

Table 213: Muons in Paraffin ($\text{CH}_3(\text{CH}_2)_{n \approx 23}\text{CH}_3$)

	$\langle Z/A \rangle$	ρ [g/cm ³]	I [eV]	a	$k = m_s$	x_0	x_1	\bar{C}	δ_0
	0.57275	0.930	55.9	0.12087	3.4288	0.1289	2.5084	2.9551	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	8.531				8.531	6.462×10^{-1}		
14.0 MeV	5.616×10^1	6.645				6.645	1.183×10^0		
20.0 MeV	6.802×10^1	5.183				5.183	2.217×10^0		
30.0 MeV	8.509×10^1	4.015				4.015	4.440×10^0		
40.0 MeV	1.003×10^2	3.426				3.426	7.154×10^0		
80.0 MeV	1.527×10^2	2.561				2.561	2.108×10^1		
100. MeV	1.764×10^2	2.397				2.397	2.917×10^1		
140. MeV	2.218×10^2	2.228				2.228	4.657×10^1		
200. MeV	2.868×10^2	2.130				2.130	7.422×10^1		
300. MeV	3.917×10^2	2.089			0.000	2.089	1.218×10^2		
328. MeV	4.211×10^2	2.088			0.000	2.088	<i>Minimum ionization</i>		
400. MeV	4.945×10^2	2.092			0.000	2.093	1.696×10^2		
800. MeV	8.995×10^2	2.164	0.000		0.000	2.164	3.577×10^2		
1.00 GeV	1.101×10^3	2.198	0.000		0.000	2.198	4.494×10^2		
1.40 GeV	1.502×10^3	2.253	0.000		0.001	2.254	6.290×10^2		
2.00 GeV	2.103×10^3	2.314	0.000	0.000	0.001	2.315	8.914×10^2		
3.00 GeV	3.104×10^3	2.384	0.001	0.000	0.001	2.386	1.316×10^3		
4.00 GeV	4.104×10^3	2.432	0.001	0.001	0.002	2.436	1.731×10^3		
8.00 GeV	8.105×10^3	2.544	0.003	0.003	0.004	2.554	3.330×10^3		
10.0 GeV	1.011×10^4	2.578	0.004	0.004	0.005	2.591	4.107×10^3		
14.0 GeV	1.411×10^4	2.628	0.006	0.006	0.007	2.647	5.634×10^3		
20.0 GeV	2.011×10^4	2.678	0.009	0.010	0.009	2.707	7.874×10^3		
30.0 GeV	3.011×10^4	2.733	0.015	0.018	0.014	2.779	1.152×10^4		
40.0 GeV	4.011×10^4	2.771	0.021	0.026	0.018	2.836	1.508×10^4		
80.0 GeV	8.011×10^4	2.857	0.047	0.063	0.035	3.003	2.876×10^4		
100. GeV	1.001×10^5	2.884	0.061	0.083	0.043	3.072	3.535×10^4		
140. GeV	1.401×10^5	2.924	0.090	0.126	0.060	3.200	4.810×10^4		
200. GeV	2.001×10^5	2.966	0.136	0.193	0.085	3.380	6.633×10^4		
300. GeV	3.001×10^5	3.014	0.216	0.307	0.127	3.664	9.473×10^4		
400. GeV	4.001×10^5	3.048	0.298	0.426	0.170	3.942	1.210×10^5		
800. GeV	8.001×10^5	3.130	0.642	0.923	0.343	5.038	2.106×10^5		
1.00 TeV	1.000×10^6	3.156	0.821	1.181	0.431	5.588	2.482×10^5		
1.29 TeV	1.288×10^6	3.187	1.078	1.548	0.560	6.374	<i>Muon critical energy</i>		
1.40 TeV	1.400×10^6	3.197	1.180	1.693	0.611	6.681	3.136×10^5		
2.00 TeV	2.000×10^6	3.240	1.733	2.481	0.885	8.339	3.939×10^5		
3.00 TeV	3.000×10^6	3.291	2.661	3.791	1.356	11.099	4.975×10^5		
4.00 TeV	4.000×10^6	3.327	3.605	5.122	1.835	13.889	5.779×10^5		
8.00 TeV	8.000×10^6	3.416	7.437	10.482	3.833	25.169	7.888×10^5		
10.0 TeV	1.000×10^7	3.445	9.378	13.183	4.863	30.869	8.604×10^5		
14.0 TeV	1.400×10^7	3.489	13.250	18.564	6.986	42.289	9.707×10^5		
20.0 TeV	2.000×10^7	3.537	19.113	26.682	10.248	59.581	1.090×10^6		
30.0 TeV	3.000×10^7	3.593	28.878	40.187	15.916	88.574	1.227×10^6		
40.0 TeV	4.000×10^7	3.633	38.701	53.737	21.735	117.806	1.324×10^6		
80.0 TeV	8.000×10^7	3.732	78.084	107.986	46.181	235.983	1.559×10^6		
100. TeV	1.000×10^8	3.764	97.828	135.145	58.862	295.599	1.635×10^6		