

Muons in carbon tetrafluoride (CF₄)

$\langle Z/A \rangle$	ρ [g/cm ³]	I [eV]	a	$k = m_s$	x_0	x_1	\bar{C}	δ_0
0.47721	3.780×10^{-3}	115.0	0.18551	3.0000	1.7000	4.0000	10.0858	0.00
T	p [MeV/c]	Ionization	Brems	Pair prod	Photonucl	Total	CSDA range [g/cm ²]	
10.0 MeV	4.704×10^1	6.469				6.469	8.580×10^{-1}	
14.0 MeV	5.616×10^1	5.057				5.057	1.565×10^0	
20.0 MeV	6.802×10^1	3.958				3.958	2.921×10^0	
30.0 MeV	8.509×10^1	3.077				3.077	5.827×10^0	
40.0 MeV	1.003×10^2	2.631				2.631	9.364×10^0	
80.0 MeV	1.527×10^2	1.982				1.982	2.743×10^1	
100. MeV	1.764×10^2	1.866				1.866	3.786×10^1	
140. MeV	2.218×10^2	1.753				1.753	6.007×10^1	
200. MeV	2.868×10^2	1.697				1.698	9.498×10^1	
252. MeV	3.421×10^2	1.688			0.000	1.689	<i>Minimum ionization</i>	
300. MeV	3.917×10^2	1.693			0.000	1.693	1.541×10^2	
400. MeV	4.945×10^2	1.718			0.000	1.718	2.128×10^2	
800. MeV	8.995×10^2	1.837	0.000		0.000	1.838	4.377×10^2	
1.00 GeV	1.101×10^3	1.887	0.000		0.000	1.888	5.450×10^2	
1.40 GeV	1.502×10^3	1.969	0.000	0.000	0.001	1.970	7.522×10^2	
2.00 GeV	2.103×10^3	2.061	0.001	0.000	0.001	2.063	1.049×10^3	
3.00 GeV	3.104×10^3	2.169	0.001	0.001	0.001	2.173	1.521×10^3	
4.00 GeV	4.104×10^3	2.247	0.002	0.001	0.002	2.252	1.973×10^3	
8.00 GeV	8.105×10^3	2.410	0.004	0.004	0.004	2.421	3.675×10^3	
10.0 GeV	1.011×10^4	2.454	0.005	0.005	0.005	2.469	4.492×10^3	
14.0 GeV	1.411×10^4	2.517	0.008	0.009	0.006	2.540	6.088×10^3	
20.0 GeV	2.011×10^4	2.579	0.012	0.014	0.009	2.615	8.414×10^3	
30.0 GeV	3.011×10^4	2.644	0.020	0.025	0.013	2.702	1.217×10^4	
40.0 GeV	4.011×10^4	2.686	0.029	0.036	0.017	2.769	1.583×10^4	
80.0 GeV	8.011×10^4	2.778	0.065	0.088	0.033	2.965	2.976×10^4	
100. GeV	1.001×10^5	2.805	0.084	0.116	0.041	3.047	3.641×10^4	
140. GeV	1.401×10^5	2.844	0.124	0.174	0.058	3.200	4.921×10^4	
200. GeV	2.001×10^5	2.883	0.187	0.266	0.082	3.418	6.735×10^4	
300. GeV	3.001×10^5	2.926	0.295	0.421	0.123	3.765	9.521×10^4	
400. GeV	4.001×10^5	2.955	0.407	0.583	0.163	4.109	1.206×10^5	
800. GeV	8.001×10^5	3.024	0.871	1.257	0.330	5.483	2.046×10^5	
974. GeV	9.744×10^5	3.044	1.080	1.560	0.404	6.088	<i>Muon critical energy</i>	
1.00 TeV	1.000×10^6	3.046	1.111	1.605	0.415	6.178	2.390×10^5	
1.40 TeV	1.400×10^6	3.080	1.593	2.296	0.589	7.559	2.974×10^5	
2.00 TeV	2.000×10^6	3.117	2.334	3.355	0.853	9.658	3.675×10^5	
3.00 TeV	3.000×10^6	3.158	3.574	5.117	1.306	13.156	4.559×10^5	
4.00 TeV	4.000×10^6	3.188	4.835	6.903	1.767	16.694	5.232×10^5	
8.00 TeV	8.000×10^6	3.263	9.935	14.094	3.686	30.977	6.964×10^5	
10.0 TeV	1.000×10^7	3.287	12.512	17.714	4.674	38.187	7.544×10^5	
14.0 TeV	1.400×10^7	3.324	17.653	24.930	6.707	52.615	8.433×10^5	
20.0 TeV	2.000×10^7	3.364	25.426	35.809	9.831	74.431	9.387×10^5	
30.0 TeV	3.000×10^7	3.410	38.368	53.915	15.249	110.942	1.048×10^6	
40.0 TeV	4.000×10^7	3.444	51.373	72.076	20.808	147.701	1.126×10^6	
80.0 TeV	8.000×10^7	3.526	103.515	144.786	44.113	295.940	1.314×10^6	
100. TeV	1.000×10^8	3.553	129.652	181.183	56.186	370.574	1.374×10^6	