

Table 135: Muons in Carbon tetrachloride CCl₄

$\langle Z/A \rangle$	ρ [g/cm ³]	I [eV]	a	$k = m_s$	x_0	x_1	\bar{C}	δ_0
0.49107	1.594	166.3	0.19018	3.0116	0.1773	2.9165	4.7712	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	6.320				6.320	8.817×10^{-1}	
14.0 MeV	5.616×10^1	4.951				4.951	1.604×10^0	
20.0 MeV	6.802×10^1	3.883				3.883	2.988×10^0	
30.0 MeV	8.509×10^1	3.025				3.025	5.946×10^0	
40.0 MeV	1.003×10^2	2.590				2.590	9.542×10^0	
80.0 MeV	1.527×10^2	1.957				1.957	2.786×10^1	
100. MeV	1.764×10^2	1.843				1.843	3.842×10^1	
140. MeV	2.218×10^2	1.729				1.730	6.092×10^1	
200. MeV	2.868×10^2	1.669				1.669	9.636×10^1	
277. MeV	3.673×10^2	1.654			0.000	1.655	<i>Minimum ionization</i>	
300. MeV	3.917×10^2	1.655			0.000	1.656	1.567×10^2	
400. MeV	4.945×10^2	1.671	0.000		0.000	1.671	2.168×10^2	
800. MeV	8.995×10^2	1.757	0.000		0.000	1.757	4.501×10^2	
1.00 GeV	1.101×10^3	1.793	0.000		0.000	1.794	5.627×10^2	
1.40 GeV	1.502×10^3	1.850	0.001	0.000	0.001	1.852	7.820×10^2	
2.00 GeV	2.103×10^3	1.913	0.001	0.001	0.001	1.915	1.100×10^3	
3.00 GeV	3.104×10^3	1.983	0.002	0.001	0.001	1.988	1.612×10^3	
4.00 GeV	4.104×10^3	2.031	0.003	0.002	0.002	2.038	2.109×10^3	
8.00 GeV	8.105×10^3	2.140	0.007	0.007	0.004	2.158	4.010×10^3	
10.0 GeV	1.011×10^4	2.172	0.009	0.010	0.004	2.196	4.928×10^3	
14.0 GeV	1.411×10^4	2.219	0.014	0.016	0.006	2.255	6.724×10^3	
20.0 GeV	2.011×10^4	2.265	0.022	0.025	0.009	2.322	9.345×10^3	
30.0 GeV	3.011×10^4	2.315	0.036	0.044	0.013	2.408	1.357×10^4	
40.0 GeV	4.011×10^4	2.348	0.051	0.065	0.017	2.480	1.766×10^4	
80.0 GeV	8.011×10^4	2.422	0.115	0.156	0.032	2.725	3.302×10^4	
100. GeV	1.001×10^5	2.445	0.148	0.205	0.040	2.839	4.021×10^4	
140. GeV	1.401×10^5	2.480	0.218	0.307	0.056	3.061	5.378×10^4	
200. GeV	2.001×10^5	2.516	0.327	0.468	0.079	3.391	7.240×10^4	
300. GeV	3.001×10^5	2.557	0.515	0.740	0.118	3.930	9.977×10^4	
400. GeV	4.001×10^5	2.585	0.709	1.022	0.158	4.474	1.236×10^5	
538. GeV	5.381×10^5	2.615	0.983	1.420	0.212	5.231	<i>Muon critical energy</i>	
800. GeV	8.001×10^5	2.656	1.513	2.183	0.319	6.671	1.964×10^5	
1.00 TeV	1.000×10^6	2.679	1.927	2.780	0.400	7.786	2.241×10^5	
1.40 TeV	1.400×10^6	2.713	2.759	3.970	0.568	10.010	2.693×10^5	
2.00 TeV	2.000×10^6	2.751	4.034	5.790	0.821	13.397	3.209×10^5	
3.00 TeV	3.000×10^6	2.794	6.166	8.816	1.257	19.034	3.833×10^5	
4.00 TeV	4.000×10^6	2.825	8.331	11.879	1.701	24.736	4.292×10^5	
8.00 TeV	8.000×10^6	2.901	17.076	24.201	3.543	47.722	5.436×10^5	
10.0 TeV	1.000×10^7	2.926	21.491	30.400	4.491	59.308	5.811×10^5	
14.0 TeV	1.400×10^7	2.964	30.303	42.759	6.440	82.467	6.381×10^5	
20.0 TeV	2.000×10^7	3.005	43.618	61.386	9.431	117.440	6.987×10^5	
30.0 TeV	3.000×10^7	3.053	65.758	92.394	14.612	175.818	7.679×10^5	
40.0 TeV	4.000×10^7	3.087	87.991	123.491	19.923	234.492	8.170×10^5	
80.0 TeV	8.000×10^7	3.172	177.123	247.966	42.154	470.416	9.350×10^5	
100. TeV	1.000×10^8	3.200	221.794	310.268	53.656	588.918	9.730×10^5	