

**Table 169: Muons in Borosilicate glass (Pyrex Corning 7740)**

$\langle Z/A \rangle$	$\rho$ [g/cm <sup>3</sup> ]	$I$ [eV]	$a$	$k = m_s$	$x_0$	$x_1$	$\bar{C}$	$\delta_0$
0.49707	2.230	134.0	0.08270	3.5224	0.1479	2.9933	3.9708	0.00
$T$	$p$ [MeV/c]	Ionization	Brems	Pair prod [MeV cm <sup>2</sup> /g]	Photonucl	Total	CSDA range [g/cm <sup>2</sup> ]	
10.0 MeV	$4.704 \times 10^1$	6.597				6.597	$8.427 \times 10^{-1}$	
14.0 MeV	$5.616 \times 10^1$	5.161				5.162	$1.535 \times 10^0$	
20.0 MeV	$6.802 \times 10^1$	4.043				4.043	$2.864 \times 10^0$	
30.0 MeV	$8.509 \times 10^1$	3.146				3.146	$5.707 \times 10^0$	
40.0 MeV	$1.003 \times 10^2$	2.691				2.691	$9.166 \times 10^0$	
80.0 MeV	$1.527 \times 10^2$	2.029				2.029	$2.682 \times 10^1$	
100. MeV	$1.764 \times 10^2$	1.907				1.907	$3.701 \times 10^1$	
140. MeV	$2.218 \times 10^2$	1.784				1.784	$5.880 \times 10^1$	
200. MeV	$2.868 \times 10^2$	1.716				1.716	$9.321 \times 10^1$	
294. MeV	$3.854 \times 10^2$	1.696			0.000	1.696	<i>Minimum ionization</i>	
300. MeV	$3.917 \times 10^2$	1.696			0.000	1.696	$1.520 \times 10^2$	
400. MeV	$4.945 \times 10^2$	1.707			0.000	1.707	$2.108 \times 10^2$	
800. MeV	$8.995 \times 10^2$	1.784	0.000		0.000	1.785	$4.400 \times 10^2$	
1.00 GeV	$1.101 \times 10^3$	1.817	0.000		0.000	1.818	$5.510 \times 10^2$	
1.40 GeV	$1.502 \times 10^3$	1.871	0.000	0.000	0.001	1.872	$7.676 \times 10^2$	
2.00 GeV	$2.103 \times 10^3$	1.929	0.001	0.000	0.001	1.931	$1.083 \times 10^3$	
3.00 GeV	$3.104 \times 10^3$	1.995	0.001	0.001	0.001	1.999	$1.591 \times 10^3$	
4.00 GeV	$4.104 \times 10^3$	2.041	0.002	0.002	0.002	2.046	$2.085 \times 10^3$	
8.00 GeV	$8.105 \times 10^3$	2.145	0.005	0.005	0.004	2.158	$3.982 \times 10^3$	
10.0 GeV	$1.011 \times 10^4$	2.176	0.006	0.006	0.005	2.194	$4.901 \times 10^3$	
14.0 GeV	$1.411 \times 10^4$	2.221	0.010	0.011	0.006	2.248	$6.701 \times 10^3$	
20.0 GeV	$2.011 \times 10^4$	2.267	0.015	0.017	0.009	2.309	$9.333 \times 10^3$	
30.0 GeV	$3.011 \times 10^4$	2.316	0.025	0.030	0.013	2.384	$1.359 \times 10^4$	
40.0 GeV	$4.011 \times 10^4$	2.348	0.035	0.045	0.017	2.446	$1.773 \times 10^4$	
80.0 GeV	$8.011 \times 10^4$	2.424	0.080	0.108	0.033	2.645	$3.343 \times 10^4$	
100. GeV	$1.001 \times 10^5$	2.447	0.103	0.142	0.041	2.734	$4.087 \times 10^4$	
140. GeV	$1.401 \times 10^5$	2.482	0.152	0.212	0.057	2.904	$5.506 \times 10^4$	
200. GeV	$2.001 \times 10^5$	2.518	0.229	0.324	0.081	3.153	$7.488 \times 10^4$	
300. GeV	$3.001 \times 10^5$	2.560	0.360	0.514	0.122	3.557	$1.047 \times 10^5$	
400. GeV	$4.001 \times 10^5$	2.589	0.497	0.713	0.162	3.961	$1.313 \times 10^5$	
731. GeV	$7.311 \times 10^5$	2.651	0.963	1.388	0.299	5.302	<i>Muon critical energy</i>	
800. GeV	$8.001 \times 10^5$	2.660	1.062	1.532	0.328	5.583	$2.160 \times 10^5$	
1.00 TeV	$1.000 \times 10^6$	2.683	1.354	1.953	0.413	6.404	$2.494 \times 10^5$	
1.40 TeV	$1.400 \times 10^6$	2.718	1.941	2.793	0.585	8.038	$3.051 \times 10^5$	
2.00 TeV	$2.000 \times 10^6$	2.756	2.842	4.079	0.847	10.524	$3.701 \times 10^5$	
3.00 TeV	$3.000 \times 10^6$	2.800	4.349	6.217	1.297	14.664	$4.503 \times 10^5$	
4.00 TeV	$4.000 \times 10^6$	2.831	5.881	8.384	1.755	18.851	$5.103 \times 10^5$	
8.00 TeV	$8.000 \times 10^6$	2.908	12.074	17.104	3.661	35.747	$6.618 \times 10^5$	
10.0 TeV	$1.000 \times 10^7$	2.934	15.202	21.493	4.642	44.271	$7.120 \times 10^5$	
14.0 TeV	$1.400 \times 10^7$	2.972	21.446	30.242	6.661	61.321	$7.885 \times 10^5$	
20.0 TeV	$2.000 \times 10^7$	3.014	30.884	43.433	9.761	87.092	$8.702 \times 10^5$	
30.0 TeV	$3.000 \times 10^7$	3.062	46.586	65.386	15.136	130.171	$9.635 \times 10^5$	
40.0 TeV	$4.000 \times 10^7$	3.097	62.361	87.405	20.650	173.513	$1.030 \times 10^6$	
80.0 TeV	$8.000 \times 10^7$	3.183	125.615	175.553	43.761	348.112	$1.189 \times 10^6$	
100. TeV	$1.000 \times 10^8$	3.211	157.323	219.676	55.730	435.941	$1.241 \times 10^6$	