

## Muons in n-propyl alcohol (C<sub>3</sub>H<sub>7</sub>OH)

$\langle Z/A \rangle$	$\rho$ [g/cm <sup>3</sup> ]	$I$ [eV]	$a$	$k = m_s$	$x_0$	$x_1$	$\bar{C}$	$\delta_0$
0.56577	0.803	61.1	0.09644	3.5415	0.2046	2.6681	3.2915	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	$4.704 \times 10^1$	8.333				8.333	$6.620 \times 10^{-1}$	
14.0 MeV	$5.616 \times 10^1$	6.494				6.494	$1.211 \times 10^0$	
20.0 MeV	$6.802 \times 10^1$	5.067				5.067	$2.270 \times 10^0$	
30.0 MeV	$8.509 \times 10^1$	3.927				3.927	$4.543 \times 10^0$	
40.0 MeV	$1.003 \times 10^2$	3.351				3.351	$7.317 \times 10^0$	
80.0 MeV	$1.527 \times 10^2$	2.512				2.512	$2.154 \times 10^1$	
100. MeV	$1.764 \times 10^2$	2.359				2.359	$2.978 \times 10^1$	
140. MeV	$2.218 \times 10^2$	2.196				2.196	$4.744 \times 10^1$	
200. MeV	$2.868 \times 10^2$	2.101				2.101	$7.548 \times 10^1$	
300. MeV	$3.917 \times 10^2$	2.063			0.000	2.063	$1.237 \times 10^2$	
324. MeV	$4.161 \times 10^2$	2.062			0.000	2.063	<i>Minimum ionization</i>	
400. MeV	$4.945 \times 10^2$	2.068			0.000	2.068	$1.721 \times 10^2$	
800. MeV	$8.995 \times 10^2$	2.142	0.000		0.000	2.143	$3.622 \times 10^2$	
1.00 GeV	$1.101 \times 10^3$	2.176	0.000		0.000	2.177	$4.548 \times 10^2$	
1.40 GeV	$1.502 \times 10^3$	2.232	0.000		0.001	2.233	$6.360 \times 10^2$	
2.00 GeV	$2.103 \times 10^3$	2.294	0.000	0.000	0.001	2.296	$9.008 \times 10^2$	
3.00 GeV	$3.104 \times 10^3$	2.364	0.001	0.001	0.001	2.367	$1.329 \times 10^3$	
4.00 GeV	$4.104 \times 10^3$	2.413	0.001	0.001	0.002	2.417	$1.747 \times 10^3$	
8.00 GeV	$8.105 \times 10^3$	2.525	0.003	0.003	0.004	2.535	$3.358 \times 10^3$	
10.0 GeV	$1.011 \times 10^4$	2.560	0.004	0.004	0.005	2.573	$4.141 \times 10^3$	
14.0 GeV	$1.411 \times 10^4$	2.609	0.006	0.007	0.007	2.629	$5.678 \times 10^3$	
20.0 GeV	$2.011 \times 10^4$	2.659	0.010	0.011	0.009	2.689	$7.933 \times 10^3$	
30.0 GeV	$3.011 \times 10^4$	2.714	0.016	0.019	0.014	2.763	$1.160 \times 10^4$	
40.0 GeV	$4.011 \times 10^4$	2.751	0.022	0.028	0.018	2.820	$1.518 \times 10^4$	
80.0 GeV	$8.011 \times 10^4$	2.836	0.051	0.069	0.035	2.991	$2.893 \times 10^4$	
100. GeV	$1.001 \times 10^5$	2.863	0.066	0.091	0.043	3.063	$3.554 \times 10^4$	
140. GeV	$1.401 \times 10^5$	2.902	0.098	0.136	0.060	3.197	$4.832 \times 10^4$	
200. GeV	$2.001 \times 10^5$	2.944	0.148	0.209	0.085	3.386	$6.655 \times 10^4$	
300. GeV	$3.001 \times 10^5$	2.991	0.234	0.332	0.127	3.684	$9.485 \times 10^4$	
400. GeV	$4.001 \times 10^5$	3.024	0.323	0.461	0.169	3.977	$1.210 \times 10^5$	
800. GeV	$8.001 \times 10^5$	3.105	0.695	0.999	0.341	5.140	$2.092 \times 10^5$	
1.00 TeV	$1.000 \times 10^6$	3.131	0.887	1.277	0.428	5.724	$2.460 \times 10^5$	
1.20 TeV	$1.202 \times 10^6$	3.153	1.081	1.554	0.518	6.307	<i>Muon critical energy</i>	
1.40 TeV	$1.400 \times 10^6$	3.172	1.275	1.830	0.608	6.884	$3.097 \times 10^5$	
2.00 TeV	$2.000 \times 10^6$	3.215	1.871	2.679	0.880	8.645	$3.873 \times 10^5$	
3.00 TeV	$3.000 \times 10^6$	3.264	2.871	4.093	1.348	11.577	$4.869 \times 10^5$	
4.00 TeV	$4.000 \times 10^6$	3.300	3.889	5.527	1.825	14.542	$5.639 \times 10^5$	
8.00 TeV	$8.000 \times 10^6$	3.388	8.016	11.306	3.811	26.521	$7.646 \times 10^5$	
10.0 TeV	$1.000 \times 10^7$	3.416	10.105	14.218	4.834	32.573	$8.325 \times 10^5$	
14.0 TeV	$1.400 \times 10^7$	3.461	14.273	20.017	6.943	44.695	$9.370 \times 10^5$	
20.0 TeV	$2.000 \times 10^7$	3.508	20.583	28.767	10.185	63.044	$1.049 \times 10^6$	
30.0 TeV	$3.000 \times 10^7$	3.563	31.090	43.324	15.815	93.792	$1.179 \times 10^6$	
40.0 TeV	$4.000 \times 10^7$	3.602	41.658	57.928	21.595	124.784	$1.271 \times 10^6$	
80.0 TeV	$8.000 \times 10^7$	3.700	84.035	116.398	45.867	250.001	$1.493 \times 10^6$	
100. TeV	$1.000 \times 10^8$	3.732	105.282	145.669	58.455	313.138	$1.564 \times 10^6$	