

## Muons in lithium tetraborate $\text{Li}_2\text{B}_4\text{O}_7$

	$\langle Z/A \rangle$	$\rho$ [g/cm <sup>3</sup> ]	$I$ [eV]	$a$	$k = m_s$	$x_0$	$x_1$	$\bar{C}$	$\delta_0$
	0.48487	2.440	94.6	0.11075	3.4389	0.0737	2.6502	3.2093	0.00
$T$	$p$ [MeV/c]	Ionization	Brems	Pair prod	Photonucl	Total	CSDA range [g/cm <sup>2</sup> ]		
10.0 MeV	$4.704 \times 10^1$	6.748				6.748		$8.208 \times 10^{-1}$	
14.0 MeV	$5.616 \times 10^1$	5.270				5.270		$1.499 \times 10^0$	
20.0 MeV	$6.802 \times 10^1$	4.120				4.120		$2.801 \times 10^0$	
30.0 MeV	$8.509 \times 10^1$	3.200				3.200		$5.593 \times 10^0$	
40.0 MeV	$1.003 \times 10^2$	2.735				2.735		$8.995 \times 10^0$	
80.0 MeV	$1.527 \times 10^2$	2.048				2.048		$2.642 \times 10^1$	
100. MeV	$1.764 \times 10^2$	1.920				1.920		$3.653 \times 10^1$	
140. MeV	$2.218 \times 10^2$	1.790				1.790		$5.821 \times 10^1$	
200. MeV	$2.868 \times 10^2$	1.716				1.716		$9.258 \times 10^1$	
300. MeV	$3.917 \times 10^2$	1.688			0.000	1.688		$1.515 \times 10^2$	
314. MeV	$4.065 \times 10^2$	1.688			0.000	1.688			<i>Minimum ionization</i>
400. MeV	$4.945 \times 10^2$	1.695			0.000	1.695		$2.107 \times 10^2$	
800. MeV	$8.995 \times 10^2$	1.761	0.000		0.000	1.762		$4.422 \times 10^2$	
1.00 GeV	$1.101 \times 10^3$	1.791	0.000		0.000	1.792		$5.547 \times 10^2$	
1.40 GeV	$1.502 \times 10^3$	1.840	0.000		0.001	1.841		$7.748 \times 10^2$	
2.00 GeV	$2.103 \times 10^3$	1.893	0.001	0.000	0.001	1.895		$1.096 \times 10^3$	
3.00 GeV	$3.104 \times 10^3$	1.954	0.001	0.001	0.001	1.957		$1.614 \times 10^3$	
4.00 GeV	$4.104 \times 10^3$	1.996	0.001	0.001	0.002	2.001		$2.120 \times 10^3$	
8.00 GeV	$8.105 \times 10^3$	2.093	0.003	0.003	0.004	2.103		$4.064 \times 10^3$	
10.0 GeV	$1.011 \times 10^4$	2.122	0.004	0.004	0.005	2.136		$5.007 \times 10^3$	
14.0 GeV	$1.411 \times 10^4$	2.165	0.007	0.007	0.007	2.185		$6.857 \times 10^3$	
20.0 GeV	$2.011 \times 10^4$	2.208	0.010	0.012	0.009	2.239		$9.568 \times 10^3$	
30.0 GeV	$3.011 \times 10^4$	2.255	0.017	0.021	0.013	2.306		$1.396 \times 10^4$	
40.0 GeV	$4.011 \times 10^4$	2.286	0.024	0.030	0.018	2.359		$1.825 \times 10^4$	
80.0 GeV	$8.011 \times 10^4$	2.359	0.055	0.074	0.034	2.523		$3.462 \times 10^4$	
100. GeV	$1.001 \times 10^5$	2.382	0.071	0.098	0.042	2.593		$4.244 \times 10^4$	
140. GeV	$1.401 \times 10^5$	2.416	0.105	0.146	0.059	2.727		$5.748 \times 10^4$	
200. GeV	$2.001 \times 10^5$	2.452	0.158	0.224	0.083	2.917		$7.874 \times 10^4$	
300. GeV	$3.001 \times 10^5$	2.492	0.250	0.356	0.125	3.222		$1.113 \times 10^5$	
400. GeV	$4.001 \times 10^5$	2.521	0.344	0.493	0.166	3.525		$1.410 \times 10^5$	
800. GeV	$8.001 \times 10^5$	2.590	0.739	1.066	0.335	4.730		$2.386 \times 10^5$	
960. GeV	$9.603 \times 10^5$	2.608	0.902	1.302	0.404	5.217			<i>Muon critical energy</i>
1.00 TeV	$1.000 \times 10^6$	2.613	0.943	1.361	0.421	5.339		$2.784 \times 10^5$	
1.40 TeV	$1.400 \times 10^6$	2.647	1.353	1.950	0.598	6.548		$3.459 \times 10^5$	
2.00 TeV	$2.000 \times 10^6$	2.684	1.984	2.851	0.866	8.385		$4.267 \times 10^5$	
3.00 TeV	$3.000 \times 10^6$	2.726	3.040	4.352	1.326	11.445		$5.284 \times 10^5$	
4.00 TeV	$4.000 \times 10^6$	2.757	4.115	5.874	1.795	14.541		$6.058 \times 10^5$	
8.00 TeV	$8.000 \times 10^6$	2.832	8.464	12.004	3.746	27.047		$8.044 \times 10^5$	
10.0 TeV	$1.000 \times 10^7$	2.857	10.663	15.092	4.751	33.363		$8.708 \times 10^5$	
14.0 TeV	$1.400 \times 10^7$	2.895	15.050	21.243	6.821	46.010		$9.725 \times 10^5$	
20.0 TeV	$2.000 \times 10^7$	2.935	21.685	30.522	10.001	65.145		$1.082 \times 10^6$	
30.0 TeV	$3.000 \times 10^7$	2.982	32.732	45.961	15.520	97.197		$1.206 \times 10^6$	
40.0 TeV	$4.000 \times 10^7$	3.016	43.836	61.450	21.184	129.487		$1.295 \times 10^6$	
80.0 TeV	$8.000 \times 10^7$	3.100	88.359	123.458	44.947	259.863		$1.509 \times 10^6$	
100. TeV	$1.000 \times 10^8$	3.127	110.678	154.499	57.261	325.566		$1.578 \times 10^6$	