

**Table 103: Muons in Adipose tissue (ICRP)**

$\langle Z/A \rangle$	$\rho$ [g/cm <sup>3</sup> ]	$I$ [eV]	$a$	$k = m_s$	$x_0$	$x_1$	$\bar{C}$	$\delta_0$
0.55947	0.920	63.2	0.10278	3.4817	0.1827	2.6530	3.2367	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	$4.704 \times 10^1$	8.205				8.205	$6.725 \times 10^{-1}$	
14.0 MeV	$5.616 \times 10^1$	6.395				6.396	$1.231 \times 10^0$	
20.0 MeV	$6.802 \times 10^1$	4.991				4.991	$2.305 \times 10^0$	
30.0 MeV	$8.509 \times 10^1$	3.869				3.869	$4.613 \times 10^0$	
40.0 MeV	$1.003 \times 10^2$	3.302				3.302	$7.429 \times 10^0$	
80.0 MeV	$1.527 \times 10^2$	2.476				2.476	$2.187 \times 10^1$	
100. MeV	$1.764 \times 10^2$	2.322				2.322	$3.023 \times 10^1$	
140. MeV	$2.218 \times 10^2$	2.160				2.160	$4.817 \times 10^1$	
200. MeV	$2.868 \times 10^2$	2.067				2.067	$7.668 \times 10^1$	
300. MeV	$3.917 \times 10^2$	2.030			0.000	2.030	$1.256 \times 10^2$	
324. MeV	$4.161 \times 10^2$	2.029			0.000	2.029	<i>Minimum ionization</i>	
400. MeV	$4.945 \times 10^2$	2.035			0.000	2.035	$1.749 \times 10^2$	
800. MeV	$8.995 \times 10^2$	2.108	0.000		0.000	2.108	$3.681 \times 10^2$	
1.00 GeV	$1.101 \times 10^3$	2.142	0.000		0.000	2.142	$4.622 \times 10^2$	
1.40 GeV	$1.502 \times 10^3$	2.197	0.000		0.001	2.198	$6.464 \times 10^2$	
2.00 GeV	$2.103 \times 10^3$	2.258	0.000	0.000	0.001	2.260	$9.154 \times 10^2$	
3.00 GeV	$3.104 \times 10^3$	2.327	0.001	0.001	0.001	2.330	$1.351 \times 10^3$	
4.00 GeV	$4.104 \times 10^3$	2.376	0.001	0.001	0.002	2.380	$1.775 \times 10^3$	
8.00 GeV	$8.105 \times 10^3$	2.487	0.003	0.003	0.004	2.497	$3.411 \times 10^3$	
10.0 GeV	$1.011 \times 10^4$	2.520	0.004	0.004	0.005	2.534	$4.206 \times 10^3$	
14.0 GeV	$1.411 \times 10^4$	2.570	0.006	0.007	0.007	2.589	$5.767 \times 10^3$	
20.0 GeV	$2.011 \times 10^4$	2.619	0.010	0.011	0.009	2.649	$8.056 \times 10^3$	
30.0 GeV	$3.011 \times 10^4$	2.673	0.016	0.019	0.014	2.722	$1.178 \times 10^4$	
40.0 GeV	$4.011 \times 10^4$	2.710	0.022	0.028	0.018	2.779	$1.541 \times 10^4$	
80.0 GeV	$8.011 \times 10^4$	2.794	0.051	0.069	0.035	2.949	$2.936 \times 10^4$	
100. GeV	$1.001 \times 10^5$	2.820	0.067	0.091	0.043	3.021	$3.606 \times 10^4$	
140. GeV	$1.401 \times 10^5$	2.860	0.098	0.137	0.060	3.154	$4.902 \times 10^4$	
200. GeV	$2.001 \times 10^5$	2.901	0.148	0.209	0.084	3.343	$6.749 \times 10^4$	
300. GeV	$3.001 \times 10^5$	2.947	0.234	0.333	0.126	3.641	$9.614 \times 10^4$	
400. GeV	$4.001 \times 10^5$	2.980	0.323	0.462	0.169	3.934	$1.226 \times 10^5$	
800. GeV	$8.001 \times 10^5$	3.060	0.696	1.000	0.341	5.096	$2.116 \times 10^5$	
1.00 TeV	$1.000 \times 10^6$	3.086	0.888	1.279	0.428	5.681	$2.488 \times 10^5$	
1.18 TeV	$1.184 \times 10^6$	3.106	1.065	1.531	0.510	6.212	<i>Muon critical energy</i>	
1.40 TeV	$1.400 \times 10^6$	3.126	1.276	1.833	0.607	6.842	$3.129 \times 10^5$	
2.00 TeV	$2.000 \times 10^6$	3.168	1.873	2.683	0.879	8.603	$3.909 \times 10^5$	
3.00 TeV	$3.000 \times 10^6$	3.217	2.873	4.098	1.347	11.536	$4.910 \times 10^5$	
4.00 TeV	$4.000 \times 10^6$	3.253	3.892	5.534	1.823	14.502	$5.681 \times 10^5$	
8.00 TeV	$8.000 \times 10^6$	3.339	8.021	11.319	3.806	26.486	$7.693 \times 10^5$	
10.0 TeV	$1.000 \times 10^7$	3.368	10.110	14.234	4.828	32.540	$8.373 \times 10^5$	
14.0 TeV	$1.400 \times 10^7$	3.411	14.280	20.040	6.934	44.667	$9.418 \times 10^5$	
20.0 TeV	$2.000 \times 10^7$	3.458	20.591	28.800	10.172	63.021	$1.054 \times 10^6$	
30.0 TeV	$3.000 \times 10^7$	3.513	31.101	43.372	15.793	93.779	$1.184 \times 10^6$	
40.0 TeV	$4.000 \times 10^7$	3.552	41.671	57.993	21.564	124.780	$1.276 \times 10^6$	
80.0 TeV	$8.000 \times 10^7$	3.648	84.052	116.528	45.798	250.026	$1.498 \times 10^6$	
100. TeV	$1.000 \times 10^8$	3.680	105.300	145.830	58.365	313.176	$1.569 \times 10^6$	