

Table 108: Muons in Ammonia (NH₃)

$\langle Z/A \rangle$	ρ [g/cm ³]	I [eV]	a	$k = m_s$	x_0	x_1	\bar{C}	δ_0
0.59719	8.260×10^{-4}	53.7	0.08315	3.6464	1.6822	4.1158	9.8763	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	8.939				8.939	6.164×10^{-1}	
14.0 MeV	5.616×10^1	6.962				6.962	1.129×10^0	
20.0 MeV	6.802×10^1	5.429				5.429	2.116×10^0	
30.0 MeV	8.509×10^1	4.205				4.206	4.238×10^0	
40.0 MeV	1.003×10^2	3.587				3.587	6.830×10^0	
80.0 MeV	1.527×10^2	2.687				2.687	2.013×10^1	
100. MeV	1.764×10^2	2.525				2.525	2.783×10^1	
140. MeV	2.218×10^2	2.365				2.366	4.427×10^1	
200. MeV	2.868×10^2	2.283				2.283	7.019×10^1	
266. MeV	3.567×10^2	2.265			0.000	2.266	<i>Minimum ionization</i>	
300. MeV	3.917×10^2	2.268			0.000	2.269	1.143×10^2	
400. MeV	4.945×10^2	2.295			0.000	2.296	1.581×10^2	
800. MeV	8.995×10^2	2.441	0.000		0.000	2.441	3.270×10^2	
1.00 GeV	1.101×10^3	2.503	0.000		0.000	2.504	4.078×10^2	
1.40 GeV	1.502×10^3	2.605	0.000		0.001	2.606	5.643×10^2	
2.00 GeV	2.103×10^3	2.719	0.001	0.000	0.001	2.721	7.893×10^2	
3.00 GeV	3.104×10^3	2.855	0.001	0.001	0.001	2.858	1.147×10^3	
4.00 GeV	4.104×10^3	2.952	0.001	0.001	0.002	2.956	1.491×10^3	
8.00 GeV	8.105×10^3	3.155	0.003	0.003	0.004	3.165	2.791×10^3	
10.0 GeV	1.011×10^4	3.210	0.004	0.004	0.005	3.224	3.417×10^3	
14.0 GeV	1.411×10^4	3.289	0.006	0.007	0.007	3.309	4.641×10^3	
20.0 GeV	2.011×10^4	3.365	0.010	0.011	0.009	3.395	6.429×10^3	
30.0 GeV	3.011×10^4	3.443	0.016	0.020	0.014	3.493	9.330×10^3	
40.0 GeV	4.011×10^4	3.495	0.023	0.029	0.018	3.564	1.216×10^4	
80.0 GeV	8.011×10^4	3.605	0.052	0.070	0.035	3.762	2.306×10^4	
100. GeV	1.001×10^5	3.637	0.068	0.093	0.043	3.841	2.833×10^4	
140. GeV	1.401×10^5	3.684	0.100	0.139	0.060	3.983	3.855×10^4	
200. GeV	2.001×10^5	3.731	0.151	0.213	0.085	4.180	5.325×10^4	
300. GeV	3.001×10^5	3.783	0.239	0.340	0.127	4.488	7.632×10^4	
400. GeV	4.001×10^5	3.819	0.330	0.471	0.169	4.789	9.789×10^4	
800. GeV	8.001×10^5	3.905	0.710	1.020	0.342	5.977	1.725×10^5	
1.00 TeV	1.000×10^6	3.933	0.907	1.304	0.429	6.574	2.044×10^5	
1.40 TeV	1.400×10^6	3.975	1.303	1.870	0.609	7.757	2.603×10^5	
1.47 TeV	1.469×10^6	3.981	1.373	1.968	0.640	7.963	<i>Muon critical energy</i>	
2.00 TeV	2.000×10^6	4.021	1.913	2.737	0.882	9.553	3.299×10^5	
3.00 TeV	3.000×10^6	4.073	2.937	4.181	1.351	12.542	4.210×10^5	
4.00 TeV	4.000×10^6	4.111	3.979	5.647	1.828	15.564	4.925×10^5	
8.00 TeV	8.000×10^6	4.203	8.202	11.550	3.818	27.774	6.823×10^5	
10.0 TeV	1.000×10^7	4.234	10.340	14.524	4.843	33.941	7.473×10^5	
14.0 TeV	1.400×10^7	4.280	14.607	20.449	6.957	46.294	8.478×10^5	
20.0 TeV	2.000×10^7	4.330	21.067	29.387	10.205	64.990	9.567×10^5	
30.0 TeV	3.000×10^7	4.388	31.825	44.257	15.847	96.318	1.082×10^6	
40.0 TeV	4.000×10^7	4.430	42.647	59.175	21.640	127.892	1.172×10^6	
80.0 TeV	8.000×10^7	4.533	86.070	118.900	45.974	255.478	1.389×10^6	
100. TeV	1.000×10^8	4.567	107.853	148.799	58.595	319.815	1.459×10^6	