

Muons in lead fluoride (PbF₂)

	$\langle Z/A \rangle$	ρ [g/cm ³]	I [eV]	a	$k = m_s$	x_0	x_1	\bar{C}	δ_0
	0.40784	7.770	635.4	0.23890	3.0000	0.4668	3.0000	6.0333	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	4.234				4.235		1.343×10^0	
14.0 MeV	5.616×10^1	3.350				3.350		2.416×10^0	
20.0 MeV	6.802×10^1	2.652				2.652		4.450×10^0	
30.0 MeV	8.509×10^1	2.085				2.085		8.759×10^0	
40.0 MeV	1.003×10^2	1.797				1.797		1.396×10^1	
80.0 MeV	1.527×10^2	1.377				1.377		4.015×10^1	
100. MeV	1.764×10^2	1.304				1.304		5.511×10^1	
140. MeV	2.218×10^2	1.236				1.236		8.675×10^1	
200. MeV	2.868×10^2	1.208				1.208		1.360×10^2	
223. MeV	3.114×10^2	1.206				1.207			<i>Minimum ionization</i>
300. MeV	3.917×10^2	1.216	0.000		0.000	1.216		2.187×10^2	
400. MeV	4.945×10^2	1.239	0.000		0.000	1.240		3.002×10^2	
800. MeV	8.995×10^2	1.330	0.001		0.000	1.331		6.109×10^2	
1.00 GeV	1.101×10^3	1.365	0.001		0.000	1.366		7.592×10^2	
1.40 GeV	1.502×10^3	1.419	0.002		0.001	1.421		1.046×10^3	
2.00 GeV	2.103×10^3	1.476	0.003	0.001	0.001	1.482		1.459×10^3	
3.00 GeV	3.104×10^3	1.540	0.006	0.003	0.001	1.551		2.117×10^3	
4.00 GeV	4.104×10^3	1.584	0.009	0.006	0.002	1.600		2.752×10^3	
8.00 GeV	8.105×10^3	1.681	0.022	0.019	0.003	1.725		5.150×10^3	
10.0 GeV	1.011×10^4	1.709	0.029	0.027	0.004	1.770		6.294×10^3	
14.0 GeV	1.411×10^4	1.750	0.044	0.044	0.005	1.845		8.506×10^3	
20.0 GeV	2.011×10^4	1.790	0.069	0.073	0.008	1.940		1.168×10^4	
30.0 GeV	3.011×10^4	1.832	0.113	0.129	0.011	2.086		1.664×10^4	
40.0 GeV	4.011×10^4	1.860	0.159	0.190	0.015	2.225		2.128×10^4	
80.0 GeV	8.011×10^4	1.923	0.360	0.460	0.029	2.772		3.736×10^4	
100. GeV	1.001×10^5	1.942	0.466	0.605	0.035	3.051		4.423×10^4	
140. GeV	1.401×10^5	1.971	0.685	0.905	0.049	3.611		5.627×10^4	
165. GeV	1.652×10^5	1.984	0.826	1.101	0.058	3.970			<i>Muon critical energy</i>
200. GeV	2.001×10^5	2.001	1.026	1.380	0.070	4.478		7.117×10^4	
300. GeV	3.001×10^5	2.034	1.609	2.174	0.105	5.923		9.054×10^4	
400. GeV	4.001×10^5	2.058	2.211	2.996	0.141	7.407		1.056×10^5	
800. GeV	8.001×10^5	2.117	4.695	6.368	0.284	13.465		1.451×10^5	
1.00 TeV	1.000×10^6	2.136	5.970	8.093	0.357	16.557		1.585×10^5	
1.40 TeV	1.400×10^6	2.165	8.525	11.533	0.506	22.730		1.790×10^5	
2.00 TeV	2.000×10^6	2.196	12.432	16.782	0.731	32.142		2.011×10^5	
3.00 TeV	3.000×10^6	2.231	18.951	25.504	1.118	47.805		2.265×10^5	
4.00 TeV	4.000×10^6	2.257	25.555	34.318	1.511	63.642		2.445×10^5	
8.00 TeV	8.000×10^6	2.320	52.167	69.746	3.139	127.374		2.881×10^5	
10.0 TeV	1.000×10^7	2.341	65.573	87.553	3.975	159.444		3.021×10^5	
14.0 TeV	1.400×10^7	2.373	92.310	123.084	5.691	223.460		3.232×10^5	
20.0 TeV	2.000×10^7	2.407	132.642	176.605	8.322	319.978		3.455×10^5	
30.0 TeV	3.000×10^7	2.447	199.787	265.651	12.866	480.752		3.708×10^5	
40.0 TeV	4.000×10^7	2.475	267.162	354.904	17.518	642.060		3.888×10^5	
80.0 TeV	8.000×10^7	2.546	537.024	712.167	36.946	1288.684		4.319×10^5	
100. TeV	1.000×10^8	2.569	672.164	890.961	46.983	1612.679		4.457×10^5	