

## Muons in Nylon type 6/10 [(CH(CH<sub>2</sub>)<sub>7</sub>NO)<sub>n</sub>]

$\langle Z/A \rangle$	$\rho$ [g/cm <sup>3</sup> ]	$I$ [eV]	$a$	$k = m_s$	$x_0$	$x_1$	$\bar{C}$	$\delta_0$
0.55236	1.140	63.2	0.11852	3.3912	0.1304	2.5681	3.0333	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	$4.704 \times 10^1$	8.101				8.101	$6.811 \times 10^{-1}$	
14.0 MeV	$5.616 \times 10^1$	6.314				6.314	$1.246 \times 10^0$	
20.0 MeV	$6.802 \times 10^1$	4.927				4.927	$2.334 \times 10^0$	
30.0 MeV	$8.509 \times 10^1$	3.820				3.820	$4.672 \times 10^0$	
40.0 MeV	$1.003 \times 10^2$	3.260				3.260	$7.525 \times 10^0$	
80.0 MeV	$1.527 \times 10^2$	2.440				2.440	$2.215 \times 10^1$	
100. MeV	$1.764 \times 10^2$	2.283				2.284	$3.065 \times 10^1$	
140. MeV	$2.218 \times 10^2$	2.124				2.124	$4.890 \times 10^1$	
200. MeV	$2.868 \times 10^2$	2.030				2.031	$7.791 \times 10^1$	
300. MeV	$3.917 \times 10^2$	1.993			0.000	1.993	$1.278 \times 10^2$	
328. MeV	$4.201 \times 10^2$	1.992			0.000	1.992	<i>Minimum ionization</i>	
400. MeV	$4.945 \times 10^2$	1.997			0.000	1.997	$1.779 \times 10^2$	
800. MeV	$8.995 \times 10^2$	2.068	0.000		0.000	2.068	$3.748 \times 10^2$	
1.00 GeV	$1.101 \times 10^3$	2.101	0.000		0.000	2.102	$4.707 \times 10^2$	
1.40 GeV	$1.502 \times 10^3$	2.155	0.000		0.001	2.156	$6.585 \times 10^2$	
2.00 GeV	$2.103 \times 10^3$	2.214	0.000	0.000	0.001	2.216	$9.328 \times 10^2$	
3.00 GeV	$3.104 \times 10^3$	2.282	0.001	0.001	0.001	2.285	$1.377 \times 10^3$	
4.00 GeV	$4.104 \times 10^3$	2.330	0.001	0.001	0.002	2.334	$1.809 \times 10^3$	
8.00 GeV	$8.105 \times 10^3$	2.439	0.003	0.003	0.004	2.448	$3.478 \times 10^3$	
10.0 GeV	$1.011 \times 10^4$	2.472	0.004	0.004	0.005	2.485	$4.288 \times 10^3$	
14.0 GeV	$1.411 \times 10^4$	2.520	0.006	0.006	0.007	2.539	$5.880 \times 10^3$	
20.0 GeV	$2.011 \times 10^4$	2.569	0.009	0.011	0.009	2.599	$8.214 \times 10^3$	
30.0 GeV	$3.011 \times 10^4$	2.622	0.016	0.019	0.014	2.670	$1.201 \times 10^4$	
40.0 GeV	$4.011 \times 10^4$	2.658	0.022	0.028	0.018	2.726	$1.571 \times 10^4$	
80.0 GeV	$8.011 \times 10^4$	2.741	0.050	0.068	0.035	2.894	$2.993 \times 10^4$	
100. GeV	$1.001 \times 10^5$	2.767	0.065	0.089	0.043	2.965	$3.676 \times 10^4$	
140. GeV	$1.401 \times 10^5$	2.806	0.096	0.134	0.060	3.096	$4.995 \times 10^4$	
200. GeV	$2.001 \times 10^5$	2.847	0.145	0.205	0.084	3.282	$6.877 \times 10^4$	
300. GeV	$3.001 \times 10^5$	2.892	0.230	0.327	0.126	3.576	$9.794 \times 10^4$	
400. GeV	$4.001 \times 10^5$	2.925	0.317	0.454	0.169	3.865	$1.248 \times 10^5$	
800. GeV	$8.001 \times 10^5$	3.004	0.683	0.982	0.340	5.010	$2.155 \times 10^5$	
1.00 TeV	$1.000 \times 10^6$	3.030	0.872	1.256	0.428	5.585	$2.533 \times 10^5$	
1.18 TeV	$1.180 \times 10^6$	3.049	1.042	1.499	0.508	6.098	<i>Muon critical energy</i>	
1.40 TeV	$1.400 \times 10^6$	3.069	1.253	1.800	0.607	6.729	$3.184 \times 10^5$	
2.00 TeV	$2.000 \times 10^6$	3.111	1.839	2.635	0.879	8.464	$3.978 \times 10^5$	
3.00 TeV	$3.000 \times 10^6$	3.159	2.821	4.026	1.347	11.353	$4.995 \times 10^5$	
4.00 TeV	$4.000 \times 10^6$	3.194	3.822	5.436	1.823	14.275	$5.779 \times 10^5$	
8.00 TeV	$8.000 \times 10^6$	3.280	7.876	11.120	3.806	26.083	$7.821 \times 10^5$	
10.0 TeV	$1.000 \times 10^7$	3.308	9.928	13.984	4.828	32.048	$8.512 \times 10^5$	
14.0 TeV	$1.400 \times 10^7$	3.351	14.023	19.688	6.934	43.997	$9.573 \times 10^5$	
20.0 TeV	$2.000 \times 10^7$	3.397	20.220	28.295	10.171	62.083	$1.072 \times 10^6$	
30.0 TeV	$3.000 \times 10^7$	3.451	30.540	42.612	15.792	92.396	$1.203 \times 10^6$	
40.0 TeV	$4.000 \times 10^7$	3.489	40.919	56.977	21.563	122.949	$1.296 \times 10^6$	
80.0 TeV	$8.000 \times 10^7$	3.585	82.531	114.488	45.796	246.401	$1.522 \times 10^6$	
100. TeV	$1.000 \times 10^8$	3.616	103.393	143.279	58.363	308.651	$1.594 \times 10^6$	