

**Table 047: Muons in Silver**

Z	A [g/mol]	$\rho$ [g/cm <sup>3</sup> ]	I [eV]	a	$k = m_s$	$x_0$	$x_1$	$\bar{C}$	$\delta_0$
47 (Ag)	107.8682 (2)	10.500	470.0	0.24585	2.6899	0.0657	3.1074	5.0630	0.14
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	$4.704 \times 10^1$	4.721				4.721	$1.206 \times 10^0$		
14.0 MeV	$5.616 \times 10^1$	3.732				3.733	$2.168 \times 10^0$		
20.0 MeV	$6.802 \times 10^1$	2.950				2.950	$3.996 \times 10^0$		
30.0 MeV	$8.509 \times 10^1$	2.314				2.314	$7.874 \times 10^0$		
40.0 MeV	$1.003 \times 10^2$	1.988				1.988	$1.257 \times 10^1$		
80.0 MeV	$1.527 \times 10^2$	1.513				1.513	$3.634 \times 10^1$		
100. MeV	$1.764 \times 10^2$	1.428				1.428	$4.998 \times 10^1$		
140. MeV	$2.218 \times 10^2$	1.346				1.346	$7.896 \times 10^1$		
200. MeV	$2.868 \times 10^2$	1.305				1.306	$1.244 \times 10^2$		
253. MeV	$3.431 \times 10^2$	1.299				1.299	<i>Minimum ionization</i>		
300. MeV	$3.917 \times 10^2$	1.303	0.000		0.000	1.303	$2.012 \times 10^2$		
400. MeV	$4.945 \times 10^2$	1.321	0.000		0.000	1.321	$2.775 \times 10^2$		
800. MeV	$8.995 \times 10^2$	1.404	0.001		0.000	1.405	$5.707 \times 10^2$		
1.00 GeV	$1.101 \times 10^3$	1.438	0.001		0.000	1.440	$7.113 \times 10^2$		
1.40 GeV	$1.502 \times 10^3$	1.492	0.002	0.000	0.001	1.495	$9.837 \times 10^2$		
2.00 GeV	$2.103 \times 10^3$	1.550	0.003	0.001	0.001	1.555	$1.377 \times 10^3$		
3.00 GeV	$3.104 \times 10^3$	1.616	0.005	0.003	0.001	1.625	$2.005 \times 10^3$		
4.00 GeV	$4.104 \times 10^3$	1.662	0.007	0.005	0.002	1.676	$2.610 \times 10^3$		
8.00 GeV	$8.105 \times 10^3$	1.765	0.017	0.016	0.003	1.802	$4.903 \times 10^3$		
10.0 GeV	$1.011 \times 10^4$	1.796	0.022	0.023	0.004	1.845	$6.000 \times 10^3$		
14.0 GeV	$1.411 \times 10^4$	1.840	0.034	0.037	0.005	1.917	$8.125 \times 10^3$		
20.0 GeV	$2.011 \times 10^4$	1.884	0.053	0.060	0.008	2.005	$1.118 \times 10^4$		
30.0 GeV	$3.011 \times 10^4$	1.930	0.086	0.105	0.011	2.134	$1.601 \times 10^4$		
40.0 GeV	$4.011 \times 10^4$	1.961	0.121	0.154	0.015	2.252	$2.057 \times 10^4$		
80.0 GeV	$8.011 \times 10^4$	2.029	0.274	0.370	0.029	2.703	$3.675 \times 10^4$		
100. GeV	$1.001 \times 10^5$	2.050	0.355	0.486	0.036	2.928	$4.386 \times 10^4$		
140. GeV	$1.401 \times 10^5$	2.081	0.521	0.725	0.051	3.379	$5.657 \times 10^4$		
200. GeV	$2.001 \times 10^5$	2.113	0.781	1.103	0.072	4.071	$7.273 \times 10^4$		
215. GeV	$2.149 \times 10^5$	2.119	0.846	1.196	0.078	4.239	<i>Muon critical energy</i>		
300. GeV	$3.001 \times 10^5$	2.149	1.226	1.737	0.108	5.221	$9.438 \times 10^4$		
400. GeV	$4.001 \times 10^5$	2.175	1.685	2.393	0.144	6.398	$1.117 \times 10^5$		
800. GeV	$8.001 \times 10^5$	2.237	3.582	5.084	0.292	11.195	$1.583 \times 10^5$		
1.00 TeV	$1.000 \times 10^6$	2.257	4.557	6.460	0.367	13.642	$1.745 \times 10^5$		
1.40 TeV	$1.400 \times 10^6$	2.288	6.511	9.207	0.519	18.527	$1.996 \times 10^5$		
2.00 TeV	$2.000 \times 10^6$	2.321	9.501	13.399	0.751	25.974	$2.268 \times 10^5$		
3.00 TeV	$3.000 \times 10^6$	2.359	14.493	20.366	1.149	38.369	$2.583 \times 10^5$		
4.00 TeV	$4.000 \times 10^6$	2.387	19.553	27.407	1.553	50.901	$2.809 \times 10^5$		
8.00 TeV	$8.000 \times 10^6$	2.454	39.957	55.715	3.227	101.354	$3.355 \times 10^5$		
10.0 TeV	$1.000 \times 10^7$	2.477	50.241	69.945	4.086	126.750	$3.531 \times 10^5$		
14.0 TeV	$1.400 \times 10^7$	2.511	70.753	98.337	5.851	177.453	$3.796 \times 10^5$		
20.0 TeV	$2.000 \times 10^7$	2.547	101.706	141.108	8.556	253.918	$4.078 \times 10^5$		
30.0 TeV	$3.000 \times 10^7$	2.589	153.235	212.274	13.231	381.330	$4.397 \times 10^5$		
40.0 TeV	$4.000 \times 10^7$	2.620	204.952	283.611	18.017	509.201	$4.623 \times 10^5$		
80.0 TeV	$8.000 \times 10^7$	2.695	412.144	569.156	37.999	1021.995	$5.166 \times 10^5$		
100. TeV	$1.000 \times 10^8$	2.720	515.920	712.060	48.320	1279.021	$5.341 \times 10^5$		