

## Muons in pyridine (C<sub>5</sub>H<sub>5</sub>N)

	$\langle Z/A \rangle$	$\rho$ [g/cm <sup>3</sup> ]	$I$ [eV]	$a$	$k = m_s$	$x_0$	$x_1$	$\bar{C}$	$\delta_0$
	0.53096	0.982	66.2	0.16399	3.1977	0.1670	2.5245	3.3148	0.00
$T$	$p$ [MeV/c]	Ionization	Brems	Pair prod	Photonucl	Total	CSDA range [g/cm <sup>2</sup> ]		
10.0 MeV	$4.704 \times 10^1$	7.742				7.742	$7.131 \times 10^{-1}$		
14.0 MeV	$5.616 \times 10^1$	6.035				6.035	$1.304 \times 10^0$		
20.0 MeV	$6.802 \times 10^1$	4.711				4.711	$2.443 \times 10^0$		
30.0 MeV	$8.509 \times 10^1$	3.652				3.652	$4.888 \times 10^0$		
40.0 MeV	$1.003 \times 10^2$	3.117				3.118	$7.870 \times 10^0$		
80.0 MeV	$1.527 \times 10^2$	2.338				2.338	$2.316 \times 10^1$		
100. MeV	$1.764 \times 10^2$	2.191				2.191	$3.202 \times 10^1$		
140. MeV	$2.218 \times 10^2$	2.040				2.040	$5.103 \times 10^1$		
200. MeV	$2.868 \times 10^2$	1.952				1.952	$8.121 \times 10^1$		
300. MeV	$3.917 \times 10^2$	1.918			0.000	1.919	$1.330 \times 10^2$		
318. MeV	$4.105 \times 10^2$	1.918			0.000	1.918	<i>Minimum ionization</i>		
400. MeV	$4.945 \times 10^2$	1.924			0.000	1.924	$1.851 \times 10^2$		
800. MeV	$8.995 \times 10^2$	1.995	0.000		0.000	1.996	$3.893 \times 10^2$		
1.00 GeV	$1.101 \times 10^3$	2.028	0.000		0.000	2.029	$4.887 \times 10^2$		
1.40 GeV	$1.502 \times 10^3$	2.081	0.000		0.001	2.082	$6.832 \times 10^2$		
2.00 GeV	$2.103 \times 10^3$	2.140	0.000	0.000	0.001	2.142	$9.671 \times 10^2$		
3.00 GeV	$3.104 \times 10^3$	2.207	0.001	0.001	0.001	2.210	$1.426 \times 10^3$		
4.00 GeV	$4.104 \times 10^3$	2.253	0.001	0.001	0.002	2.257	$1.874 \times 10^3$		
8.00 GeV	$8.105 \times 10^3$	2.359	0.003	0.003	0.004	2.369	$3.598 \times 10^3$		
10.0 GeV	$1.011 \times 10^4$	2.391	0.004	0.004	0.005	2.404	$4.436 \times 10^3$		
14.0 GeV	$1.411 \times 10^4$	2.438	0.006	0.006	0.007	2.457	$6.081 \times 10^3$		
20.0 GeV	$2.011 \times 10^4$	2.485	0.009	0.011	0.009	2.514	$8.494 \times 10^3$		
30.0 GeV	$3.011 \times 10^4$	2.536	0.016	0.019	0.014	2.584	$1.241 \times 10^4$		
40.0 GeV	$4.011 \times 10^4$	2.570	0.022	0.028	0.018	2.638	$1.624 \times 10^4$		
80.0 GeV	$8.011 \times 10^4$	2.651	0.050	0.067	0.034	2.803	$3.093 \times 10^4$		
100. GeV	$1.001 \times 10^5$	2.675	0.065	0.089	0.043	2.873	$3.797 \times 10^4$		
140. GeV	$1.401 \times 10^5$	2.713	0.096	0.134	0.059	3.002	$5.159 \times 10^4$		
200. GeV	$2.001 \times 10^5$	2.752	0.145	0.205	0.084	3.186	$7.098 \times 10^4$		
300. GeV	$3.001 \times 10^5$	2.796	0.229	0.326	0.126	3.477	$1.010 \times 10^5$		
400. GeV	$4.001 \times 10^5$	2.827	0.317	0.453	0.168	3.764	$1.286 \times 10^5$		
800. GeV	$8.001 \times 10^5$	2.903	0.681	0.979	0.339	4.903	$2.215 \times 10^5$		
1.00 TeV	$1.000 \times 10^6$	2.928	0.869	1.252	0.426	5.475	$2.601 \times 10^5$		
1.14 TeV	$1.145 \times 10^6$	2.943	1.005	1.447	0.491	5.886	<i>Muon critical energy</i>		
1.40 TeV	$1.400 \times 10^6$	2.965	1.248	1.795	0.605	6.613	$3.264 \times 10^5$		
2.00 TeV	$2.000 \times 10^6$	3.006	1.831	2.627	0.876	8.340	$4.071 \times 10^5$		
3.00 TeV	$3.000 \times 10^6$	3.052	2.809	4.013	1.342	11.217	$5.101 \times 10^5$		
4.00 TeV	$4.000 \times 10^6$	3.086	3.805	5.419	1.817	14.126	$5.894 \times 10^5$		
8.00 TeV	$8.000 \times 10^6$	3.168	7.837	11.084	3.793	25.882	$7.955 \times 10^5$		
10.0 TeV	$1.000 \times 10^7$	3.195	9.877	13.937	4.811	31.821	$8.651 \times 10^5$		
14.0 TeV	$1.400 \times 10^7$	3.236	13.949	19.622	6.909	43.717	$9.719 \times 10^5$		
20.0 TeV	$2.000 \times 10^7$	3.281	20.110	28.199	10.133	61.723	$1.087 \times 10^6$		
30.0 TeV	$3.000 \times 10^7$	3.332	30.368	42.468	15.732	91.900	$1.219 \times 10^6$		
40.0 TeV	$4.000 \times 10^7$	3.370	40.684	56.784	21.479	122.316	$1.313 \times 10^6$		
80.0 TeV	$8.000 \times 10^7$	3.461	82.033	114.099	45.606	245.199	$1.539 \times 10^6$		
100. TeV	$1.000 \times 10^8$	3.491	102.759	142.791	58.117	307.158	$1.612 \times 10^6$		