

Muons in boron oxide (B₂O₃)

$\langle Z/A \rangle$	ρ [g/cm ³]	I [eV]	a	$k = m_s$	x_0	x_1	\bar{C}	δ_0
0.49839	1.812	99.6	0.11548	3.3832	0.1843	2.7379	3.6027	0.00
T	p [MeV/c]	Ionization	Brems	Pair prod [MeV cm ² /g]	Photonucl	Total	CSDA range [g/cm ²]	
10.0 MeV	4.704×10^1	6.889				6.889	8.045×10^{-1}	
14.0 MeV	5.616×10^1	5.381				5.381	1.468×10^0	
20.0 MeV	6.802×10^1	4.208				4.208	2.744×10^0	
30.0 MeV	8.509×10^1	3.269				3.269	5.477×10^0	
40.0 MeV	1.003×10^2	2.794				2.794	8.807×10^0	
80.0 MeV	1.527×10^2	2.102				2.103	2.583×10^1	
100. MeV	1.764×10^2	1.975				1.975	3.567×10^1	
140. MeV	2.218×10^2	1.843				1.843	5.674×10^1	
200. MeV	2.868×10^2	1.768				1.768	9.010×10^1	
300. MeV	3.917×10^2	1.742			0.000	1.742	1.472×10^2	
307. MeV	3.990×10^2	1.742			0.000	1.742	<i>Minimum ionization</i>	
400. MeV	4.945×10^2	1.750			0.000	1.750	2.045×10^2	
800. MeV	8.995×10^2	1.822	0.000		0.000	1.823	4.285×10^2	
1.00 GeV	1.101×10^3	1.854	0.000		0.000	1.855	5.373×10^2	
1.40 GeV	1.502×10^3	1.905	0.000		0.001	1.907	7.499×10^2	
2.00 GeV	2.103×10^3	1.962	0.001	0.000	0.001	1.964	1.060×10^3	
3.00 GeV	3.104×10^3	2.026	0.001	0.001	0.001	2.029	1.560×10^3	
4.00 GeV	4.104×10^3	2.070	0.001	0.001	0.002	2.075	2.047×10^3	
8.00 GeV	8.105×10^3	2.172	0.003	0.003	0.004	2.182	3.921×10^3	
10.0 GeV	1.011×10^4	2.202	0.005	0.005	0.005	2.216	4.830×10^3	
14.0 GeV	1.411×10^4	2.247	0.007	0.007	0.007	2.268	6.613×10^3	
20.0 GeV	2.011×10^4	2.291	0.011	0.012	0.009	2.324	9.226×10^3	
30.0 GeV	3.011×10^4	2.339	0.018	0.021	0.013	2.392	1.346×10^4	
40.0 GeV	4.011×10^4	2.372	0.025	0.032	0.017	2.446	1.760×10^4	
80.0 GeV	8.011×10^4	2.447	0.057	0.077	0.034	2.615	3.338×10^4	
100. GeV	1.001×10^5	2.471	0.074	0.101	0.042	2.688	4.093×10^4	
140. GeV	1.401×10^5	2.506	0.109	0.152	0.058	2.825	5.544×10^4	
200. GeV	2.001×10^5	2.542	0.164	0.232	0.083	3.021	7.597×10^4	
300. GeV	3.001×10^5	2.584	0.258	0.368	0.124	3.334	1.075×10^5	
400. GeV	4.001×10^5	2.613	0.356	0.510	0.166	3.645	1.361×10^5	
800. GeV	8.001×10^5	2.684	0.764	1.101	0.335	4.885	2.306×10^5	
968. GeV	9.678×10^5	2.704	0.940	1.357	0.407	5.409	<i>Muon critical energy</i>	
1.00 TeV	1.000×10^6	2.708	0.975	1.407	0.421	5.510	2.691×10^5	
1.40 TeV	1.400×10^6	2.743	1.399	2.015	0.596	6.753	3.346×10^5	
2.00 TeV	2.000×10^6	2.781	2.050	2.946	0.864	8.641	4.130×10^5	
3.00 TeV	3.000×10^6	2.824	3.142	4.496	1.323	11.786	5.117×10^5	
4.00 TeV	4.000×10^6	2.856	4.252	6.068	1.791	14.966	5.868×10^5	
8.00 TeV	8.000×10^6	2.933	8.744	12.398	3.737	27.812	7.799×10^5	
10.0 TeV	1.000×10^7	2.959	11.015	15.586	4.739	34.299	8.445×10^5	
14.0 TeV	1.400×10^7	2.997	15.546	21.938	6.804	47.286	9.434×10^5	
20.0 TeV	2.000×10^7	3.039	22.398	31.519	9.975	66.932	1.050×10^6	
30.0 TeV	3.000×10^7	3.088	33.807	47.461	15.478	99.834	1.171×10^6	
40.0 TeV	4.000×10^7	3.122	45.274	63.455	21.125	132.977	1.258×10^6	
80.0 TeV	8.000×10^7	3.208	91.252	127.483	44.814	266.757	1.466×10^6	
100. TeV	1.000×10^8	3.237	114.300	159.535	57.089	334.161	1.533×10^6	