

**Table 147: Muons in Dichlorodiethyl ether C<sub>4</sub>Cl<sub>2</sub>H<sub>8</sub>O**

$\langle Z/A \rangle$	$\rho$ [g/cm <sup>3</sup> ]	$I$ [eV]	$a$	$k = m_s$	$x_0$	$x_1$	$\bar{C}$	$\delta_0$
0.51744	1.220	103.3	0.06799	3.5250	0.1773	3.1586	4.0135	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	$4.704 \times 10^1$	7.117				7.117	$7.789 \times 10^{-1}$	
14.0 MeV	$5.616 \times 10^1$	5.561				5.561	$1.421 \times 10^0$	
20.0 MeV	$6.802 \times 10^1$	4.349				4.349	$2.655 \times 10^0$	
30.0 MeV	$8.509 \times 10^1$	3.380				3.380	$5.300 \times 10^0$	
40.0 MeV	$1.003 \times 10^2$	2.889				2.889	$8.521 \times 10^0$	
80.0 MeV	$1.527 \times 10^2$	2.174				2.174	$2.499 \times 10^1$	
100. MeV	$1.764 \times 10^2$	2.042				2.042	$3.450 \times 10^1$	
140. MeV	$2.218 \times 10^2$	1.907				1.907	$5.486 \times 10^1$	
200. MeV	$2.868 \times 10^2$	1.832				1.832	$8.708 \times 10^1$	
298. MeV	$3.894 \times 10^2$	1.807			0.000	1.807	<i>Minimum ionization</i>	
300. MeV	$3.917 \times 10^2$	1.807			0.000	1.807	$1.422 \times 10^2$	
400. MeV	$4.945 \times 10^2$	1.817			0.000	1.817	$1.974 \times 10^2$	
800. MeV	$8.995 \times 10^2$	1.895	0.000		0.000	1.896	$4.129 \times 10^2$	
1.00 GeV	$1.101 \times 10^3$	1.930	0.000		0.000	1.931	$5.174 \times 10^2$	
1.40 GeV	$1.502 \times 10^3$	1.986	0.001	0.000	0.001	1.987	$7.215 \times 10^2$	
2.00 GeV	$2.103 \times 10^3$	2.047	0.001	0.000	0.001	2.049	$1.019 \times 10^3$	
3.00 GeV	$3.104 \times 10^3$	2.116	0.001	0.001	0.001	2.120	$1.498 \times 10^3$	
4.00 GeV	$4.104 \times 10^3$	2.165	0.002	0.002	0.002	2.170	$1.964 \times 10^3$	
8.00 GeV	$8.105 \times 10^3$	2.274	0.005	0.005	0.004	2.288	$3.753 \times 10^3$	
10.0 GeV	$1.011 \times 10^4$	2.307	0.007	0.007	0.005	2.326	$4.619 \times 10^3$	
14.0 GeV	$1.411 \times 10^4$	2.355	0.010	0.011	0.006	2.383	$6.317 \times 10^3$	
20.0 GeV	$2.011 \times 10^4$	2.403	0.016	0.019	0.009	2.447	$8.800 \times 10^3$	
30.0 GeV	$3.011 \times 10^4$	2.454	0.027	0.033	0.013	2.527	$1.282 \times 10^4$	
40.0 GeV	$4.011 \times 10^4$	2.489	0.038	0.048	0.017	2.592	$1.672 \times 10^4$	
80.0 GeV	$8.011 \times 10^4$	2.568	0.085	0.115	0.033	2.802	$3.154 \times 10^4$	
100. GeV	$1.001 \times 10^5$	2.592	0.110	0.152	0.041	2.896	$3.856 \times 10^4$	
140. GeV	$1.401 \times 10^5$	2.628	0.163	0.228	0.057	3.077	$5.196 \times 10^4$	
200. GeV	$2.001 \times 10^5$	2.666	0.244	0.348	0.081	3.341	$7.067 \times 10^4$	
300. GeV	$3.001 \times 10^5$	2.709	0.385	0.551	0.122	3.768	$9.883 \times 10^4$	
400. GeV	$4.001 \times 10^5$	2.740	0.530	0.762	0.163	4.195	$1.240 \times 10^5$	
730. GeV	$7.297 \times 10^5$	2.804	1.026	1.479	0.299	5.608	<i>Muon critical energy</i>	
800. GeV	$8.001 \times 10^5$	2.814	1.134	1.635	0.329	5.912	$2.039 \times 10^5$	
1.00 TeV	$1.000 \times 10^6$	2.838	1.445	2.084	0.413	6.781	$2.355 \times 10^5$	
1.40 TeV	$1.400 \times 10^6$	2.875	2.072	2.980	0.586	8.512	$2.880 \times 10^5$	
2.00 TeV	$2.000 \times 10^6$	2.914	3.032	4.350	0.848	11.145	$3.495 \times 10^5$	
3.00 TeV	$3.000 \times 10^6$	2.959	4.640	6.630	1.299	15.529	$4.252 \times 10^5$	
4.00 TeV	$4.000 \times 10^6$	2.992	6.274	8.939	1.757	19.963	$4.818 \times 10^5$	
8.00 TeV	$8.000 \times 10^6$	3.072	12.880	18.232	3.665	37.850	$6.249 \times 10^5$	
10.0 TeV	$1.000 \times 10^7$	3.099	16.217	22.909	4.647	46.873	$6.723 \times 10^5$	
14.0 TeV	$1.400 \times 10^7$	3.139	22.879	32.231	6.670	64.919	$7.445 \times 10^5$	
20.0 TeV	$2.000 \times 10^7$	3.182	32.949	46.286	9.775	92.192	$8.217 \times 10^5$	
30.0 TeV	$3.000 \times 10^7$	3.232	49.700	69.678	15.160	137.771	$9.099 \times 10^5$	
40.0 TeV	$4.000 \times 10^7$	3.269	66.529	93.140	20.685	183.623	$9.725 \times 10^5$	
80.0 TeV	$8.000 \times 10^7$	3.358	134.000	187.059	43.847	368.264	$1.123 \times 10^6$	
100. TeV	$1.000 \times 10^8$	3.387	167.818	234.069	55.844	461.119	$1.172 \times 10^6$	