

Muons in lithium carbonate ($\text{Li}_2\text{C-O}_3$)

	$\langle Z/A \rangle$	ρ [g/cm ³]	I [eV]	a	$k = m_s$	x_0	x_1	\bar{C}	δ_0
	0.49720	2.110	87.9	0.09936	3.5417	0.0551	2.6598	3.2029	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	6.988				6.988	7.921×10^{-1}		
14.0 MeV	5.616×10^1	5.455				5.455	1.447×10^0		
20.0 MeV	6.802×10^1	4.263				4.263	2.705×10^0		
30.0 MeV	8.509×10^1	3.310				3.310	5.404×10^0		
40.0 MeV	1.003×10^2	2.828				2.828	8.694×10^0		
80.0 MeV	1.527×10^2	2.116				2.116	2.555×10^1		
100. MeV	1.764×10^2	1.984				1.984	3.534×10^1		
140. MeV	2.218×10^2	1.850				1.850	5.631×10^1		
200. MeV	2.868×10^2	1.773				1.773	8.957×10^1		
300. MeV	3.917×10^2	1.745			0.000	1.745	1.466×10^2		
313. MeV	4.055×10^2	1.744			0.000	1.745	<i>Minimum ionization</i>		
400. MeV	4.945×10^2	1.751			0.000	1.751	2.038×10^2		
800. MeV	8.995×10^2	1.819	0.000		0.000	1.819	4.280×10^2		
1.00 GeV	1.101×10^3	1.849	0.000		0.000	1.850	5.370×10^2		
1.40 GeV	1.502×10^3	1.899	0.000		0.001	1.900	7.502×10^2		
2.00 GeV	2.103×10^3	1.953	0.001	0.000	0.001	1.955	1.061×10^3		
3.00 GeV	3.104×10^3	2.015	0.001	0.001	0.001	2.018	1.564×10^3		
4.00 GeV	4.104×10^3	2.058	0.001	0.001	0.002	2.063	2.054×10^3		
8.00 GeV	8.105×10^3	2.157	0.003	0.003	0.004	2.167	3.940×10^3		
10.0 GeV	1.011×10^4	2.187	0.004	0.004	0.005	2.201	4.855×10^3		
14.0 GeV	1.411×10^4	2.231	0.007	0.007	0.007	2.251	6.651×10^3		
20.0 GeV	2.011×10^4	2.275	0.010	0.012	0.009	2.306	9.283×10^3		
30.0 GeV	3.011×10^4	2.323	0.017	0.021	0.013	2.374	1.355×10^4		
40.0 GeV	4.011×10^4	2.355	0.024	0.030	0.018	2.427	1.772×10^4		
80.0 GeV	8.011×10^4	2.430	0.055	0.074	0.034	2.593	3.363×10^4		
100. GeV	1.001×10^5	2.454	0.071	0.097	0.042	2.664	4.124×10^4		
140. GeV	1.401×10^5	2.488	0.105	0.146	0.059	2.798	5.589×10^4		
200. GeV	2.001×10^5	2.525	0.158	0.223	0.083	2.989	7.663×10^4		
300. GeV	3.001×10^5	2.566	0.249	0.355	0.125	3.294	1.085×10^5		
400. GeV	4.001×10^5	2.595	0.343	0.491	0.166	3.596	1.375×10^5		
800. GeV	8.001×10^5	2.667	0.736	1.061	0.336	4.801	2.335×10^5		
990. GeV	9.902×10^5	2.689	0.929	1.341	0.418	5.378	<i>Muon critical energy</i>		
1.00 TeV	1.000×10^6	2.690	0.939	1.356	0.422	5.408	2.727×10^5		
1.40 TeV	1.400×10^6	2.725	1.348	1.942	0.599	6.615	3.395×10^5		
2.00 TeV	2.000×10^6	2.763	1.977	2.841	0.867	8.447	4.196×10^5		
3.00 TeV	3.000×10^6	2.806	3.030	4.336	1.329	11.501	5.206×10^5		
4.00 TeV	4.000×10^6	2.838	4.100	5.853	1.798	14.589	5.977×10^5		
8.00 TeV	8.000×10^6	2.915	8.435	11.961	3.753	27.064	7.959×10^5		
10.0 TeV	1.000×10^7	2.940	10.626	15.038	4.760	33.365	8.623×10^5		
14.0 TeV	1.400×10^7	2.979	14.999	21.168	6.834	45.980	9.640×10^5		
20.0 TeV	2.000×10^7	3.021	21.612	30.415	10.020	65.068	1.073×10^6		
30.0 TeV	3.000×10^7	3.069	32.621	45.800	15.551	97.041	1.198×10^6		
40.0 TeV	4.000×10^7	3.103	43.688	61.235	21.227	129.254	1.287×10^6		
80.0 TeV	8.000×10^7	3.189	88.060	123.027	45.043	259.320	1.502×10^6		
100. TeV	1.000×10^8	3.217	110.304	153.960	57.386	324.868	1.570×10^6		