

Table 270: Muons in Uranium dicarbide UC₂

$\langle Z/A \rangle$	ρ [g/cm ³]	I [eV]	a	$k = m_s$	x_0	x_1	\bar{C}	δ_0
0.39687	11.280	752.0	0.21120	2.6577	-0.2191	3.5208	6.0247	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	3.996				3.997	1.428×10^0	
14.0 MeV	5.616×10^1	3.167				3.167	2.563×10^0	
20.0 MeV	6.802×10^1	2.512				2.512	4.714×10^0	
30.0 MeV	8.509×10^1	1.982				1.982	9.252×10^0	
40.0 MeV	1.003×10^2	1.710				1.710	1.472×10^1	
80.0 MeV	1.527×10^2	1.309				1.309	4.225×10^1	
100. MeV	1.764×10^2	1.238				1.238	5.800×10^1	
140. MeV	2.218×10^2	1.170				1.170	9.138×10^1	
200. MeV	2.868×10^2	1.138				1.138	1.435×10^2	
237. MeV	3.260×10^2	1.135	0.000			1.135	<i>Minimum ionization</i>	
300. MeV	3.917×10^2	1.140	0.000		0.000	1.140	2.315×10^2	
400. MeV	4.945×10^2	1.158	0.000		0.000	1.159	3.186×10^2	
800. MeV	8.995×10^2	1.240	0.001		0.000	1.241	6.516×10^2	
1.00 GeV	1.101×10^3	1.272	0.001		0.000	1.274	8.105×10^2	
1.40 GeV	1.502×10^3	1.324	0.002		0.001	1.327	1.118×10^3	
2.00 GeV	2.103×10^3	1.380	0.004	0.001	0.001	1.385	1.560×10^3	
3.00 GeV	3.104×10^3	1.443	0.007	0.003	0.001	1.454	2.263×10^3	
4.00 GeV	4.104×10^3	1.487	0.010	0.006	0.002	1.505	2.939×10^3	
8.00 GeV	8.105×10^3	1.587	0.025	0.021	0.003	1.636	5.477×10^3	
10.0 GeV	1.011×10^4	1.617	0.033	0.030	0.004	1.684	6.681×10^3	
14.0 GeV	1.411×10^4	1.660	0.051	0.049	0.005	1.766	8.999×10^3	
20.0 GeV	2.011×10^4	1.703	0.079	0.081	0.007	1.871	1.230×10^4	
30.0 GeV	3.011×10^4	1.749	0.129	0.143	0.011	2.033	1.742×10^4	
40.0 GeV	4.011×10^4	1.779	0.182	0.212	0.014	2.189	2.216×10^4	
80.0 GeV	8.011×10^4	1.846	0.412	0.515	0.028	2.802	3.827×10^4	
100. GeV	1.001×10^5	1.866	0.534	0.679	0.035	3.115	4.504×10^4	
140. GeV	1.401×10^5	1.895	0.784	1.016	0.048	3.745	5.674×10^4	
143. GeV	1.433×10^5	1.897	0.804	1.044	0.050	3.796	<i>Muon critical energy</i>	
200. GeV	2.001×10^5	1.925	1.175	1.550	0.069	4.720	7.099×10^4	
300. GeV	3.001×10^5	1.959	1.841	2.442	0.103	6.346	8.920×10^4	
400. GeV	4.001×10^5	1.982	2.530	3.366	0.138	8.018	1.032×10^5	
800. GeV	8.001×10^5	2.039	5.371	7.157	0.278	14.847	1.393×10^5	
1.00 TeV	1.000×10^6	2.057	6.829	9.097	0.350	18.334	1.514×10^5	
1.40 TeV	1.400×10^6	2.085	9.749	12.964	0.495	25.295	1.699×10^5	
2.00 TeV	2.000×10^6	2.116	14.213	18.864	0.716	35.911	1.897×10^5	
3.00 TeV	3.000×10^6	2.150	21.662	28.668	1.095	53.576	2.124×10^5	
4.00 TeV	4.000×10^6	2.175	29.205	38.576	1.479	71.437	2.285×10^5	
8.00 TeV	8.000×10^6	2.237	59.598	78.396	3.072	143.305	2.673×10^5	
10.0 TeV	1.000×10^7	2.257	74.906	98.410	3.889	179.465	2.797×10^5	
14.0 TeV	1.400×10^7	2.288	105.438	138.346	5.568	251.642	2.984×10^5	
20.0 TeV	2.000×10^7	2.321	151.489	198.504	8.139	360.456	3.183×10^5	
30.0 TeV	3.000×10^7	2.360	228.153	298.581	12.582	541.677	3.407×10^5	
40.0 TeV	4.000×10^7	2.388	305.073	398.889	17.128	723.479	3.567×10^5	
80.0 TeV	8.000×10^7	2.456	613.150	800.406	36.105	1452.119	3.949×10^5	
100. TeV	1.000×10^8	2.479	767.421	1001.347	45.904	1817.153	4.072×10^5	