

## Muons in glucose (dextrose monohydrate) (C<sub>6</sub>H<sub>12</sub>O<sub>6</sub>·H<sub>2</sub>O)

$\langle Z/A \rangle$	$\rho$ [g/cm <sup>3</sup> ]	$I$ [eV]	$a$	$k = m_s$	$x_0$	$x_1$	$\bar{C}$	$\delta_0$
0.53499	1.540	77.2	0.10783	3.3946	0.1411	2.6700	3.1649	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	$4.704 \times 10^1$	7.648				7.648	$7.228 \times 10^{-1}$	
14.0 MeV	$5.616 \times 10^1$	5.966				5.966	$1.321 \times 10^0$	
20.0 MeV	$6.802 \times 10^1$	4.660				4.660	$2.472 \times 10^0$	
30.0 MeV	$8.509 \times 10^1$	3.616				3.616	$4.942 \times 10^0$	
40.0 MeV	$1.003 \times 10^2$	3.088				3.088	$7.955 \times 10^0$	
80.0 MeV	$1.527 \times 10^2$	2.316				2.316	$2.338 \times 10^1$	
100. MeV	$1.764 \times 10^2$	2.169				2.169	$3.233 \times 10^1$	
140. MeV	$2.218 \times 10^2$	2.018				2.019	$5.154 \times 10^1$	
200. MeV	$2.868 \times 10^2$	1.932				1.932	$8.204 \times 10^1$	
300. MeV	$3.917 \times 10^2$	1.898			0.000	1.898	$1.344 \times 10^2$	
318. MeV	$4.105 \times 10^2$	1.897			0.000	1.898	<i>Minimum ionization</i>	
400. MeV	$4.945 \times 10^2$	1.903			0.000	1.904	$1.871 \times 10^2$	
800. MeV	$8.995 \times 10^2$	1.974	0.000		0.000	1.975	$3.935 \times 10^2$	
1.00 GeV	$1.101 \times 10^3$	2.007	0.000		0.000	2.008	$4.939 \times 10^2$	
1.40 GeV	$1.502 \times 10^3$	2.060	0.000		0.001	2.061	$6.904 \times 10^2$	
2.00 GeV	$2.103 \times 10^3$	2.119	0.001	0.000	0.001	2.120	$9.772 \times 10^2$	
3.00 GeV	$3.104 \times 10^3$	2.185	0.001	0.001	0.001	2.188	$1.441 \times 10^3$	
4.00 GeV	$4.104 \times 10^3$	2.232	0.001	0.001	0.002	2.236	$1.893 \times 10^3$	
8.00 GeV	$8.105 \times 10^3$	2.339	0.003	0.003	0.004	2.349	$3.632 \times 10^3$	
10.0 GeV	$1.011 \times 10^4$	2.371	0.005	0.004	0.005	2.385	$4.477 \times 10^3$	
14.0 GeV	$1.411 \times 10^4$	2.418	0.007	0.007	0.007	2.439	$6.135 \times 10^3$	
20.0 GeV	$2.011 \times 10^4$	2.466	0.011	0.012	0.009	2.498	$8.564 \times 10^3$	
30.0 GeV	$3.011 \times 10^4$	2.517	0.018	0.021	0.013	2.570	$1.251 \times 10^4$	
40.0 GeV	$4.011 \times 10^4$	2.552	0.025	0.031	0.018	2.627	$1.635 \times 10^4$	
80.0 GeV	$8.011 \times 10^4$	2.633	0.057	0.076	0.034	2.801	$3.108 \times 10^4$	
100. GeV	$1.001 \times 10^5$	2.658	0.074	0.101	0.042	2.875	$3.812 \times 10^4$	
140. GeV	$1.401 \times 10^5$	2.696	0.109	0.151	0.059	3.015	$5.171 \times 10^4$	
200. GeV	$2.001 \times 10^5$	2.735	0.164	0.231	0.084	3.214	$7.098 \times 10^4$	
300. GeV	$3.001 \times 10^5$	2.779	0.258	0.368	0.125	3.531	$1.006 \times 10^5$	
400. GeV	$4.001 \times 10^5$	2.811	0.356	0.510	0.167	3.844	$1.278 \times 10^5$	
800. GeV	$8.001 \times 10^5$	2.887	0.765	1.102	0.337	5.092	$2.179 \times 10^5$	
1.00 TeV	$1.000 \times 10^6$	2.912	0.977	1.408	0.424	5.721	$2.549 \times 10^5$	
1.04 TeV	$1.036 \times 10^6$	2.916	1.015	1.462	0.440	5.833	<i>Muon critical energy</i>	
1.40 TeV	$1.400 \times 10^6$	2.950	1.402	2.016	0.601	6.970	$3.182 \times 10^5$	
2.00 TeV	$2.000 \times 10^6$	2.991	2.057	2.949	0.870	8.867	$3.943 \times 10^5$	
3.00 TeV	$3.000 \times 10^6$	3.038	3.153	4.503	1.333	12.027	$4.908 \times 10^5$	
4.00 TeV	$4.000 \times 10^6$	3.072	4.269	6.078	1.805	15.223	$5.646 \times 10^5$	
8.00 TeV	$8.000 \times 10^6$	3.155	8.786	12.422	3.767	28.130	$7.549 \times 10^5$	
10.0 TeV	$1.000 \times 10^7$	3.182	11.071	15.618	4.778	34.649	$8.189 \times 10^5$	
14.0 TeV	$1.400 \times 10^7$	3.223	15.631	21.984	6.860	47.699	$9.169 \times 10^5$	
20.0 TeV	$2.000 \times 10^7$	3.268	22.528	31.588	10.060	67.445	$1.022 \times 10^6$	
30.0 TeV	$3.000 \times 10^7$	3.320	34.014	47.567	15.615	100.516	$1.143 \times 10^6$	
40.0 TeV	$4.000 \times 10^7$	3.358	45.560	63.597	21.316	133.831	$1.229 \times 10^6$	
80.0 TeV	$8.000 \times 10^7$	3.450	91.862	127.774	45.242	268.328	$1.436 \times 10^6$	
100. TeV	$1.000 \times 10^8$	3.480	115.075	159.900	57.645	336.100	$1.502 \times 10^6$	