

Table 296: Muons in Silica aerogel for rho = 0.2 (0.03 H₂O, 0.97 SiO₂)

$\langle Z/A \rangle$	ρ [g/cm ³]	I [eV]	a	$k = m_s$	x_0	x_1	\bar{C}	δ_0
0.50093	0.200	139.2	0.26675	3.0000	0.6029	3.0000	6.4507	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	6.613				6.613	8.411×10^{-1}	
14.0 MeV	5.616×10^1	5.175				5.175	1.532×10^0	
20.0 MeV	6.802×10^1	4.054				4.054	2.857×10^0	
30.0 MeV	8.509×10^1	3.155				3.155	5.691×10^0	
40.0 MeV	1.003×10^2	2.700				2.700	9.140×10^0	
80.0 MeV	1.527×10^2	2.037				2.037	2.673×10^1	
100. MeV	1.764×10^2	1.919				1.919	3.687×10^1	
140. MeV	2.218×10^2	1.804				1.805	5.847×10^1	
200. MeV	2.868×10^2	1.748				1.749	9.237×10^1	
247. MeV	3.366×10^2	1.740			0.000	1.740	<i>Minimum ionization</i>	
300. MeV	3.917×10^2	1.745			0.000	1.746	1.498×10^2	
400. MeV	4.945×10^2	1.771			0.000	1.772	2.066×10^2	
800. MeV	8.995×10^2	1.883	0.000		0.000	1.884	4.253×10^2	
1.00 GeV	1.101×10^3	1.927	0.000		0.000	1.928	5.302×10^2	
1.40 GeV	1.502×10^3	1.996	0.001	0.000	0.001	1.997	7.338×10^2	
2.00 GeV	2.103×10^3	2.069	0.001	0.000	0.001	2.071	1.028×10^3	
3.00 GeV	3.104×10^3	2.150	0.001	0.001	0.001	2.154	1.501×10^3	
4.00 GeV	4.104×10^3	2.205	0.002	0.002	0.002	2.211	1.959×10^3	
8.00 GeV	8.105×10^3	2.327	0.005	0.005	0.004	2.341	3.711×10^3	
10.0 GeV	1.011×10^4	2.363	0.007	0.007	0.005	2.381	4.558×10^3	
14.0 GeV	1.411×10^4	2.414	0.010	0.011	0.006	2.441	6.216×10^3	
20.0 GeV	2.011×10^4	2.463	0.016	0.018	0.009	2.507	8.639×10^3	
30.0 GeV	3.011×10^4	2.516	0.026	0.032	0.013	2.586	1.256×10^4	
40.0 GeV	4.011×10^4	2.550	0.036	0.046	0.017	2.651	1.638×10^4	
80.0 GeV	8.011×10^4	2.627	0.083	0.112	0.033	2.855	3.090×10^4	
100. GeV	1.001×10^5	2.651	0.107	0.147	0.041	2.947	3.779×10^4	
140. GeV	1.401×10^5	2.686	0.158	0.220	0.057	3.122	5.098×10^4	
200. GeV	2.001×10^5	2.723	0.237	0.336	0.081	3.377	6.945×10^4	
300. GeV	3.001×10^5	2.764	0.373	0.533	0.122	3.793	9.737×10^4	
400. GeV	4.001×10^5	2.794	0.514	0.738	0.162	4.209	1.224×10^5	
762. GeV	7.625×10^5	2.861	1.044	1.505	0.312	5.722	<i>Muon critical energy</i>	
800. GeV	8.001×10^5	2.866	1.100	1.586	0.328	5.880	2.024×10^5	
1.00 TeV	1.000×10^6	2.889	1.402	2.022	0.412	6.725	2.342×10^5	
1.40 TeV	1.400×10^6	2.924	2.010	2.891	0.584	8.410	2.873×10^5	
2.00 TeV	2.000×10^6	2.962	2.942	4.222	0.846	10.972	3.496×10^5	
3.00 TeV	3.000×10^6	3.006	4.502	6.434	1.295	15.238	4.266×10^5	
4.00 TeV	4.000×10^6	3.038	6.087	8.676	1.752	19.553	4.844×10^5	
8.00 TeV	8.000×10^6	3.116	12.495	17.697	3.653	36.963	6.308×10^5	
10.0 TeV	1.000×10^7	3.141	15.732	22.238	4.632	45.745	6.793×10^5	
14.0 TeV	1.400×10^7	3.180	22.193	31.290	6.647	63.311	7.533×10^5	
20.0 TeV	2.000×10^7	3.222	31.960	44.936	9.741	89.858	8.325×10^5	
30.0 TeV	3.000×10^7	3.271	48.207	67.647	15.104	134.229	9.230×10^5	
40.0 TeV	4.000×10^7	3.306	64.528	90.427	20.605	178.867	9.873×10^5	
80.0 TeV	8.000×10^7	3.392	129.977	181.618	43.661	358.650	1.142×10^6	
100. TeV	1.000×10^8	3.421	162.786	227.265	55.602	449.073	1.192×10^6	