Table 176: Muons in Gypsum (plaster of Paris, $CaSO_4 \cdot H_2O$)

$\langle Z/A \rangle$	ρ [g/cm^3]	I [eV]	a	$k = m_s$	x_0	x_1	$\overline{C}$	δ_0
0.51113	2.320	129.7	0.06949	3.5134	0.0995	3.1206	3.8382	0.00

T	p [MeV/c]	Ionization	Brems	Pair prod	Photonucl	Total	CSDA range [g/cm^2]
		[MeV cm^2/g]					
10.0 MeV	4.704×10^1	6.814				6.814	8.155×10^{-1}
14.0 MeV	5.616×10^1	5.331				5.331	1.486×10^0
20.0 MeV	6.802×10^1	4.174				4.174	2.772×10^0
30.0 MeV	8.509×10^1	3.248				3.248	5.526×10^0
40.0 MeV	1.003×10^2	2.778				2.778	8.877×10^0
80.0 MeV	1.527×10^2	2.090				2.090	2.599×10^1
100. MeV	1.764×10^2	1.962				1.962	3.589×10^1
140. MeV	2.218×10^2	1.833				1.833	5.709×10^1
200. MeV	2.868×10^2	1.761				1.761	9.061×10^1
297. MeV	3.884×10^2	1.738			0.000	1.738	*Minimum ionization*
300. MeV	3.917×10^2	1.738			0.000	1.739	1.479×10^2
400. MeV	4.945×10^2	1.749			0.000	1.749	2.053×10^2
800. MeV	8.995×10^2	1.826	0.000		0.000	1.827	4.291×10^2
1.00 GeV	1.101×10^3	1.860	0.000		0.000	1.861	5.375×10^2
1.40 GeV	1.502×10^3	1.915	0.001	0.000	0.001	1.917	7.491×10^2
2.00 GeV	2.103×10^3	1.975	0.001	0.000	0.001	1.978	1.057×10^3
3.00 GeV	3.104×10^3	2.043	0.002	0.001	0.001	2.047	1.553×10^3
4.00 GeV	4.104×10^3	2.090	0.002	0.002	0.002	2.096	2.036×10^3
8.00 GeV	8.105×10^3	2.198	0.006	0.005	0.004	2.213	3.887×10^3
10.0 GeV	1.011×10^4	2.230	0.007	0.008	0.005	2.250	4.783×10^3
14.0 GeV	1.411×10^4	2.277	0.011	0.012	0.006	2.308	6.537×10^3
20.0 GeV	2.011×10^4	2.325	0.018	0.020	0.009	2.372	9.100×10^3
30.0 GeV	3.011×10^4	2.375	0.029	0.035	0.013	2.453	1.324×10^4
40.0 GeV	4.011×10^4	2.409	0.041	0.052	0.017	2.519	1.726×10^4
80.0 GeV	8.011×10^4	2.487	0.092	0.125	0.033	2.738	3.247×10^4
100. GeV	1.001×10^5	2.511	0.120	0.165	0.041	2.837	3.964×10^4
140. GeV	1.401×10^5	2.547	0.176	0.246	0.057	3.027	5.329×10^4
200. GeV	2.001×10^5	2.584	0.265	0.376	0.081	3.306	7.225×10^4
300. GeV	3.001×10^5	2.627	0.416	0.595	0.121	3.760	1.006×10^5
400. GeV	4.001×10^5	2.657	0.574	0.824	0.162	4.216	1.257×10^5
663. GeV	6.634×10^5	2.710	1.000	1.440	0.270	5.421	*Muon critical energy*
800. GeV	8.001×10^5	2.730	1.226	1.766	0.327	6.050	2.045×10^5
1.00 TeV	1.000×10^6	2.754	1.562	2.251	0.411	6.978	2.352×10^5
1.40 TeV	1.400×10^6	2.790	2.239	3.217	0.582	8.829	2.861×10^5
2.00 TeV	2.000×10^6	2.829	3.276	4.696	0.843	11.644	3.451×10^5
3.00 TeV	3.000×10^6	2.874	5.011	7.155	1.291	16.331	4.173×10^5
4.00 TeV	4.000×10^6	2.906	6.774	9.645	1.746	21.071	4.711×10^5
8.00 TeV	8.000×10^6	2.985	13.899	19.666	3.641	40.192	6.062×10^5
10.0 TeV	1.000×10^7	3.011	17.498	24.710	4.616	49.835	6.508×10^5
14.0 TeV	1.400×10^7	3.051	24.680	34.765	6.624	69.120	7.187×10^5
20.0 TeV	2.000×10^7	3.094	35.535	49.923	9.706	98.258	7.911×10^5
30.0 TeV	3.000×10^7	3.143	53.593	75.147	15.050	146.934	8.738×10^5
40.0 TeV	4.000×10^7	3.179	71.733	100.445	20.530	195.888	9.326×10^5
80.0 TeV	8.000×10^7	3.267	144.466	201.717	43.500	392.950	1.074×10^6
100. TeV	1.000×10^8	3.296	180.922	252.408	55.395	492.022	1.119×10^6