

**Table 100: Muons in Acetone (CH<sub>3</sub>CHCH<sub>3</sub>)**

$\langle Z/A \rangle$	$\rho$ [g/cm <sup>3</sup> ]	$I$ [eV]	$a$	$k = m_s$	$x_0$	$x_1$	$\bar{C}$	$\delta_0$
0.55097	0.790	64.2	0.11100	3.4047	0.2197	2.6928	3.4341	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	$4.704 \times 10^1$	8.065				8.065	$6.843 \times 10^{-1}$	
14.0 MeV	$5.616 \times 10^1$	6.286				6.286	$1.252 \times 10^0$	
20.0 MeV	$6.802 \times 10^1$	4.906				4.906	$2.345 \times 10^0$	
30.0 MeV	$8.509 \times 10^1$	3.803				3.803	$4.693 \times 10^0$	
40.0 MeV	$1.003 \times 10^2$	3.246				3.246	$7.557 \times 10^0$	
80.0 MeV	$1.527 \times 10^2$	2.434				2.434	$2.224 \times 10^1$	
100. MeV	$1.764 \times 10^2$	2.288				2.288	$3.074 \times 10^1$	
140. MeV	$2.218 \times 10^2$	2.130				2.130	$4.894 \times 10^1$	
200. MeV	$2.868 \times 10^2$	2.039				2.039	$7.784 \times 10^1$	
300. MeV	$3.917 \times 10^2$	2.003			0.000	2.004	$1.275 \times 10^2$	
318. MeV	$4.105 \times 10^2$	2.003			0.000	2.003	<i>Minimum ionization</i>	
400. MeV	$4.945 \times 10^2$	2.009			0.000	2.009	$1.774 \times 10^2$	
800. MeV	$8.995 \times 10^2$	2.083	0.000		0.000	2.083	$3.729 \times 10^2$	
1.00 GeV	$1.101 \times 10^3$	2.117	0.000		0.000	2.118	$4.681 \times 10^2$	
1.40 GeV	$1.502 \times 10^3$	2.172	0.000		0.001	2.173	$6.545 \times 10^2$	
2.00 GeV	$2.103 \times 10^3$	2.233	0.001	0.000	0.001	2.235	$9.265 \times 10^2$	
3.00 GeV	$3.104 \times 10^3$	2.303	0.001	0.001	0.001	2.306	$1.366 \times 10^3$	
4.00 GeV	$4.104 \times 10^3$	2.351	0.001	0.001	0.002	2.356	$1.795 \times 10^3$	
8.00 GeV	$8.105 \times 10^3$	2.462	0.003	0.003	0.004	2.472	$3.448 \times 10^3$	
10.0 GeV	$1.011 \times 10^4$	2.495	0.004	0.004	0.005	2.509	$4.251 \times 10^3$	
14.0 GeV	$1.411 \times 10^4$	2.544	0.006	0.007	0.007	2.564	$5.827 \times 10^3$	
20.0 GeV	$2.011 \times 10^4$	2.593	0.010	0.011	0.009	2.624	$8.139 \times 10^3$	
30.0 GeV	$3.011 \times 10^4$	2.646	0.016	0.020	0.014	2.696	$1.190 \times 10^4$	
40.0 GeV	$4.011 \times 10^4$	2.683	0.023	0.029	0.018	2.752	$1.557 \times 10^4$	
80.0 GeV	$8.011 \times 10^4$	2.766	0.052	0.070	0.035	2.922	$2.965 \times 10^4$	
100. GeV	$1.001 \times 10^5$	2.792	0.067	0.092	0.043	2.994	$3.641 \times 10^4$	
140. GeV	$1.401 \times 10^5$	2.830	0.100	0.138	0.059	3.128	$4.947 \times 10^4$	
200. GeV	$2.001 \times 10^5$	2.871	0.150	0.212	0.084	3.317	$6.809 \times 10^4$	
300. GeV	$3.001 \times 10^5$	2.916	0.237	0.337	0.126	3.617	$9.695 \times 10^4$	
400. GeV	$4.001 \times 10^5$	2.949	0.327	0.468	0.168	3.913	$1.235 \times 10^5$	
800. GeV	$8.001 \times 10^5$	3.028	0.704	1.013	0.340	5.085	$2.129 \times 10^5$	
1.00 TeV	$1.000 \times 10^6$	3.053	0.899	1.295	0.427	5.674	$2.502 \times 10^5$	
1.16 TeV	$1.160 \times 10^6$	3.070	1.055	1.518	0.498	6.141	<i>Muon critical energy</i>	
1.40 TeV	$1.400 \times 10^6$	3.092	1.292	1.856	0.606	6.845	$3.142 \times 10^5$	
2.00 TeV	$2.000 \times 10^6$	3.134	1.895	2.716	0.877	8.622	$3.922 \times 10^5$	
3.00 TeV	$3.000 \times 10^6$	3.182	2.907	4.148	1.344	11.582	$4.919 \times 10^5$	
4.00 TeV	$4.000 \times 10^6$	3.217	3.938	5.601	1.819	14.576	$5.687 \times 10^5$	
8.00 TeV	$8.000 \times 10^6$	3.303	8.112	11.455	3.798	26.669	$7.687 \times 10^5$	
10.0 TeV	$1.000 \times 10^7$	3.331	10.225	14.404	4.818	32.778	$8.362 \times 10^5$	
14.0 TeV	$1.400 \times 10^7$	3.374	14.441	20.280	6.919	45.014	$9.399 \times 10^5$	
20.0 TeV	$2.000 \times 10^7$	3.420	20.821	29.143	10.149	63.532	$1.052 \times 10^6$	
30.0 TeV	$3.000 \times 10^7$	3.473	31.445	43.888	15.757	94.563	$1.180 \times 10^6$	
40.0 TeV	$4.000 \times 10^7$	3.512	42.128	58.682	21.513	125.836	$1.271 \times 10^6$	
80.0 TeV	$8.000 \times 10^7$	3.607	84.965	117.910	45.684	252.166	$1.491 \times 10^6$	
100. TeV	$1.000 \times 10^8$	3.638	106.440	147.560	58.218	315.857	$1.562 \times 10^6$	