

Muons in magnesium oxide MgO

	$\langle Z/A \rangle$	ρ [g/cm ³]	I [eV]	a	$k = m_s$	x_0	x_1	\bar{C}	δ_0	
	0.49622	3.580	143.8	0.08313	3.5968	0.0575	2.8580	3.6404	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	6.521				6.521		8.532×10^{-1}		
14.0 MeV	5.616×10^1	5.104				5.104		1.554×10^0		
20.0 MeV	6.802×10^1	3.999				3.999		2.897×10^0		
30.0 MeV	8.509×10^1	3.113				3.113		5.770×10^0		
40.0 MeV	1.003×10^2	2.664				2.664		9.265×10^0		
80.0 MeV	1.527×10^2	2.005				2.005		2.711×10^1		
100. MeV	1.764×10^2	1.884				1.884		3.742×10^1		
140. MeV	2.218×10^2	1.762				1.762		5.948×10^1		
200. MeV	2.868×10^2	1.695				1.695		9.432×10^1		
294. MeV	3.854×10^2	1.674			0.000	1.674		<i>Minimum ionization</i>		
300. MeV	3.917×10^2	1.674			0.000	1.674		1.539×10^2		
400. MeV	4.945×10^2	1.684			0.000	1.684		2.135×10^2		
800. MeV	8.995×10^2	1.758	0.000		0.000	1.759		4.459×10^2		
1.00 GeV	1.101×10^3	1.790	0.000		0.000	1.791		5.585×10^2		
1.40 GeV	1.502×10^3	1.842	0.000	0.000	0.001	1.844		7.784×10^2		
2.00 GeV	2.103×10^3	1.899	0.001	0.000	0.001	1.901		1.099×10^3		
3.00 GeV	3.104×10^3	1.963	0.001	0.001	0.001	1.967		1.615×10^3		
4.00 GeV	4.104×10^3	2.007	0.002	0.002	0.002	2.013		2.117×10^3		
8.00 GeV	8.105×10^3	2.108	0.005	0.005	0.004	2.122		4.047×10^3		
10.0 GeV	1.011×10^4	2.139	0.006	0.007	0.005	2.157		4.981×10^3		
14.0 GeV	1.411×10^4	2.183	0.010	0.011	0.006	2.210		6.812×10^3		
20.0 GeV	2.011×10^4	2.228	0.015	0.018	0.009	2.270		9.489×10^3		
30.0 GeV	3.011×10^4	2.276	0.025	0.031	0.013	2.345		1.382×10^4		
40.0 GeV	4.011×10^4	2.309	0.035	0.045	0.017	2.406		1.803×10^4		
80.0 GeV	8.011×10^4	2.384	0.080	0.108	0.033	2.606		3.397×10^4		
100. GeV	1.001×10^5	2.407	0.104	0.143	0.041	2.695		4.152×10^4		
140. GeV	1.401×10^5	2.442	0.153	0.214	0.057	2.866		5.591×10^4		
200. GeV	2.001×10^5	2.478	0.230	0.327	0.081	3.117		7.597×10^4		
300. GeV	3.001×10^5	2.519	0.362	0.517	0.122	3.521		1.061×10^5		
400. GeV	4.001×10^5	2.549	0.499	0.716	0.162	3.926		1.330×10^5		
718. GeV	7.176×10^5	2.608	0.949	1.367	0.293	5.217		<i>Muon critical energy</i>		
800. GeV	8.001×10^5	2.620	1.068	1.539	0.328	5.555		2.183×10^5		
1.00 TeV	1.000×10^6	2.643	1.361	1.964	0.412	6.380		2.518×10^5		
1.40 TeV	1.400×10^6	2.678	1.951	2.808	0.584	8.021		3.076×10^5		
2.00 TeV	2.000×10^6	2.716	2.856	4.100	0.845	10.517		3.728×10^5		
3.00 TeV	3.000×10^6	2.759	4.371	6.250	1.295	14.675		4.529×10^5		
4.00 TeV	4.000×10^6	2.790	5.910	8.427	1.752	18.880		5.129×10^5		
8.00 TeV	8.000×10^6	2.867	12.134	17.192	3.653	35.847		6.641×10^5		
10.0 TeV	1.000×10^7	2.893	15.278	21.604	4.632	44.406		7.141×10^5		
14.0 TeV	1.400×10^7	2.931	21.553	30.397	6.646	61.528		7.903×10^5		
20.0 TeV	2.000×10^7	2.973	31.040	43.654	9.739	87.407		8.717×10^5		
30.0 TeV	3.000×10^7	3.021	46.820	65.720	15.102	130.663		9.647×10^5		
40.0 TeV	4.000×10^7	3.056	62.672	87.853	20.603	174.183		1.031×10^6		
80.0 TeV	8.000×10^7	3.141	126.243	176.451	43.656	349.491		1.190×10^6		
100. TeV	1.000×10^8	3.169	158.110	220.798	55.595	437.672		1.241×10^6		