

## Muons in mendelevium (Md)

Z	A [g/mol]	$\rho$ [g/cm <sup>3</sup> ]	I [eV]	a	$k = m_s$	$x_0$	$x_1$	$\bar{C}$	$\delta_0$
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 [MeV cm <sup>2</sup> /g]	Photonucl	Total	CSDA range [g/cm <sup>2</sup> ]		
10.0 MeV	$4.704 \times 10^1$	3.594				3.595	$1.641 \times 10^0$		
14.0 MeV	$5.616 \times 10^1$	2.889				2.889	$2.893 \times 10^0$		
20.0 MeV	$6.802 \times 10^1$	2.316				2.316	$5.236 \times 10^0$		
30.0 MeV	$8.509 \times 10^1$	1.841				1.841	$1.014 \times 10^1$		
40.0 MeV	$1.003 \times 10^2$	1.596				1.596	$1.601 \times 10^1$		
80.0 MeV	$1.527 \times 10^2$	1.236				1.236	$4.532 \times 10^1$		
100. MeV	$1.764 \times 10^2$	1.174				1.174	$6.196 \times 10^1$		
140. MeV	$2.218 \times 10^2$	1.116				1.117	$9.705 \times 10^1$		
200. MeV	$2.868 \times 10^2$	1.095				1.095	$1.515 \times 10^2$		
213. MeV	$3.008 \times 10^2$	1.095	0.000			1.095	<i>Minimum ionization</i>		
300. MeV	$3.917 \times 10^2$	1.108	0.000		0.000	1.108	$2.424 \times 10^2$		
400. MeV	$4.945 \times 10^2$	1.135	0.000		0.000	1.135	$3.316 \times 10^2$		
800. MeV	$8.995 \times 10^2$	1.229	0.001		0.000	1.231	$6.690 \times 10^2$		
1.00 GeV	$1.101 \times 10^3$	1.264	0.002		0.000	1.267	$8.291 \times 10^2$		
1.40 GeV	$1.502 \times 10^3$	1.319	0.003		0.000	1.322	$1.138 \times 10^3$		
2.00 GeV	$2.103 \times 10^3$	1.376	0.005	0.001	0.001	1.383	$1.581 \times 10^3$		
3.00 GeV	$3.104 \times 10^3$	1.440	0.008	0.003	0.001	1.453	$2.285 \times 10^3$		
4.00 GeV	$4.104 \times 10^3$	1.483	0.012	0.006	0.001	1.503	$2.962 \times 10^3$		
8.00 GeV	$8.105 \times 10^3$	1.578	0.030	0.024	0.003	1.635	$5.503 \times 10^3$		
10.0 GeV	$1.011 \times 10^4$	1.605	0.040	0.034	0.004	1.684	$6.708 \times 10^3$		
14.0 GeV	$1.411 \times 10^4$	1.645	0.061	0.057	0.005	1.769	$9.024 \times 10^3$		
20.0 GeV	$2.011 \times 10^4$	1.684	0.095	0.094	0.007	1.881	$1.231 \times 10^4$		
30.0 GeV	$3.011 \times 10^4$	1.725	0.155	0.167	0.011	2.059	$1.739 \times 10^4$		
40.0 GeV	$4.011 \times 10^4$	1.752	0.219	0.248	0.014	2.234	$2.205 \times 10^4$		
80.0 GeV	$8.011 \times 10^4$	1.812	0.495	0.605	0.027	2.941	$3.761 \times 10^4$		
100. GeV	$1.001 \times 10^5$	1.831	0.642	0.798	0.034	3.306	$4.403 \times 10^4$		
121. GeV	$1.213 \times 10^5$	1.846	0.799	1.006	0.041	3.694	<i>Muon critical energy</i>		
140. GeV	$1.401 \times 10^5$	1.858	0.942	1.196	0.047	4.044	$5.495 \times 10^4$		
200. GeV	$2.001 \times 10^5$	1.887	1.411	1.826	0.067	5.193	$6.802 \times 10^4$		
300. GeV	$3.001 \times 10^5$	1.919	2.212	2.879	0.100	7.112	$8.442 \times 10^4$		
400. GeV	$4.001 \times 10^5$	1.942	3.039	3.970	0.134	9.086	$9.684 \times 10^4$		
800. GeV	$8.001 \times 10^5$	1.998	6.449	8.442	0.270	17.161	$1.284 \times 10^5$		
1.00 TeV	$1.000 \times 10^6$	2.016	8.198	10.730	0.340	21.286	$1.388 \times 10^5$		
1.40 TeV	$1.400 \times 10^6$	2.044	11.702	15.291	0.481	29.520	$1.547 \times 10^5$		
2.00 TeV	$2.000 \times 10^6$	2.074	17.057	22.252	0.695	42.080	$1.716 \times 10^5$		
3.00 TeV	$3.000 \times 10^6$	2.108	25.989	33.817	1.062	62.978	$1.910 \times 10^5$		
4.00 TeV	$4.000 \times 10^6$	2.133	35.034	45.504	1.435	84.107	$2.046 \times 10^5$		
8.00 TeV	$8.000 \times 10^6$	2.194	71.471	92.473	2.978	169.118	$2.375 \times 10^5$		
10.0 TeV	$1.000 \times 10^7$	2.213	89.820	116.080	3.770	211.886	$2.481 \times 10^5$		
14.0 TeV	$1.400 \times 10^7$	2.244	126.417	163.186	5.394	297.243	$2.639 \times 10^5$		
20.0 TeV	$2.000 \times 10^7$	2.277	181.610	234.142	7.880	425.911	$2.807 \times 10^5$		
30.0 TeV	$3.000 \times 10^7$	2.315	273.582	352.181	12.174	640.254	$2.997 \times 10^5$		
40.0 TeV	$4.000 \times 10^7$	2.342	365.880	470.490	16.568	855.282	$3.132 \times 10^5$		
80.0 TeV	$8.000 \times 10^7$	2.410	735.040	944.060	34.893	1716.404	$3.455 \times 10^5$		
100. TeV	$1.000 \times 10^8$	2.432	919.730	1181.060	44.350	2147.574	$3.559 \times 10^5$		