

**Table 201: Muons in Skeletal muscle (ICRP)**

$\langle Z/A \rangle$	$\rho$ [g/cm <sup>3</sup> ]	$I$ [eV]	$a$	$k = m_s$	$x_0$	$x_1$	$\bar{C}$	$\delta_0$
0.54938	1.040	75.3	0.08636	3.5330	0.2282	2.7999	3.4809	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	$4.704 \times 10^1$	7.879				7.879	$7.015 \times 10^{-1}$	
14.0 MeV	$5.616 \times 10^1$	6.146				6.146	$1.282 \times 10^0$	
20.0 MeV	$6.802 \times 10^1$	4.800				4.800	$2.400 \times 10^0$	
30.0 MeV	$8.509 \times 10^1$	3.724				3.724	$4.798 \times 10^0$	
40.0 MeV	$1.003 \times 10^2$	3.180				3.180	$7.723 \times 10^0$	
80.0 MeV	$1.527 \times 10^2$	2.387				2.387	$2.270 \times 10^1$	
100. MeV	$1.764 \times 10^2$	2.246				2.246	$3.136 \times 10^1$	
140. MeV	$2.218 \times 10^2$	2.092				2.092	$4.990 \times 10^1$	
200. MeV	$2.868 \times 10^2$	2.004				2.004	$7.932 \times 10^1$	
300. MeV	$3.917 \times 10^2$	1.970			0.000	1.971	$1.298 \times 10^2$	
318. MeV	$4.105 \times 10^2$	1.970			0.000	1.970	<i>Minimum ionization</i>	
400. MeV	$4.945 \times 10^2$	1.977			0.000	1.977	$1.805 \times 10^2$	
800. MeV	$8.995 \times 10^2$	2.052	0.000		0.000	2.052	$3.791 \times 10^2$	
1.00 GeV	$1.101 \times 10^3$	2.086	0.000		0.000	2.086	$4.758 \times 10^2$	
1.40 GeV	$1.502 \times 10^3$	2.141	0.000		0.001	2.142	$6.649 \times 10^2$	
2.00 GeV	$2.103 \times 10^3$	2.202	0.001	0.000	0.001	2.204	$9.407 \times 10^2$	
3.00 GeV	$3.104 \times 10^3$	2.272	0.001	0.001	0.001	2.275	$1.387 \times 10^3$	
4.00 GeV	$4.104 \times 10^3$	2.320	0.001	0.001	0.002	2.325	$1.821 \times 10^3$	
8.00 GeV	$8.105 \times 10^3$	2.431	0.004	0.003	0.004	2.442	$3.495 \times 10^3$	
10.0 GeV	$1.011 \times 10^4$	2.465	0.005	0.005	0.005	2.479	$4.308 \times 10^3$	
14.0 GeV	$1.411 \times 10^4$	2.513	0.007	0.008	0.007	2.535	$5.902 \times 10^3$	
20.0 GeV	$2.011 \times 10^4$	2.563	0.011	0.013	0.009	2.596	$8.239 \times 10^3$	
30.0 GeV	$3.011 \times 10^4$	2.616	0.018	0.023	0.013	2.670	$1.203 \times 10^4$	
40.0 GeV	$4.011 \times 10^4$	2.652	0.026	0.033	0.018	2.729	$1.574 \times 10^4$	
80.0 GeV	$8.011 \times 10^4$	2.735	0.060	0.080	0.034	2.909	$2.991 \times 10^4$	
100. GeV	$1.001 \times 10^5$	2.761	0.077	0.106	0.042	2.986	$3.670 \times 10^4$	
140. GeV	$1.401 \times 10^5$	2.799	0.114	0.159	0.059	3.131	$4.977 \times 10^4$	
200. GeV	$2.001 \times 10^5$	2.839	0.172	0.243	0.084	3.338	$6.833 \times 10^4$	
300. GeV	$3.001 \times 10^5$	2.885	0.271	0.386	0.125	3.667	$9.689 \times 10^4$	
400. GeV	$4.001 \times 10^5$	2.917	0.374	0.535	0.167	3.993	$1.230 \times 10^5$	
800. GeV	$8.001 \times 10^5$	2.996	0.803	1.155	0.337	5.292	$2.097 \times 10^5$	
1.00 TeV	$1.000 \times 10^6$	3.021	1.025	1.476	0.424	5.946	$2.454 \times 10^5$	
1.03 TeV	$1.032 \times 10^6$	3.025	1.060	1.527	0.438	6.051	<i>Muon critical energy</i>	
1.40 TeV	$1.400 \times 10^6$	3.060	1.471	2.114	0.601	7.246	$3.062 \times 10^5$	
2.00 TeV	$2.000 \times 10^6$	3.102	2.157	3.091	0.870	9.221	$3.795 \times 10^5$	
3.00 TeV	$3.000 \times 10^6$	3.150	3.307	4.719	1.333	12.509	$4.723 \times 10^5$	
4.00 TeV	$4.000 \times 10^6$	3.185	4.477	6.369	1.803	15.834	$5.432 \times 10^5$	
8.00 TeV	$8.000 \times 10^6$	3.270	9.214	13.014	3.764	29.263	$7.262 \times 10^5$	
10.0 TeV	$1.000 \times 10^7$	3.298	11.610	16.361	4.774	36.044	$7.876 \times 10^5$	
14.0 TeV	$1.400 \times 10^7$	3.341	16.392	23.030	6.855	49.619	$8.818 \times 10^5$	
20.0 TeV	$2.000 \times 10^7$	3.387	23.625	33.089	10.053	70.154	$9.831 \times 10^5$	
30.0 TeV	$3.000 \times 10^7$	3.440	35.670	49.825	15.603	104.538	$1.099 \times 10^6$	
40.0 TeV	$4.000 \times 10^7$	3.479	47.779	66.615	21.300	139.173	$1.182 \times 10^6$	
80.0 TeV	$8.000 \times 10^7$	3.573	96.349	133.832	45.207	278.961	$1.381 \times 10^6$	
100. TeV	$1.000 \times 10^8$	3.605	120.703	167.479	57.600	349.388	$1.445 \times 10^6$	