

## Muons in benzene C<sub>6</sub>H<sub>6</sub>

	$\langle Z/A \rangle$	$\rho$ [g/cm <sup>3</sup> ]	$I$ [eV]	$a$	$k = m_s$	$x_0$	$x_1$	$\bar{C}$	$\delta_0$
	0.53769	0.879	63.4	0.16519	3.2174	0.1710	2.5091	3.3269	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	$4.704 \times 10^1$	7.883				7.883		$7.000 \times 10^{-1}$	
14.0 MeV	$5.616 \times 10^1$	6.144				6.144		$1.281 \times 10^0$	
20.0 MeV	$6.802 \times 10^1$	4.795				4.795		$2.399 \times 10^0$	
30.0 MeV	$8.509 \times 10^1$	3.717				3.717		$4.801 \times 10^0$	
40.0 MeV	$1.003 \times 10^2$	3.172				3.172		$7.733 \times 10^0$	
80.0 MeV	$1.527 \times 10^2$	2.379				2.379		$2.276 \times 10^1$	
100. MeV	$1.764 \times 10^2$	2.229				2.229		$3.147 \times 10^1$	
140. MeV	$2.218 \times 10^2$	2.075				2.076		$5.015 \times 10^1$	
200. MeV	$2.868 \times 10^2$	1.987				1.987		$7.981 \times 10^1$	
300. MeV	$3.917 \times 10^2$	1.952			0.000	1.952		$1.307 \times 10^2$	
318. MeV	$4.105 \times 10^2$	1.951			0.000	1.952		<i>Minimum ionization</i>	
400. MeV	$4.945 \times 10^2$	1.958			0.000	1.958		$1.819 \times 10^2$	
800. MeV	$8.995 \times 10^2$	2.030	0.000		0.000	2.030		$3.826 \times 10^2$	
1.00 GeV	$1.101 \times 10^3$	2.063	0.000		0.000	2.064		$4.803 \times 10^2$	
1.40 GeV	$1.502 \times 10^3$	2.117	0.000		0.001	2.118		$6.716 \times 10^2$	
2.00 GeV	$2.103 \times 10^3$	2.176	0.000	0.000	0.001	2.178		$9.507 \times 10^2$	
3.00 GeV	$3.104 \times 10^3$	2.243	0.001	0.001	0.001	2.246		$1.402 \times 10^3$	
4.00 GeV	$4.104 \times 10^3$	2.290	0.001	0.001	0.002	2.294		$1.843 \times 10^3$	
8.00 GeV	$8.105 \times 10^3$	2.397	0.003	0.003	0.004	2.407		$3.540 \times 10^3$	
10.0 GeV	$1.011 \times 10^4$	2.430	0.004	0.004	0.005	2.442		$4.364 \times 10^3$	
14.0 GeV	$1.411 \times 10^4$	2.477	0.006	0.006	0.007	2.496		$5.983 \times 10^3$	
20.0 GeV	$2.011 \times 10^4$	2.524	0.009	0.010	0.009	2.553		$8.359 \times 10^3$	
30.0 GeV	$3.011 \times 10^4$	2.576	0.015	0.018	0.014	2.623		$1.222 \times 10^4$	
40.0 GeV	$4.011 \times 10^4$	2.611	0.021	0.027	0.018	2.677		$1.599 \times 10^4$	
80.0 GeV	$8.011 \times 10^4$	2.692	0.049	0.065	0.035	2.841		$3.047 \times 10^4$	
100. GeV	$1.001 \times 10^5$	2.718	0.063	0.086	0.043	2.910		$3.743 \times 10^4$	
140. GeV	$1.401 \times 10^5$	2.755	0.093	0.130	0.059	3.038		$5.087 \times 10^4$	
200. GeV	$2.001 \times 10^5$	2.795	0.141	0.199	0.084	3.219		$7.005 \times 10^4$	
300. GeV	$3.001 \times 10^5$	2.839	0.222	0.316	0.126	3.505		$9.981 \times 10^4$	
400. GeV	$4.001 \times 10^5$	2.871	0.307	0.439	0.168	3.786		$1.273 \times 10^5$	
800. GeV	$8.001 \times 10^5$	2.948	0.661	0.951	0.340	4.900		$2.199 \times 10^5$	
1.00 TeV	$1.000 \times 10^6$	2.973	0.844	1.216	0.428	5.460		$2.585 \times 10^5$	
1.19 TeV	$1.189 \times 10^6$	2.992	1.017	1.464	0.512	5.985		<i>Muon critical energy</i>	
1.40 TeV	$1.400 \times 10^6$	3.011	1.212	1.743	0.606	6.573		$3.252 \times 10^5$	
2.00 TeV	$2.000 \times 10^6$	3.052	1.779	2.552	0.878	8.262		$4.065 \times 10^5$	
3.00 TeV	$3.000 \times 10^6$	3.099	2.730	3.899	1.346	11.075		$5.107 \times 10^5$	
4.00 TeV	$4.000 \times 10^6$	3.133	3.698	5.266	1.822	13.919		$5.910 \times 10^5$	
8.00 TeV	$8.000 \times 10^6$	3.216	7.621	10.772	3.804	25.414		$8.006 \times 10^5$	
10.0 TeV	$1.000 \times 10^7$	3.244	9.606	13.547	4.825	31.223		$8.715 \times 10^5$	
14.0 TeV	$1.400 \times 10^7$	3.286	13.568	19.074	6.931	42.858		$9.804 \times 10^5$	
20.0 TeV	$2.000 \times 10^7$	3.331	19.563	27.412	10.166	60.472		$1.098 \times 10^6$	
30.0 TeV	$3.000 \times 10^7$	3.383	29.546	41.284	15.784	89.997		$1.232 \times 10^6$	
40.0 TeV	$4.000 \times 10^7$	3.420	39.586	55.203	21.551	119.760		$1.328 \times 10^6$	
80.0 TeV	$8.000 \times 10^7$	3.513	79.826	110.926	45.767	240.031		$1.560 \times 10^6$	
100. TeV	$1.000 \times 10^8$	3.544	99.994	138.821	58.325	300.684		$1.634 \times 10^6$	