

## Muons in 1,2-dichlorobenzene (C<sub>6</sub>H<sub>4</sub>Cl<sub>2</sub>)

	$\langle Z/A \rangle$	$\rho$ [g/cm <sup>3</sup> ]	$I$ [eV]	$a$	$k = m_s$	$x_0$	$x_1$	$\bar{C}$	$\delta_0$
	0.50339	1.305	106.5	0.16010	3.0836	0.1587	2.8276	4.0348	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	$4.704 \times 10^1$	6.895				6.895	$8.043 \times 10^{-1}$		
14.0 MeV	$5.616 \times 10^1$	5.388				5.388	$1.467 \times 10^0$		
20.0 MeV	$6.802 \times 10^1$	4.215				4.215	$2.741 \times 10^0$		
30.0 MeV	$8.509 \times 10^1$	3.276				3.276	$5.469 \times 10^0$		
40.0 MeV	$1.003 \times 10^2$	2.800				2.801	$8.792 \times 10^0$		
80.0 MeV	$1.527 \times 10^2$	2.108				2.108	$2.578 \times 10^1$		
100. MeV	$1.764 \times 10^2$	1.979				1.979	$3.559 \times 10^1$		
140. MeV	$2.218 \times 10^2$	1.848				1.848	$5.661 \times 10^1$		
200. MeV	$2.868 \times 10^2$	1.775				1.776	$8.985 \times 10^1$		
298. MeV	$3.894 \times 10^2$	1.752			0.000	1.752	<i>Minimum ionization</i>		
300. MeV	$3.917 \times 10^2$	1.752			0.000	1.752	$1.467 \times 10^2$		
400. MeV	$4.945 \times 10^2$	1.762			0.000	1.763	$2.037 \times 10^2$		
800. MeV	$8.995 \times 10^2$	1.840	0.000		0.000	1.841	$4.257 \times 10^2$		
1.00 GeV	$1.101 \times 10^3$	1.874	0.000		0.000	1.875	$5.333 \times 10^2$		
1.40 GeV	$1.502 \times 10^3$	1.929	0.001	0.000	0.001	1.931	$7.434 \times 10^2$		
2.00 GeV	$2.103 \times 10^3$	1.989	0.001	0.000	0.001	1.992	$1.049 \times 10^3$		
3.00 GeV	$3.104 \times 10^3$	2.057	0.001	0.001	0.001	2.061	$1.542 \times 10^3$		
4.00 GeV	$4.104 \times 10^3$	2.104	0.002	0.002	0.002	2.110	$2.021 \times 10^3$		
8.00 GeV	$8.105 \times 10^3$	2.211	0.005	0.005	0.004	2.225	$3.861 \times 10^3$		
10.0 GeV	$1.011 \times 10^4$	2.243	0.007	0.007	0.005	2.262	$4.752 \times 10^3$		
14.0 GeV	$1.411 \times 10^4$	2.290	0.010	0.011	0.006	2.318	$6.498 \times 10^3$		
20.0 GeV	$2.011 \times 10^4$	2.336	0.016	0.018	0.009	2.379	$9.051 \times 10^3$		
30.0 GeV	$3.011 \times 10^4$	2.386	0.026	0.032	0.013	2.457	$1.318 \times 10^4$		
40.0 GeV	$4.011 \times 10^4$	2.419	0.037	0.047	0.017	2.520	$1.720 \times 10^4$		
80.0 GeV	$8.011 \times 10^4$	2.495	0.083	0.113	0.033	2.725	$3.244 \times 10^4$		
100. GeV	$1.001 \times 10^5$	2.519	0.108	0.149	0.041	2.817	$3.966 \times 10^4$		
140. GeV	$1.401 \times 10^5$	2.554	0.159	0.223	0.057	2.994	$5.343 \times 10^4$		
200. GeV	$2.001 \times 10^5$	2.591	0.239	0.341	0.081	3.252	$7.265 \times 10^4$		
300. GeV	$3.001 \times 10^5$	2.633	0.376	0.539	0.122	3.670	$1.016 \times 10^5$		
400. GeV	$4.001 \times 10^5$	2.662	0.518	0.746	0.163	4.089	$1.274 \times 10^5$		
723. GeV	$7.235 \times 10^5$	2.724	0.994	1.433	0.296	5.448	<i>Muon critical energy</i>		
800. GeV	$8.001 \times 10^5$	2.734	1.109	1.599	0.329	5.772	$2.093 \times 10^5$		
1.00 TeV	$1.000 \times 10^6$	2.758	1.413	2.039	0.413	6.623	$2.416 \times 10^5$		
1.40 TeV	$1.400 \times 10^6$	2.793	2.026	2.915	0.586	8.320	$2.954 \times 10^5$		
2.00 TeV	$2.000 \times 10^6$	2.832	2.965	4.256	0.848	10.901	$3.583 \times 10^5$		
3.00 TeV	$3.000 \times 10^6$	2.876	4.537	6.486	1.298	15.198	$4.356 \times 10^5$		
4.00 TeV	$4.000 \times 10^6$	2.908	6.134	8.745	1.757	19.544	$4.935 \times 10^5$		
8.00 TeV	$8.000 \times 10^6$	2.986	12.593	17.837	3.664	37.079	$6.396 \times 10^5$		
10.0 TeV	$1.000 \times 10^7$	3.011	15.855	22.413	4.645	45.925	$6.880 \times 10^5$		
14.0 TeV	$1.400 \times 10^7$	3.051	22.366	31.534	6.667	63.617	$7.617 \times 10^5$		
20.0 TeV	$2.000 \times 10^7$	3.093	32.208	45.284	9.770	90.356	$8.405 \times 10^5$		
30.0 TeV	$3.000 \times 10^7$	3.142	48.581	68.171	15.153	135.047	$9.304 \times 10^5$		
40.0 TeV	$4.000 \times 10^7$	3.177	65.029	91.126	20.674	180.007	$9.943 \times 10^5$		
80.0 TeV	$8.000 \times 10^7$	3.264	130.963	183.016	43.821	361.065	$1.148 \times 10^6$		
100. TeV	$1.000 \times 10^8$	3.292	164.008	229.011	55.810	452.122	$1.198 \times 10^6$		