

Table 218: Muons in Polyacrylonitrile (C₃H₃N)_n

$\langle Z/A \rangle$	ρ [g/cm ³]	I [eV]	a	$k = m_s$	x_0	x_1	\bar{C}	δ_0
0.52767	1.170	69.6	0.16275	3.1975	0.1504	2.5159	3.2459	0.00
T	p [MeV/c]	Ionization	Brems	Pair prod [MeV cm ² /g]	Photonucl	Total	CSDA range [g/cm ²]	
10.0 MeV	4.704×10^1	7.645				7.645	7.224×10^{-1}	
14.0 MeV	5.616×10^1	5.961				5.961	1.321×10^0	
20.0 MeV	6.802×10^1	4.654				4.654	2.474×10^0	
30.0 MeV	8.509×10^1	3.609				3.609	4.948×10^0	
40.0 MeV	1.003×10^2	3.081				3.081	7.966×10^0	
80.0 MeV	1.527×10^2	2.311				2.311	2.343×10^1	
100. MeV	1.764×10^2	2.164				2.164	3.240×10^1	
140. MeV	2.218×10^2	2.014				2.014	5.165×10^1	
200. MeV	2.868×10^2	1.928				1.928	8.222×10^1	
300. MeV	3.917×10^2	1.894			0.000	1.895	1.347×10^2	
318. MeV	4.105×10^2	1.894			0.000	1.894	<i>Minimum ionization</i>	
400. MeV	4.945×10^2	1.900			0.000	1.900	1.874×10^2	
800. MeV	8.995×10^2	1.971	0.000		0.000	1.971	3.942×10^2	
1.00 GeV	1.101×10^3	2.003	0.000		0.000	2.004	4.948×10^2	
1.40 GeV	1.502×10^3	2.056	0.000		0.001	2.057	6.917×10^2	
2.00 GeV	2.103×10^3	2.114	0.000	0.000	0.001	2.115	9.792×10^2	
3.00 GeV	3.104×10^3	2.180	0.001	0.001	0.001	2.183	1.444×10^3	
4.00 GeV	4.104×10^3	2.226	0.001	0.001	0.002	2.230	1.897×10^3	
8.00 GeV	8.105×10^3	2.331	0.003	0.003	0.004	2.341	3.642×10^3	
10.0 GeV	1.011×10^4	2.363	0.004	0.004	0.005	2.376	4.490×10^3	
14.0 GeV	1.411×10^4	2.409	0.006	0.007	0.007	2.428	6.155×10^3	
20.0 GeV	2.011×10^4	2.456	0.010	0.011	0.009	2.486	8.595×10^3	
30.0 GeV	3.011×10^4	2.506	0.016	0.019	0.014	2.555	1.256×10^4	
40.0 GeV	4.011×10^4	2.541	0.022	0.028	0.018	2.609	1.643×10^4	
80.0 GeV	8.011×10^4	2.620	0.051	0.068	0.034	2.774	3.127×10^4	
100. GeV	1.001×10^5	2.645	0.066	0.090	0.043	2.845	3.839×10^4	
140. GeV	1.401×10^5	2.682	0.098	0.136	0.059	2.975	5.214×10^4	
200. GeV	2.001×10^5	2.721	0.147	0.208	0.084	3.160	7.170×10^4	
300. GeV	3.001×10^5	2.765	0.233	0.331	0.126	3.454	1.019×10^5	
400. GeV	4.001×10^5	2.796	0.321	0.459	0.168	3.744	1.297×10^5	
800. GeV	8.001×10^5	2.871	0.690	0.994	0.339	4.894	2.229×10^5	
1.00 TeV	1.000×10^6	2.896	0.881	1.270	0.426	5.473	2.615×10^5	
1.12 TeV	1.120×10^6	2.908	0.995	1.434	0.479	5.817	<i>Muon critical energy</i>	
1.40 TeV	1.400×10^6	2.933	1.266	1.820	0.604	6.623	3.279×10^5	
2.00 TeV	2.000×10^6	2.973	1.857	2.664	0.875	8.369	4.083×10^5	
3.00 TeV	3.000×10^6	3.020	2.848	4.069	1.340	11.277	5.109×10^5	
4.00 TeV	4.000×10^6	3.053	3.857	5.494	1.814	14.218	5.897×10^5	
8.00 TeV	8.000×10^6	3.135	7.943	11.236	3.787	26.102	7.943×10^5	
10.0 TeV	1.000×10^7	3.162	10.011	14.129	4.804	32.105	8.632×10^5	
14.0 TeV	1.400×10^7	3.203	14.136	19.892	6.898	44.129	9.691×10^5	
20.0 TeV	2.000×10^7	3.247	20.378	28.585	10.117	62.328	1.083×10^6	
30.0 TeV	3.000×10^7	3.298	30.771	43.049	15.706	92.825	1.214×10^6	
40.0 TeV	4.000×10^7	3.335	41.222	57.560	21.443	123.561	1.307×10^6	
80.0 TeV	8.000×10^7	3.426	83.116	115.656	45.527	247.726	1.531×10^6	
100. TeV	1.000×10^8	3.456	104.116	144.739	58.015	310.326	1.603×10^6	