

## Muons in polytetrafluoroethylene (Teflon, $[(CF_2CF_2)_n]$ )

$\langle Z/A \rangle$	$\rho$ [g/cm <sup>3</sup> ]	$I$ [eV]	$a$	$k = m_s$	$x_0$	$x_1$	$\bar{C}$	$\delta_0$
0.47992	2.200	99.1	0.10606	3.4046	0.1648	2.7404	3.4161	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	$4.704 \times 10^1$	6.638				6.638	$8.348 \times 10^{-1}$	
14.0 MeV	$5.616 \times 10^1$	5.185				5.185	$1.524 \times 10^0$	
20.0 MeV	$6.802 \times 10^1$	4.055				4.055	$2.847 \times 10^0$	
30.0 MeV	$8.509 \times 10^1$	3.150				3.150	$5.684 \times 10^0$	
40.0 MeV	$1.003 \times 10^2$	2.692				2.692	$9.140 \times 10^0$	
80.0 MeV	$1.527 \times 10^2$	2.026				2.026	$2.681 \times 10^1$	
100. MeV	$1.764 \times 10^2$	1.900				1.900	$3.703 \times 10^1$	
140. MeV	$2.218 \times 10^2$	1.771				1.771	$5.894 \times 10^1$	
200. MeV	$2.868 \times 10^2$	1.698				1.698	$9.367 \times 10^1$	
300. MeV	$3.917 \times 10^2$	1.671			0.000	1.672	$1.532 \times 10^2$	
308. MeV	$4.000 \times 10^2$	1.671			0.000	1.672	<i>Minimum ionization</i>	
400. MeV	$4.945 \times 10^2$	1.678			0.000	1.679	$2.129 \times 10^2$	
800. MeV	$8.995 \times 10^2$	1.745	0.000		0.000	1.746	$4.466 \times 10^2$	
1.00 GeV	$1.101 \times 10^3$	1.776	0.000		0.000	1.776	$5.602 \times 10^2$	
1.40 GeV	$1.502 \times 10^3$	1.824	0.000	0.000	0.001	1.826	$7.822 \times 10^2$	
2.00 GeV	$2.103 \times 10^3$	1.878	0.001	0.000	0.001	1.880	$1.106 \times 10^3$	
3.00 GeV	$3.104 \times 10^3$	1.939	0.001	0.001	0.001	1.942	$1.628 \times 10^3$	
4.00 GeV	$4.104 \times 10^3$	1.982	0.002	0.001	0.002	1.986	$2.137 \times 10^3$	
8.00 GeV	$8.105 \times 10^3$	2.078	0.004	0.004	0.004	2.090	$4.094 \times 10^3$	
10.0 GeV	$1.011 \times 10^4$	2.108	0.005	0.005	0.005	2.123	$5.044 \times 10^3$	
14.0 GeV	$1.411 \times 10^4$	2.150	0.008	0.008	0.006	2.173	$6.905 \times 10^3$	
20.0 GeV	$2.011 \times 10^4$	2.193	0.012	0.014	0.009	2.228	$9.629 \times 10^3$	
30.0 GeV	$3.011 \times 10^4$	2.240	0.020	0.024	0.013	2.297	$1.405 \times 10^4$	
40.0 GeV	$4.011 \times 10^4$	2.271	0.028	0.035	0.017	2.352	$1.835 \times 10^4$	
80.0 GeV	$8.011 \times 10^4$	2.344	0.063	0.085	0.034	2.526	$3.473 \times 10^4$	
100. GeV	$1.001 \times 10^5$	2.366	0.082	0.113	0.042	2.603	$4.253 \times 10^4$	
140. GeV	$1.401 \times 10^5$	2.400	0.121	0.169	0.058	2.748	$5.748 \times 10^4$	
200. GeV	$2.001 \times 10^5$	2.435	0.182	0.258	0.082	2.958	$7.851 \times 10^4$	
300. GeV	$3.001 \times 10^5$	2.475	0.287	0.410	0.123	3.295	$1.105 \times 10^5$	
400. GeV	$4.001 \times 10^5$	2.503	0.396	0.568	0.164	3.631	$1.394 \times 10^5$	
800. GeV	$8.001 \times 10^5$	2.572	0.848	1.224	0.331	4.976	$2.331 \times 10^5$	
854. GeV	$8.536 \times 10^5$	2.578	0.910	1.314	0.354	5.157	<i>Muon critical energy</i>	
1.00 TeV	$1.000 \times 10^6$	2.594	1.082	1.563	0.416	5.656	$2.708 \times 10^5$	
1.40 TeV	$1.400 \times 10^6$	2.628	1.552	2.237	0.590	7.007	$3.343 \times 10^5$	
2.00 TeV	$2.000 \times 10^6$	2.665	2.273	3.268	0.855	9.061	$4.094 \times 10^5$	
3.00 TeV	$3.000 \times 10^6$	2.707	3.482	4.985	1.310	12.484	$5.030 \times 10^5$	
4.00 TeV	$4.000 \times 10^6$	2.737	4.710	6.726	1.772	15.945	$5.738 \times 10^5$	
8.00 TeV	$8.000 \times 10^6$	2.812	9.681	13.733	3.696	29.922	$7.540 \times 10^5$	
10.0 TeV	$1.000 \times 10^7$	2.836	12.193	17.262	4.687	36.978	$8.140 \times 10^5$	
14.0 TeV	$1.400 \times 10^7$	2.873	17.204	24.293	6.727	51.098	$9.056 \times 10^5$	
20.0 TeV	$2.000 \times 10^7$	2.914	24.781	34.897	9.860	72.452	$1.004 \times 10^6$	
30.0 TeV	$3.000 \times 10^7$	2.960	37.396	52.542	15.296	108.195	$1.116 \times 10^6$	
40.0 TeV	$4.000 \times 10^7$	2.994	50.074	70.243	20.873	144.183	$1.196 \times 10^6$	
80.0 TeV	$8.000 \times 10^7$	3.076	100.900	141.106	44.257	289.339	$1.388 \times 10^6$	
100. TeV	$1.000 \times 10^8$	3.104	126.375	176.579	56.372	362.430	$1.449 \times 10^6$	