0 MeV	8.509×10^1	1.841				1.841	1.014×10^1
40.0 MeV	1.003×10^2	1.596				1.596	1.601×10^1
80.0 MeV	1.527×10^2	1.236				1.236	4.532×10^1
100. MeV	1.764×10^2	1.174				1.174	6.196×10^1
140. MeV	2.218×10^2	1.116				1.117	9.705×10^1
200. MeV	2.868×10^2	1.095				1.095	1.515×10^2
213. MeV	3.008×10^2	1.095	0.000			1.095	*Minimum ionization*
300. MeV	3.917×10^2	1.108	0.000		0.000	1.108	2.424×10^2
400. MeV	4.945×10^2	1.135	0.000		0.000	1.135	3.316×10^2
800. MeV	8.995×10^2	1.229	0.001		0.000	1.231	6.690×10^2
1.00 GeV	1.101×10^3	1.264	0.002		0.000	1.267	8.291×10^2
1.40 GeV	1.502×10^3	1.319	0.003		0.000	1.322	1.138×10^3
2.00 GeV	2.103×10^3	1.376	0.005	0.001	0.001	1.383	1.581×10^3
3.00 GeV	3.104×10^3	1.440	0.008	0.003	0.001	1.453	2.285×10^3
4.00 GeV	4.104×10^3	1.483	0.012	0.006	0.001	1.503	2.962×10^3
8.00 GeV	8.105×10^3	1.578	0.030	0.024	0.003	1.635	5.503×10^3
10.0 GeV	1.011×10^4	1.605	0.040	0.034	0.004	1.684	6.708×10^3
14.0 GeV	1.411×10^4	1.645	0.061	0.057	0.005	1.769	9.024×10^3
20.0 GeV	2.011×10^4	1.684	0.095	0.094	0.007	1.881	1.231×10^4
30.0 GeV	3.011×10^4	1.725	0.155	0.167	0.011	2.059	1.739×10^4
40.0 GeV	4.011×10^4	1.752	0.219	0.248	0.014	2.234	2.205×10^4
80.0 GeV	8.011×10^4	1.812	0.495	0.605	0.027	2.941	3.761×10^4
100. GeV	1.001×10^5	1.831	0.642	0.798	0.034	3.306	4.403×10^4
121. GeV	1.213×10^5	1.846	0.799	1.006	0.041	3.694	*Muon critical energy*
140. GeV	1.401×10^5	1.858	0.942	1.196	0.047	4.044	5.495×10^4
200. GeV	2.001×10^5	1.887	1.411	1.826	0.067	5.193	6.802×10^4
300. GeV	3.001×10^5	1.919	2.212	2.879	0.100	7.112	8.442×10^4
400. GeV	4.001×10^5	1.942	3.039	3.970	0.134	9.086	9.684×10^4
800. GeV	8.001×10^5	1.998	6.449	8.442	0.270	17.161	1.284×10^5
1.00 TeV	1.000×10^6	2.016	8.198	10.730	0.340	21.286	1.388×10^5
1.40 TeV	1.400×10^6	2.044	11.702	15.291	0.481	29.520	1.547×10^5
2.00 TeV	2.000×10^6	2.074	17.057	22.252	0.695	42.080	1.716×10^5
3.00 TeV	3.000×10^6	2.108	25.989	33.817	1.062	62.978	1.910×10^5
4.00 TeV	4.000×10^6	2.133	35.034	45.504	1.435	84.107	2.046×10^5
8.00 TeV	8.000×10^6	2.194	71.471	92.473	2.978	169.118	2.375×10^5
10.0 TeV	1.000×10^7	2.213	89.820	116.080	3.770	211.886	2.481×10^5
14.0 TeV	1.400×10^7	2.244	126.417	163.186	5.394	297.243	2.639×10^5
20.0 TeV	2.000×10^7	2.277	181.610	234.142	7.880	425.911	2.807×10^5
30.0 TeV	3.000×10^7	2.315	273.582	352.181	12.174	640.254	2.997×10^5
40.0 TeV	4.000×10^7	2.342	365.880	470.490	16.568	855.282	3.132×10^5
80.0 TeV	8.000×10^7	2.410	735.040	944.060	34.893	1716.404	3.455×10^5
100. TeV	1.000×10^8	2.432	919.730	1181.060	44.350	2147.574	3.559×10^5