Table 173: Muons in Glutamine ($C_5H_{10}N_2O_3$)

$\langle Z/A \rangle$	ρ [g/cm^3]	I [eV]	a	$k = m_s$	x_0	x_1	$\overline{C}$	δ_0
0.53371	1.460	73.3	0.11931	3.3254	0.1347	2.6301	3.1167	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	7.681				7.681	7.194×10^{-1}
14.0 MeV	5.616×10^1	5.991				5.991	1.315×10^0
20.0 MeV	6.802×10^1	4.678				4.678	2.462×10^0
30.0 MeV	8.509×10^1	3.629				3.629	4.923×10^0
40.0 MeV	1.003×10^2	3.098				3.098	7.925×10^0
80.0 MeV	1.527×10^2	2.322				2.322	2.330×10^1
100. MeV	1.764×10^2	2.174				2.174	3.223×10^1
140. MeV	2.218×10^2	2.022				2.022	5.140×10^1
200. MeV	2.868×10^2	1.934				1.935	8.186×10^1
300. MeV	3.917×10^2	1.900			0.000	1.900	1.342×10^2
325. MeV	4.171×10^2	1.899			0.000	1.899	*Minimum ionization*
400. MeV	4.945×10^2	1.905			0.000	1.905	1.868×10^2
800. MeV	8.995×10^2	1.975	0.000		0.000	1.976	3.931×10^2
1.00 GeV	1.101×10^3	2.007	0.000		0.000	2.008	4.934×10^2
1.40 GeV	1.502×10^3	2.060	0.000		0.001	2.061	6.899×10^2
2.00 GeV	2.103×10^3	2.118	0.001	0.000	0.001	2.120	9.767×10^2
3.00 GeV	3.104×10^3	2.185	0.001	0.001	0.001	2.188	1.440×10^3
4.00 GeV	4.104×10^3	2.231	0.001	0.001	0.002	2.236	1.892×10^3
8.00 GeV	8.105×10^3	2.338	0.003	0.003	0.004	2.348	3.633×10^3
10.0 GeV	1.011×10^4	2.370	0.004	0.004	0.005	2.384	4.478×10^3
14.0 GeV	1.411×10^4	2.417	0.007	0.007	0.007	2.438	6.136×10^3
20.0 GeV	2.011×10^4	2.464	0.010	0.012	0.009	2.496	8.567×10^3
30.0 GeV	3.011×10^4	2.516	0.017	0.021	0.014	2.567	1.251×10^4
40.0 GeV	4.011×10^4	2.551	0.024	0.030	0.018	2.623	1.637×10^4
80.0 GeV	8.011×10^4	2.631	0.055	0.074	0.034	2.794	3.112×10^4
100. GeV	1.001×10^5	2.656	0.071	0.097	0.042	2.867	3.818×10^4
140. GeV	1.401×10^5	2.694	0.105	0.146	0.059	3.004	5.180×10^4
200. GeV	2.001×10^5	2.733	0.158	0.224	0.084	3.199	7.115×10^4
300. GeV	3.001×10^5	2.777	0.250	0.355	0.125	3.508	1.010×10^5
400. GeV	4.001×10^5	2.809	0.345	0.493	0.167	3.814	1.283×10^5
800. GeV	8.001×10^5	2.885	0.740	1.066	0.338	5.029	2.194×10^5
1.00 TeV	1.000×10^6	2.910	0.945	1.362	0.424	5.641	2.569×10^5
1.06 TeV	1.064×10^6	2.917	1.010	1.455	0.453	5.834	*Muon critical energy*
1.40 TeV	1.400×10^6	2.948	1.357	1.951	0.602	6.858	3.211×10^5
2.00 TeV	2.000×10^6	2.988	1.990	2.854	0.872	8.705	3.986×10^5
3.00 TeV	3.000×10^6	3.035	3.052	4.358	1.336	11.781	4.970×10^5
4.00 TeV	4.000×10^6	3.069	4.132	5.883	1.808	14.892	5.723×10^5
8.00 TeV	8.000×10^6	3.152	8.506	12.027	3.774	27.460	7.672×10^5
10.0 TeV	1.000×10^7	3.179	10.719	15.122	4.787	33.807	8.327×10^5
14.0 TeV	1.400×10^7	3.220	15.135	21.288	6.874	46.517	9.332×10^5
20.0 TeV	2.000×10^7	3.265	21.815	30.588	10.081	65.749	1.041×10^6
30.0 TeV	3.000×10^7	3.317	32.938	46.062	15.648	97.965	1.165×10^6
40.0 TeV	4.000×10^7	3.354	44.122	61.587	21.362	130.425	1.253×10^6
80.0 TeV	8.000×10^7	3.446	88.965	123.739	45.346	261.496	1.466×10^6
100. TeV	1.000×10^8	3.476	111.447	154.852	57.780	327.555	1.534×10^6