Muons in rubber butyl ($[C_4H8)_n]$

$\langle Z/A \rangle$	ρ [g/cm^3]	I [eV]	a	$k = m_s$	x_0	x_1	$\overline{C}$	δ_0
0.57034	0.920	56.5	0.12108	3.4296	0.1347	2.5154	2.9915	0.00

T	p [MeV/c]	Ionization	Brems	Pair prod	Photonucl	Total	CSDA range [g/cm^2]
		[MeV cm^2/g]					
10.0 MeV	4.704×10^1	8.483				8.483	6.498×10^{-1}
14.0 MeV	5.616×10^1	6.609				6.609	1.190×10^0
20.0 MeV	6.802×10^1	5.155				5.155	2.230×10^0
30.0 MeV	8.509×10^1	3.994				3.994	4.465×10^0
40.0 MeV	1.003×10^2	3.407				3.407	7.193×10^0
80.0 MeV	1.527×10^2	2.549				2.549	2.119×10^1
100. MeV	1.764×10^2	2.385				2.386	2.932×10^1
140. MeV	2.218×10^2	2.218				2.218	4.680×10^1
200. MeV	2.868×10^2	2.120				2.120	7.458×10^1
300. MeV	3.917×10^2	2.080			0.000	2.080	1.223×10^2
328. MeV	4.211×10^2	2.079			0.000	2.079	*Minimum ionization*
400. MeV	4.945×10^2	2.084			0.000	2.084	1.704×10^2
800. MeV	8.995×10^2	2.155	0.000		0.000	2.156	3.592×10^2
1.00 GeV	1.101×10^3	2.189	0.000		0.000	2.190	4.513×10^2
1.40 GeV	1.502×10^3	2.244	0.000		0.001	2.245	6.316×10^2
2.00 GeV	2.103×10^3	2.305	0.000	0.000	0.001	2.307	8.950×10^2
3.00 GeV	3.104×10^3	2.375	0.001	0.000	0.001	2.377	1.322×10^3
4.00 GeV	4.104×10^3	2.423	0.001	0.001	0.002	2.427	1.738×10^3
8.00 GeV	8.105×10^3	2.535	0.003	0.003	0.004	2.544	3.343×10^3
10.0 GeV	1.011×10^4	2.569	0.004	0.004	0.005	2.581	4.123×10^3
14.0 GeV	1.411×10^4	2.618	0.006	0.006	0.007	2.637	5.655×10^3
20.0 GeV	2.011×10^4	2.669	0.009	0.010	0.009	2.697	7.904×10^3
30.0 GeV	3.011×10^4	2.723	0.015	0.018	0.014	2.769	1.156×10^4
40.0 GeV	4.011×10^4	2.760	0.021	0.026	0.018	2.825	1.513×10^4
80.0 GeV	8.011×10^4	2.847	0.047	0.063	0.035	2.992	2.887×10^4
100. GeV	1.001×10^5	2.873	0.061	0.084	0.043	3.062	3.547×10^4
140. GeV	1.401×10^5	2.913	0.091	0.126	0.060	3.190	4.827×10^4
200. GeV	2.001×10^5	2.955	0.137	0.193	0.085	3.370	6.656×10^4
300. GeV	3.001×10^5	3.002	0.216	0.307	0.127	3.654	9.505×10^4
400. GeV	4.001×10^5	3.036	0.299	0.427	0.170	3.931	1.214×10^5
800. GeV	8.001×10^5	3.118	0.644	0.925	0.343	5.029	2.111×10^5
1.00 TeV	1.000×10^6	3.144	0.822	1.183	0.430	5.580	2.489×10^5
1.28 TeV	1.281×10^6	3.174	1.074	1.543	0.557	6.348	*Muon critical energy*
1.40 TeV	1.400×10^6	3.185	1.182	1.697	0.611	6.675	3.143×10^5
2.00 TeV	2.000×10^6	3.228	1.736	2.485	0.884	8.334	3.946×10^5
3.00 TeV	3.000×10^6	3.278	2.665	3.799	1.355	11.098	4.983×10^5
4.00 TeV	4.000×10^6	3.314	3.612	5.132	1.834	13.892	5.787×10^5
8.00 TeV	8.000×10^6	3.402	7.450	10.502	3.831	25.186	7.895×10^5
10.0 TeV	1.000×10^7	3.432	9.393	13.208	4.860	30.894	8.611×10^5
14.0 TeV	1.400×10^7	3.476	13.272	18.599	6.982	42.329	9.713×10^5
20.0 TeV	2.000×10^7	3.524	19.144	26.732	10.243	59.643	1.090×10^6
30.0 TeV	3.000×10^7	3.579	28.924	40.262	15.907	88.672	1.227×10^6
40.0 TeV	4.000×10^7	3.619	38.762	53.838	21.722	117.941	1.324×10^6
80.0 TeV	8.000×10^7	3.717	78.203	108.188	46.153	236.262	1.559×10^6
100. TeV	1.000×10^8	3.750	97.977	135.397	58.825	295.949	1.635×10^6