

## Muons in dimethyl sulfoxide (CH<sub>3</sub>)<sub>2</sub>SO

	$\langle Z/A \rangle$	$\rho$ [g/cm <sup>3</sup> ]	$I$ [eV]	$a$	$k = m_s$	$x_0$	$x_1$	$\bar{C}$	$\delta_0$
	0.53757	1.101	98.6	0.06619	3.5708	0.2021	3.1263	3.9844	0.00
$T$	$p$ [MeV/c]	Ionization	Brems	Pair prod	Photonucl	Total	CSDA range [g/cm <sup>2</sup> ]		
				[MeV cm <sup>2</sup> /g]					
10.0 MeV	$4.704 \times 10^1$	7.440				7.440			$7.447 \times 10^{-1}$
14.0 MeV	$5.616 \times 10^1$	5.812				5.812			$1.359 \times 10^0$
20.0 MeV	$6.802 \times 10^1$	4.545				4.545			$2.540 \times 10^0$
30.0 MeV	$8.509 \times 10^1$	3.531				3.531			$5.071 \times 10^0$
40.0 MeV	$1.003 \times 10^2$	3.017				3.018			$8.155 \times 10^0$
80.0 MeV	$1.527 \times 10^2$	2.270				2.270			$2.392 \times 10^1$
100. MeV	$1.764 \times 10^2$	2.135				2.135			$3.303 \times 10^1$
140. MeV	$2.218 \times 10^2$	1.993				1.993			$5.251 \times 10^1$
200. MeV	$2.868 \times 10^2$	1.914				1.914			$8.334 \times 10^1$
300. MeV	$3.917 \times 10^2$	1.887			0.000	1.888			$1.361 \times 10^2$
300. MeV	$3.919 \times 10^2$	1.887			0.000	1.888			<i>Minimum ionization</i>
400. MeV	$4.945 \times 10^2$	1.897			0.000	1.898			$1.890 \times 10^2$
800. MeV	$8.995 \times 10^2$	1.979	0.000		0.000	1.979			$3.954 \times 10^2$
1.00 GeV	$1.101 \times 10^3$	2.014	0.000		0.000	2.015			$4.955 \times 10^2$
1.40 GeV	$1.502 \times 10^3$	2.072	0.000	0.000	0.001	2.073			$6.911 \times 10^2$
2.00 GeV	$2.103 \times 10^3$	2.135	0.001	0.000	0.001	2.137			$9.759 \times 10^2$
3.00 GeV	$3.104 \times 10^3$	2.207	0.001	0.001	0.001	2.210			$1.435 \times 10^3$
4.00 GeV	$4.104 \times 10^3$	2.256	0.002	0.002	0.002	2.262			$1.882 \times 10^3$
8.00 GeV	$8.105 \times 10^3$	2.369	0.005	0.005	0.004	2.383			$3.600 \times 10^3$
10.0 GeV	$1.011 \times 10^4$	2.403	0.006	0.006	0.005	2.421			$4.432 \times 10^3$
14.0 GeV	$1.411 \times 10^4$	2.453	0.010	0.011	0.006	2.480			$6.064 \times 10^3$
20.0 GeV	$2.011 \times 10^4$	2.502	0.015	0.017	0.009	2.544			$8.451 \times 10^3$
30.0 GeV	$3.011 \times 10^4$	2.555	0.025	0.030	0.013	2.624			$1.232 \times 10^4$
40.0 GeV	$4.011 \times 10^4$	2.591	0.035	0.045	0.017	2.688			$1.608 \times 10^4$
80.0 GeV	$8.011 \times 10^4$	2.673	0.079	0.107	0.034	2.894			$3.040 \times 10^4$
100. GeV	$1.001 \times 10^5$	2.698	0.103	0.141	0.042	2.985			$3.720 \times 10^4$
140. GeV	$1.401 \times 10^5$	2.736	0.152	0.212	0.058	3.158			$5.023 \times 10^4$
200. GeV	$2.001 \times 10^5$	2.775	0.228	0.323	0.082	3.409			$6.851 \times 10^4$
300. GeV	$3.001 \times 10^5$	2.820	0.359	0.513	0.123	3.816			$9.622 \times 10^4$
400. GeV	$4.001 \times 10^5$	2.852	0.495	0.710	0.164	4.222			$1.211 \times 10^5$
800. GeV	$8.001 \times 10^5$	2.929	1.061	1.527	0.332	5.848			$2.013 \times 10^5$
802. GeV	$8.025 \times 10^5$	2.929	1.064	1.532	0.333	5.858			<i>Muon critical energy</i>
1.00 TeV	$1.000 \times 10^6$	2.954	1.352	1.947	0.417	6.670			$2.333 \times 10^5$
1.40 TeV	$1.400 \times 10^6$	2.992	1.939	2.785	0.591	8.307			$2.869 \times 10^5$
2.00 TeV	$2.000 \times 10^6$	3.033	2.839	4.068	0.856	10.796			$3.501 \times 10^5$
3.00 TeV	$3.000 \times 10^6$	3.080	4.346	6.202	1.311	14.939			$4.285 \times 10^5$
4.00 TeV	$4.000 \times 10^6$	3.114	5.878	8.364	1.773	19.129			$4.875 \times 10^5$
8.00 TeV	$8.000 \times 10^6$	3.197	12.073	17.067	3.700	36.037			$6.374 \times 10^5$
10.0 TeV	$1.000 \times 10^7$	3.224	15.203	21.448	4.692	44.567			$6.872 \times 10^5$
14.0 TeV	$1.400 \times 10^7$	3.266	21.453	30.179	6.734	61.632			$7.633 \times 10^5$
20.0 TeV	$2.000 \times 10^7$	3.311	30.901	43.343	9.872	87.428			$8.446 \times 10^5$
30.0 TeV	$3.000 \times 10^7$	3.363	46.620	65.252	15.314	130.550			$9.376 \times 10^5$
40.0 TeV	$4.000 \times 10^7$	3.401	62.415	87.227	20.898	173.941			$1.004 \times 10^6$
80.0 TeV	$8.000 \times 10^7$	3.494	125.746	175.196	44.321	348.758			$1.163 \times 10^6$
100. TeV	$1.000 \times 10^8$	3.524	157.493	219.230	56.458	436.705			$1.214 \times 10^6$