Muons in boron carbide (B_4C)

$\langle Z/A \rangle$	ρ [g/cm^3]	I [eV]	a	$k = m_s$	x_0	x_1	$\overline{C}$	δ_0
0.47059	2.520	84.7	0.37087	2.8076	0.0093	2.1006	2.9859	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	6.646				6.646	8.325×10^{-1}
14.0 MeV	5.616×10^1	5.187				5.187	1.521×10^0
20.0 MeV	6.802×10^1	4.053				4.054	2.844×10^0
30.0 MeV	8.509×10^1	3.147				3.147	5.684×10^0
40.0 MeV	1.003×10^2	2.688				2.688	9.145×10^0
80.0 MeV	1.527×10^2	2.005				2.005	2.692×10^1
100. MeV	1.764×10^2	1.879				1.879	3.725×10^1
140. MeV	2.218×10^2	1.751				1.751	5.940×10^1
200. MeV	2.868×10^2	1.677				1.678	9.455×10^1
300. MeV	3.917×10^2	1.650			0.000	1.650	1.548×10^2
313. MeV	4.055×10^2	1.650			0.000	1.650	*Minimum ionization*
400. MeV	4.945×10^2	1.656			0.000	1.656	2.154×10^2
800. MeV	8.995×10^2	1.719	0.000		0.000	1.720	4.524×10^2
1.00 GeV	1.101×10^3	1.748	0.000		0.000	1.749	5.677×10^2
1.40 GeV	1.502×10^3	1.794	0.000		0.001	1.796	7.933×10^2
2.00 GeV	2.103×10^3	1.845	0.000	0.000	0.001	1.847	1.123×10^3
3.00 GeV	3.104×10^3	1.903	0.001	0.000	0.001	1.906	1.655×10^3
4.00 GeV	4.104×10^3	1.943	0.001	0.001	0.002	1.947	2.174×10^3
8.00 GeV	8.105×10^3	2.034	0.003	0.002	0.004	2.043	4.174×10^3
10.0 GeV	1.011×10^4	2.061	0.003	0.003	0.005	2.073	5.145×10^3
14.0 GeV	1.411×10^4	2.102	0.005	0.005	0.007	2.119	7.053×10^3
20.0 GeV	2.011×10^4	2.143	0.008	0.009	0.009	2.169	9.849×10^3
30.0 GeV	3.011×10^4	2.188	0.013	0.016	0.014	2.231	1.439×10^4
40.0 GeV	4.011×10^4	2.219	0.018	0.023	0.018	2.278	1.883×10^4
80.0 GeV	8.011×10^4	2.290	0.042	0.057	0.034	2.424	3.582×10^4
100. GeV	1.001×10^5	2.312	0.055	0.075	0.043	2.485	4.397×10^4
140. GeV	1.401×10^5	2.345	0.081	0.113	0.059	2.598	5.970×10^4
200. GeV	2.001×10^5	2.379	0.122	0.173	0.084	2.759	8.211×10^4
300. GeV	3.001×10^5	2.418	0.193	0.275	0.126	3.013	1.168×10^5
400. GeV	4.001×10^5	2.446	0.267	0.382	0.168	3.263	1.487×10^5
800. GeV	8.001×10^5	2.513	0.574	0.828	0.339	4.254	2.557×10^5
1.00 TeV	1.000×10^6	2.535	0.732	1.059	0.426	4.753	3.002×10^5
1.14 TeV	1.139×10^6	2.548	0.843	1.218	0.488	5.097	*Muon critical energy*
1.40 TeV	1.400×10^6	2.569	1.053	1.519	0.604	5.744	3.766×10^5
2.00 TeV	2.000×10^6	2.605	1.545	2.224	0.875	7.248	4.694×10^5
3.00 TeV	3.000×10^6	2.646	2.370	3.399	1.341	9.756	5.879×10^5
4.00 TeV	4.000×10^6	2.675	3.210	4.591	1.815	12.292	6.791×10^5
8.00 TeV	8.000×10^6	2.748	6.613	9.395	3.790	22.547	9.158×10^5
10.0 TeV	1.000×10^7	2.772	8.335	11.816	4.807	27.730	9.957×10^5
14.0 TeV	1.400×10^7	2.809	11.771	16.638	6.903	38.121	1.118×10^6
20.0 TeV	2.000×10^7	2.849	16.969	23.914	10.123	53.854	1.250×10^6
30.0 TeV	3.000×10^7	2.894	25.624	36.017	15.715	80.251	1.401×10^6
40.0 TeV	4.000×10^7	2.927	34.327	48.161	21.456	106.871	1.509×10^6
80.0 TeV	8.000×10^7	3.008	69.204	96.783	45.552	214.548	1.768×10^6
100. TeV	1.000×10^8	3.035	86.682	121.126	58.045	268.889	1.851×10^6