Table 274: Muons in Valine $C_5H_{11}NOi_2$

$\langle Z/A \rangle$	ρ [g/cm^3]	I [eV]	a	$k = m_s$	x_0	x_1	$\overline{C}$	δ_0
0.54632	1.230	67.7	0.11386	3.3774	0.1441	2.6227	3.1059	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	7.943				7.943	6.951×10^{-1}
14.0 MeV	5.616×10^1	6.193				6.193	1.272×10^0
20.0 MeV	6.802×10^1	4.834				4.834	2.381×10^0
30.0 MeV	8.509×10^1	3.748				3.748	4.763×10^0
40.0 MeV	1.003×10^2	3.200				3.200	7.669×10^0
80.0 MeV	1.527×10^2	2.398				2.398	2.256×10^1
100. MeV	1.764×10^2	2.245				2.245	3.121×10^1
140. MeV	2.218×10^2	2.088				2.088	4.977×10^1
200. MeV	2.868×10^2	1.997				1.997	7.927×10^1
300. MeV	3.917×10^2	1.961			0.000	1.961	1.300×10^2
324. MeV	4.161×10^2	1.960			0.000	1.960	*Minimum ionization*
400. MeV	4.945×10^2	1.965			0.000	1.965	1.809×10^2
800. MeV	8.995×10^2	2.036	0.000		0.000	2.037	3.810×10^2
1.00 GeV	1.101×10^3	2.069	0.000		0.000	2.070	4.783×10^2
1.40 GeV	1.502×10^3	2.123	0.000		0.001	2.124	6.690×10^2
2.00 GeV	2.103×10^3	2.182	0.001	0.000	0.001	2.184	9.474×10^2
3.00 GeV	3.104×10^3	2.250	0.001	0.001	0.001	2.253	1.398×10^3
4.00 GeV	4.104×10^3	2.297	0.001	0.001	0.002	2.302	1.837×10^3
8.00 GeV	8.105×10^3	2.406	0.003	0.003	0.004	2.416	3.528×10^3
10.0 GeV	1.011×10^4	2.439	0.004	0.004	0.005	2.452	4.349×10^3
14.0 GeV	1.411×10^4	2.487	0.006	0.007	0.007	2.507	5.962×10^3
20.0 GeV	2.011×10^4	2.535	0.010	0.011	0.009	2.566	8.326×10^3
30.0 GeV	3.011×10^4	2.588	0.016	0.020	0.014	2.638	1.217×10^4
40.0 GeV	4.011×10^4	2.623	0.023	0.029	0.018	2.694	1.592×10^4
80.0 GeV	8.011×10^4	2.706	0.053	0.071	0.034	2.865	3.029×10^4
100. GeV	1.001×10^5	2.732	0.069	0.094	0.043	2.937	3.718×10^4
140. GeV	1.401×10^5	2.770	0.102	0.141	0.059	3.072	5.050×10^4
200. GeV	2.001×10^5	2.810	0.153	0.216	0.084	3.263	6.944×10^4
300. GeV	3.001×10^5	2.855	0.242	0.344	0.126	3.567	9.873×10^4
400. GeV	4.001×10^5	2.887	0.334	0.477	0.168	3.866	1.257×10^5
800. GeV	8.001×10^5	2.966	0.717	1.032	0.339	5.054	2.159×10^5
1.00 TeV	1.000×10^6	2.991	0.915	1.319	0.426	5.652	2.533×10^5
1.12 TeV	1.121×10^6	3.004	1.035	1.490	0.480	6.009	*Muon critical energy*
1.40 TeV	1.400×10^6	3.030	1.315	1.890	0.604	6.839	3.175×10^5
2.00 TeV	2.000×10^6	3.071	1.929	2.765	0.875	8.641	3.954×10^5
3.00 TeV	3.000×10^6	3.119	2.959	4.223	1.341	11.643	4.948×10^5
4.00 TeV	4.000×10^6	3.154	4.007	5.702	1.816	14.679	5.711×10^5
8.00 TeV	8.000×10^6	3.238	8.254	11.660	3.790	26.943	7.693×10^5
10.0 TeV	1.000×10^7	3.266	10.403	14.661	4.808	33.138	8.361×10^5
14.0 TeV	1.400×10^7	3.309	14.691	20.640	6.905	45.545	9.387×10^5
20.0 TeV	2.000×10^7	3.355	21.179	29.659	10.127	64.320	1.049×10^6
30.0 TeV	3.000×10^7	3.408	31.984	44.665	15.722	95.779	1.176×10^6
40.0 TeV	4.000×10^7	3.446	42.848	59.721	21.465	127.480	1.266×10^6
80.0 TeV	8.000×10^7	3.540	86.412	119.994	45.576	255.523	1.483×10^6
100. TeV	1.000×10^8	3.571	108.253	150.167	58.078	320.070	1.553×10^6