

**Table 313: Muons in Meitnerium**

Z	A [g/mol]	$\rho$ [g/cm <sup>3</sup> ]	I [eV]	a	$k = m_s$	$x_0$	$x_1$	$\bar{C}$	$\delta_0$
109 (Mt)	[276.151 (5)]	??	1115.0	0.27805	3.0000	0.6522	3.0000	6.6019	0.00
T	p [MeV/c]	Ionization	Brems	Pair prod [MeV cm <sup>2</sup> /g]	Photonucl	Total	CSDA range [g/cm <sup>2</sup> ]		
10.0 MeV	$4.704 \times 10^1$	3.519				3.519	$1.692 \times 10^0$		
14.0 MeV	$5.616 \times 10^1$	2.840				2.840	$2.968 \times 10^0$		
20.0 MeV	$6.802 \times 10^1$	2.284				2.284	$5.346 \times 10^0$		
30.0 MeV	$8.509 \times 10^1$	1.821				1.821	$1.031 \times 10^1$		
40.0 MeV	$1.003 \times 10^2$	1.580				1.580	$1.624 \times 10^1$		
80.0 MeV	$1.527 \times 10^2$	1.228				1.228	$4.578 \times 10^1$		
100. MeV	$1.764 \times 10^2$	1.166				1.166	$6.253 \times 10^1$		
140. MeV	$2.218 \times 10^2$	1.111				1.111	$9.782 \times 10^1$		
200. MeV	$2.868 \times 10^2$	1.090	0.000			1.090	$1.525 \times 10^2$		
207. MeV	$2.943 \times 10^2$	1.090	0.000			1.090	<i>Minimum ionization</i>		
300. MeV	$3.917 \times 10^2$	1.104	0.000		0.000	1.105	$2.438 \times 10^2$		
400. MeV	$4.945 \times 10^2$	1.132	0.000		0.000	1.133	$3.332 \times 10^2$		
800. MeV	$8.995 \times 10^2$	1.231	0.001		0.000	1.233	$6.706 \times 10^2$		
1.00 GeV	$1.101 \times 10^3$	1.268	0.002		0.000	1.270	$8.303 \times 10^2$		
1.40 GeV	$1.502 \times 10^3$	1.324	0.003		0.000	1.328	$1.138 \times 10^3$		
2.00 GeV	$2.103 \times 10^3$	1.383	0.005	0.000	0.001	1.390	$1.579 \times 10^3$		
3.00 GeV	$3.104 \times 10^3$	1.448	0.009	0.003	0.001	1.462	$2.279 \times 10^3$		
4.00 GeV	$4.104 \times 10^3$	1.492	0.014	0.007	0.001	1.515	$2.951 \times 10^3$		
8.00 GeV	$8.105 \times 10^3$	1.590	0.033	0.025	0.003	1.652	$5.469 \times 10^3$		
10.0 GeV	$1.011 \times 10^4$	1.618	0.044	0.037	0.004	1.704	$6.661 \times 10^3$		
14.0 GeV	$1.411 \times 10^4$	1.658	0.068	0.061	0.005	1.793	$8.948 \times 10^3$		
20.0 GeV	$2.011 \times 10^4$	1.698	0.106	0.102	0.007	1.913	$1.218 \times 10^4$		
30.0 GeV	$3.011 \times 10^4$	1.739	0.173	0.182	0.010	2.106	$1.716 \times 10^4$		
40.0 GeV	$4.011 \times 10^4$	1.766	0.245	0.270	0.014	2.296	$2.171 \times 10^4$		
80.0 GeV	$8.011 \times 10^4$	1.827	0.553	0.662	0.027	3.071	$3.673 \times 10^4$		
100. GeV	$1.001 \times 10^5$	1.846	0.717	0.874	0.034	3.472	$4.285 \times 10^4$		
112. GeV	$1.121 \times 10^5$	1.855	0.816	1.002	0.038	3.713	<i>Muon critical energy</i>		
140. GeV	$1.401 \times 10^5$	1.873	1.052	1.310	0.047	4.284	$5.321 \times 10^4$		
200. GeV	$2.001 \times 10^5$	1.902	1.576	2.002	0.067	5.549	$6.550 \times 10^4$		
300. GeV	$3.001 \times 10^5$	1.935	2.469	3.157	0.100	7.663	$8.078 \times 10^4$		
400. GeV	$4.001 \times 10^5$	1.958	3.392	4.355	0.133	9.840	$9.227 \times 10^4$		
800. GeV	$8.001 \times 10^5$	2.015	7.195	9.266	0.269	18.748	$1.212 \times 10^5$		
1.00 TeV	$1.000 \times 10^6$	2.033	9.147	11.779	0.338	23.300	$1.308 \times 10^5$		
1.40 TeV	$1.400 \times 10^6$	2.061	13.054	16.788	0.479	32.385	$1.453 \times 10^5$		
2.00 TeV	$2.000 \times 10^6$	2.091	19.025	24.433	0.693	46.244	$1.607 \times 10^5$		
3.00 TeV	$3.000 \times 10^6$	2.126	28.984	37.133	1.058	69.303	$1.783 \times 10^5$		
4.00 TeV	$4.000 \times 10^6$	2.151	39.068	49.968	1.430	92.618	$1.907 \times 10^5$		
8.00 TeV	$8.000 \times 10^6$	2.212	79.685	101.552	2.967	186.418	$2.206 \times 10^5$		
10.0 TeV	$1.000 \times 10^7$	2.232	100.137	127.478	3.756	233.606	$2.301 \times 10^5$		
14.0 TeV	$1.400 \times 10^7$	2.263	140.929	179.211	5.374	327.779	$2.445 \times 10^5$		
20.0 TeV	$2.000 \times 10^7$	2.296	202.444	257.138	7.852	469.732	$2.597 \times 10^5$		
30.0 TeV	$3.000 \times 10^7$	2.334	304.951	386.772	12.130	706.189	$2.770 \times 10^5$		
40.0 TeV	$4.000 \times 10^7$	2.362	407.817	516.703	16.506	943.390	$2.892 \times 10^5$		
80.0 TeV	$8.000 \times 10^7$	2.430	819.240	1036.796	34.759	1893.228	$3.185 \times 10^5$		
100. TeV	$1.000 \times 10^8$	2.452	1025.070	1297.080	44.180	2368.785	$3.279 \times 10^5$		