

Muons in uranium monocarbide (UC)

	$\langle Z/A \rangle$	ρ [g/cm ³]	I [eV]	a	$k = m_s$	x_0	x_1	\bar{C}	δ_0
	0.39194	13.630	862.0	0.22972	2.6169	-0.2524	3.4941	6.1210	0.00
T	p [MeV/c]	Ionization	Brems	Pair prod	Photonucl	Total	CSDA range [g/cm ²]		
10.0 MeV	4.704×10^1	3.848				3.848	1.488×10^0		
14.0 MeV	5.616×10^1	3.053				3.053	2.666×10^0		
20.0 MeV	6.802×10^1	2.428				2.428	4.893×10^0		
30.0 MeV	8.509×10^1	1.918				1.918	9.586×10^0		
40.0 MeV	1.003×10^2	1.656				1.656	1.523×10^1		
80.0 MeV	1.527×10^2	1.271				1.271	4.362×10^1		
100. MeV	1.764×10^2	1.202				1.202	5.984×10^1		
140. MeV	2.218×10^2	1.137				1.137	9.419×10^1		
200. MeV	2.868×10^2	1.107				1.108	1.478×10^2		
236. MeV	3.250×10^2	1.105	0.000			1.105	<i>Minimum ionization</i>		
300. MeV	3.917×10^2	1.110	0.000		0.000	1.111	2.382×10^2		
400. MeV	4.945×10^2	1.129	0.000		0.000	1.130	3.275×10^2		
800. MeV	8.995×10^2	1.211	0.001		0.000	1.212	6.688×10^2		
1.00 GeV	1.101×10^3	1.243	0.002		0.000	1.245	8.315×10^2		
1.40 GeV	1.502×10^3	1.294	0.002		0.001	1.297	1.146×10^3		
2.00 GeV	2.103×10^3	1.350	0.004	0.001	0.001	1.356	1.598×10^3		
3.00 GeV	3.104×10^3	1.413	0.007	0.003	0.001	1.425	2.316×10^3		
4.00 GeV	4.104×10^3	1.456	0.011	0.006	0.002	1.475	3.006×10^3		
8.00 GeV	8.105×10^3	1.556	0.026	0.022	0.003	1.607	5.593×10^3		
10.0 GeV	1.011×10^4	1.585	0.034	0.031	0.004	1.655	6.819×10^3		
14.0 GeV	1.411×10^4	1.628	0.053	0.051	0.005	1.738	9.175×10^3		
20.0 GeV	2.011×10^4	1.671	0.082	0.084	0.007	1.846	1.252×10^4		
30.0 GeV	3.011×10^4	1.716	0.134	0.149	0.011	2.012	1.771×10^4		
40.0 GeV	4.011×10^4	1.746	0.190	0.221	0.014	2.172	2.249×10^4		
80.0 GeV	8.011×10^4	1.813	0.429	0.536	0.028	2.808	3.864×10^4		
100. GeV	1.001×10^5	1.832	0.556	0.707	0.034	3.132	4.539×10^4		
136. GeV	1.361×10^5	1.859	0.790	1.022	0.047	3.719	<i>Muon critical energy</i>		
140. GeV	1.401×10^5	1.861	0.817	1.058	0.048	3.785	5.699×10^4		
200. GeV	2.001×10^5	1.891	1.224	1.615	0.068	4.799	7.105×10^4		
300. GeV	3.001×10^5	1.924	1.919	2.543	0.102	6.489	8.891×10^4		
400. GeV	4.001×10^5	1.947	2.636	3.506	0.136	8.227	1.026×10^5		
800. GeV	8.001×10^5	2.003	5.596	7.454	0.275	15.330	1.377×10^5		
1.00 TeV	1.000×10^6	2.021	7.115	9.474	0.346	18.957	1.494×10^5		
1.40 TeV	1.400×10^6	2.049	10.157	13.500	0.490	26.198	1.672×10^5		
2.00 TeV	2.000×10^6	2.079	14.808	19.644	0.709	37.242	1.864×10^5		
3.00 TeV	3.000×10^6	2.113	22.567	29.852	1.083	55.617	2.082×10^5		
4.00 TeV	4.000×10^6	2.138	30.425	40.168	1.463	74.196	2.237×10^5		
8.00 TeV	8.000×10^6	2.199	62.086	81.629	3.038	148.954	2.610×10^5		
10.0 TeV	1.000×10^7	2.219	78.031	102.468	3.846	186.566	2.730×10^5		
14.0 TeV	1.400×10^7	2.249	109.835	144.049	5.505	261.640	2.910×10^5		
20.0 TeV	2.000×10^7	2.282	157.803	206.684	8.046	374.817	3.101×10^5		
30.0 TeV	3.000×10^7	2.320	237.658	310.883	12.435	563.298	3.317×10^5		
40.0 TeV	4.000×10^7	2.347	317.779	415.322	16.925	752.376	3.470×10^5		
80.0 TeV	8.000×10^7	2.415	638.678	833.372	35.663	1510.130	3.838×10^5		
100. TeV	1.000×10^8	2.437	799.369	1042.588	45.336	1889.731	3.956×10^5		