

**Table 311: Muons in Bohrium**

Z	A [g/mol]	$\rho$ [g/cm <sup>3</sup> ]	I [eV]	a	$k = m_s$	$x_0$	$x_1$	$\bar{C}$	$\delta_0$
107 (Bh)	[270.134 (4)]	??	1087.0	0.27391	3.0000	0.6345	3.0000	6.5475	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	$4.704 \times 10^1$	3.559				3.559	$1.669 \times 10^0$		
14.0 MeV	$5.616 \times 10^1$	2.869				2.869	$2.931 \times 10^0$		
20.0 MeV	$6.802 \times 10^1$	2.305				2.305	$5.287 \times 10^0$		
30.0 MeV	$8.509 \times 10^1$	1.836				1.836	$1.021 \times 10^1$		
40.0 MeV	$1.003 \times 10^2$	1.593				1.593	$1.609 \times 10^1$		
80.0 MeV	$1.527 \times 10^2$	1.237				1.237	$4.540 \times 10^1$		
100. MeV	$1.764 \times 10^2$	1.175				1.175	$6.203 \times 10^1$		
140. MeV	$2.218 \times 10^2$	1.118				1.119	$9.707 \times 10^1$		
200. MeV	$2.868 \times 10^2$	1.098	0.000			1.098	$1.514 \times 10^2$		
207. MeV	$2.943 \times 10^2$	1.097	0.000			1.098	<i>Minimum ionization</i>		
300. MeV	$3.917 \times 10^2$	1.112	0.000		0.000	1.112	$2.421 \times 10^2$		
400. MeV	$4.945 \times 10^2$	1.139	0.000		0.000	1.140	$3.309 \times 10^2$		
800. MeV	$8.995 \times 10^2$	1.238	0.001		0.000	1.240	$6.664 \times 10^2$		
1.00 GeV	$1.101 \times 10^3$	1.274	0.002		0.000	1.277	$8.253 \times 10^2$		
1.40 GeV	$1.502 \times 10^3$	1.330	0.003		0.000	1.334	$1.131 \times 10^3$		
2.00 GeV	$2.103 \times 10^3$	1.389	0.005	0.000	0.001	1.396	$1.571 \times 10^3$		
3.00 GeV	$3.104 \times 10^3$	1.454	0.009	0.003	0.001	1.468	$2.268 \times 10^3$		
4.00 GeV	$4.104 \times 10^3$	1.498	0.013	0.007	0.001	1.520	$2.937 \times 10^3$		
8.00 GeV	$8.105 \times 10^3$	1.595	0.033	0.025	0.003	1.657	$5.447 \times 10^3$		
10.0 GeV	$1.011 \times 10^4$	1.624	0.044	0.037	0.004	1.709	$6.635 \times 10^3$		
14.0 GeV	$1.411 \times 10^4$	1.664	0.067	0.061	0.005	1.798	$8.915 \times 10^3$		
20.0 GeV	$2.011 \times 10^4$	1.704	0.104	0.101	0.007	1.917	$1.214 \times 10^4$		
30.0 GeV	$3.011 \times 10^4$	1.745	0.171	0.181	0.010	2.108	$1.712 \times 10^4$		
40.0 GeV	$4.011 \times 10^4$	1.773	0.241	0.268	0.014	2.298	$2.166 \times 10^4$		
80.0 GeV	$8.011 \times 10^4$	1.834	0.546	0.656	0.027	3.065	$3.669 \times 10^4$		
100. GeV	$1.001 \times 10^5$	1.852	0.708	0.867	0.034	3.462	$4.283 \times 10^4$		
113. GeV	$1.135 \times 10^5$	1.863	0.817	1.008	0.038	3.727	<i>Muon critical energy</i>		
140. GeV	$1.401 \times 10^5$	1.880	1.038	1.299	0.047	4.266	$5.322 \times 10^4$		
200. GeV	$2.001 \times 10^5$	1.909	1.556	1.985	0.067	5.518	$6.557 \times 10^4$		
300. GeV	$3.001 \times 10^5$	1.942	2.438	3.129	0.100	7.611	$8.095 \times 10^4$		
400. GeV	$4.001 \times 10^5$	1.965	3.349	4.316	0.134	9.766	$9.252 \times 10^4$		
800. GeV	$8.001 \times 10^5$	2.022	7.105	9.182	0.270	18.581	$1.217 \times 10^5$		
1.00 TeV	$1.000 \times 10^6$	2.040	9.032	11.672	0.339	23.086	$1.314 \times 10^5$		
1.40 TeV	$1.400 \times 10^6$	2.068	12.891	16.635	0.480	32.076	$1.460 \times 10^5$		
2.00 TeV	$2.000 \times 10^6$	2.098	18.787	24.209	0.694	45.792	$1.616 \times 10^5$		
3.00 TeV	$3.000 \times 10^6$	2.133	28.623	36.793	1.061	68.612	$1.793 \times 10^5$		
4.00 TeV	$4.000 \times 10^6$	2.158	38.581	49.509	1.433	91.684	$1.919 \times 10^5$		
8.00 TeV	$8.000 \times 10^6$	2.220	78.696	100.619	2.974	184.510	$2.220 \times 10^5$		
10.0 TeV	$1.000 \times 10^7$	2.240	98.895	126.306	3.764	231.207	$2.317 \times 10^5$		
14.0 TeV	$1.400 \times 10^7$	2.271	139.183	177.563	5.385	324.404	$2.462 \times 10^5$		
20.0 TeV	$2.000 \times 10^7$	2.304	199.938	254.774	7.868	464.886	$2.616 \times 10^5$		
30.0 TeV	$3.000 \times 10^7$	2.342	301.179	383.215	12.155	698.894	$2.790 \times 10^5$		
40.0 TeV	$4.000 \times 10^7$	2.370	402.775	511.951	16.541	933.639	$2.914 \times 10^5$		
80.0 TeV	$8.000 \times 10^7$	2.438	809.119	1027.254	34.837	1873.651	$3.210 \times 10^5$		
100. TeV	$1.000 \times 10^8$	2.461	1012.410	1285.140	44.280	2344.293	$3.305 \times 10^5$		