

## Muons in nitrobenzene ( $C_6H_5NO_2$ )

	$\langle Z/A \rangle$	$\rho$ [g/cm <sup>3</sup> ]	$I$ [eV]	$a$	$k = m_s$	$x_0$	$x_1$	$\bar{C}$	$\delta_0$
	0.51986	1.199	75.8	0.12727	3.3091	0.1777	2.6630	3.4073	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	$4.704 \times 10^1$	7.449				7.449			$7.420 \times 10^{-1}$
14.0 MeV	$5.616 \times 10^1$	5.811				5.811			$1.356 \times 10^0$
20.0 MeV	$6.802 \times 10^1$	4.538				4.538			$2.538 \times 10^0$
30.0 MeV	$8.509 \times 10^1$	3.521				3.521			$5.075 \times 10^0$
40.0 MeV	$1.003 \times 10^2$	3.007				3.007			$8.168 \times 10^0$
80.0 MeV	$1.527 \times 10^2$	2.258				2.258			$2.401 \times 10^1$
100. MeV	$1.764 \times 10^2$	2.117				2.118			$3.318 \times 10^1$
140. MeV	$2.218 \times 10^2$	1.972				1.972			$5.285 \times 10^1$
200. MeV	$2.868 \times 10^2$	1.889				1.889			$8.405 \times 10^1$
300. MeV	$3.917 \times 10^2$	1.857			0.000	1.857			$1.376 \times 10^2$
317. MeV	$4.096 \times 10^2$	1.857			0.000	1.857			<i>Minimum ionization</i>
400. MeV	$4.945 \times 10^2$	1.863			0.000	1.864			$1.914 \times 10^2$
800. MeV	$8.995 \times 10^2$	1.935	0.000		0.000	1.935			$4.021 \times 10^2$
1.00 GeV	$1.101 \times 10^3$	1.967	0.000		0.000	1.968			$5.046 \times 10^2$
1.40 GeV	$1.502 \times 10^3$	2.020	0.000		0.001	2.021			$7.050 \times 10^2$
2.00 GeV	$2.103 \times 10^3$	2.078	0.001	0.000	0.001	2.079			$9.975 \times 10^2$
3.00 GeV	$3.104 \times 10^3$	2.144	0.001	0.001	0.001	2.147			$1.470 \times 10^3$
4.00 GeV	$4.104 \times 10^3$	2.189	0.001	0.001	0.002	2.194			$1.931 \times 10^3$
8.00 GeV	$8.105 \times 10^3$	2.294	0.003	0.003	0.004	2.304			$3.704 \times 10^3$
10.0 GeV	$1.011 \times 10^4$	2.326	0.004	0.004	0.005	2.339			$4.566 \times 10^3$
14.0 GeV	$1.411 \times 10^4$	2.372	0.007	0.007	0.007	2.392			$6.255 \times 10^3$
20.0 GeV	$2.011 \times 10^4$	2.418	0.010	0.012	0.009	2.449			$8.733 \times 10^3$
30.0 GeV	$3.011 \times 10^4$	2.468	0.017	0.020	0.013	2.519			$1.276 \times 10^4$
40.0 GeV	$4.011 \times 10^4$	2.502	0.024	0.030	0.018	2.574			$1.668 \times 10^4$
80.0 GeV	$8.011 \times 10^4$	2.581	0.054	0.072	0.034	2.742			$3.171 \times 10^4$
100. GeV	$1.001 \times 10^5$	2.605	0.070	0.096	0.042	2.814			$3.891 \times 10^4$
140. GeV	$1.401 \times 10^5$	2.642	0.103	0.144	0.059	2.948			$5.280 \times 10^4$
200. GeV	$2.001 \times 10^5$	2.680	0.156	0.220	0.084	3.139			$7.251 \times 10^4$
300. GeV	$3.001 \times 10^5$	2.723	0.246	0.350	0.125	3.444			$1.029 \times 10^5$
400. GeV	$4.001 \times 10^5$	2.754	0.339	0.485	0.167	3.745			$1.307 \times 10^5$
800. GeV	$8.001 \times 10^5$	2.828	0.728	1.048	0.337	4.942			$2.234 \times 10^5$
1.00 TeV	$1.000 \times 10^6$	2.852	0.929	1.340	0.424	5.545			$2.616 \times 10^5$
1.06 TeV	$1.058 \times 10^6$	2.858	0.987	1.422	0.449	5.717			<i>Muon critical energy</i>
1.40 TeV	$1.400 \times 10^6$	2.889	1.334	1.919	0.601	6.744			$3.269 \times 10^5$
2.00 TeV	$2.000 \times 10^6$	2.929	1.956	2.808	0.871	8.564			$4.057 \times 10^5$
3.00 TeV	$3.000 \times 10^6$	2.974	3.000	4.287	1.334	11.596			$5.057 \times 10^5$
4.00 TeV	$4.000 \times 10^6$	3.007	4.061	5.788	1.806	14.662			$5.822 \times 10^5$
8.00 TeV	$8.000 \times 10^6$	3.088	8.360	11.832	3.770	27.050			$7.801 \times 10^5$
10.0 TeV	$1.000 \times 10^7$	3.114	10.534	14.877	4.781	33.306			$8.466 \times 10^5$
14.0 TeV	$1.400 \times 10^7$	3.155	14.872	20.943	6.865	45.835			$9.486 \times 10^5$
20.0 TeV	$2.000 \times 10^7$	3.198	21.435	30.093	10.068	64.794			$1.058 \times 10^6$
30.0 TeV	$3.000 \times 10^7$	3.249	32.362	45.317	15.626	96.554			$1.184 \times 10^6$
40.0 TeV	$4.000 \times 10^7$	3.285	43.348	60.590	21.332	128.555			$1.273 \times 10^6$
80.0 TeV	$8.000 \times 10^7$	3.375	87.387	121.738	45.278	257.777			$1.489 \times 10^6$
100. TeV	$1.000 \times 10^8$	3.404	109.462	152.348	57.691	322.905			$1.558 \times 10^6$