Table 217: Muons in Plutonium dioxide (PuO_2)

$\langle Z/A\rangle$	ρ [g/cm^3]	I [eV]	a	$k = m_s$	x_0	x_1	$\overline{C}$	δ_0
0.40583	11.460	746.5	0.20594	2.6522	−0.2311	3.5554	5.9719	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	4.092				4.092	1.394×10^0
14.0 MeV	5.616×10^1	3.242				3.243	2.503×10^0
20.0 MeV	6.802×10^1	2.572				2.572	4.603×10^0
30.0 MeV	8.509×10^1	2.028				2.028	9.038×10^0
40.0 MeV	1.003×10^2	1.748				1.748	1.438×10^1
80.0 MeV	1.527×10^2	1.338				1.338	4.132×10^1
100. MeV	1.764×10^2	1.265				1.265	5.673×10^1
140. MeV	2.218×10^2	1.194				1.195	8.942×10^1
200. MeV	2.868×10^2	1.162				1.162	1.405×10^2
237. MeV	3.260×10^2	1.158	0.000			1.158	*Minimum ionization*
300. MeV	3.917×10^2	1.163	0.000		0.000	1.163	2.267×10^2
400. MeV	4.945×10^2	1.182	0.000		0.000	1.183	3.120×10^2
800. MeV	8.995×10^2	1.265	0.001		0.000	1.266	6.385×10^2
1.00 GeV	1.101×10^3	1.298	0.001		0.000	1.300	7.943×10^2
1.40 GeV	1.502×10^3	1.350	0.002		0.001	1.353	1.096×10^3
2.00 GeV	2.103×10^3	1.407	0.004	0.001	0.001	1.413	1.529×10^3
3.00 GeV	3.104×10^3	1.472	0.007	0.003	0.001	1.483	2.219×10^3
4.00 GeV	4.104×10^3	1.517	0.010	0.006	0.002	1.534	2.881×10^3
8.00 GeV	8.105×10^3	1.619	0.025	0.021	0.003	1.668	5.371×10^3
10.0 GeV	1.011×10^4	1.650	0.033	0.029	0.004	1.717	6.553×10^3
14.0 GeV	1.411×10^4	1.694	0.050	0.048	0.005	1.799	8.827×10^3
20.0 GeV	2.011×10^4	1.738	0.078	0.080	0.007	1.905	1.207×10^4
30.0 GeV	3.011×10^4	1.785	0.128	0.142	0.011	2.067	1.710×10^4
40.0 GeV	4.011×10^4	1.816	0.181	0.210	0.014	2.222	2.177×10^4
80.0 GeV	8.011×10^4	1.885	0.410	0.510	0.028	2.834	3.766×10^4
100. GeV	1.001×10^5	1.906	0.531	0.672	0.035	3.145	4.436×10^4
140. GeV	1.401×10^5	1.936	0.779	1.006	0.049	3.771	5.597×10^4
147. GeV	1.470×10^5	1.940	0.823	1.066	0.051	3.881	*Muon critical energy*
200. GeV	2.001×10^5	1.966	1.168	1.536	0.069	4.740	7.013×10^4
300. GeV	3.001×10^5	2.000	1.830	2.420	0.103	6.356	8.830×10^4
400. GeV	4.001×10^5	2.024	2.515	3.337	0.138	8.016	1.023×10^5
800. GeV	8.001×10^5	2.082	5.339	7.096	0.279	14.798	1.385×10^5
1.00 TeV	1.000×10^6	2.101	6.789	9.019	0.350	18.261	1.506×10^5
1.40 TeV	1.400×10^6	2.130	9.692	12.853	0.496	25.173	1.692×10^5
2.00 TeV	2.000×10^6	2.161	14.130	18.705	0.718	35.715	1.891×10^5
3.00 TeV	3.000×10^6	2.197	21.534	28.426	1.097	53.256	2.119×10^5
4.00 TeV	4.000×10^6	2.222	29.034	38.251	1.482	70.990	2.281×10^5
8.00 TeV	8.000×10^6	2.285	59.249	77.739	3.079	142.353	2.671×10^5
10.0 TeV	1.000×10^7	2.306	74.467	97.587	3.898	178.259	2.797×10^5
14.0 TeV	1.400×10^7	2.337	104.819	137.189	5.580	249.928	2.985×10^5
20.0 TeV	2.000×10^7	2.371	150.599	196.844	8.158	357.974	3.185×10^5
30.0 TeV	3.000×10^7	2.411	226.884	296.089	12.610	537.995	3.411×10^5
40.0 TeV	4.000×10^7	2.439	303.444	395.563	17.167	718.616	3.571×10^5
80.0 TeV	8.000×10^7	2.509	609.685	793.736	36.193	1442.125	3.956×10^5
100. TeV	1.000×10^8	2.532	762.907	993.003	46.019	1804.463	4.080×10^5