

Table 273: Muons in Urea $\text{CO}(\text{NH}_2)_2$

$\langle Z/A \rangle$	ρ [g/cm ³]	I [eV]	a	$k = m_s$	x_0	x_1	\bar{C}	δ_0
0.53284	1.323	72.8	0.11609	3.3461	0.1603	2.6525	3.2032	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	7.675				7.675	7.199×10^{-1}	
14.0 MeV	5.616×10^1	5.986				5.986	1.316×10^0	
20.0 MeV	6.802×10^1	4.674				4.674	2.464×10^0	
30.0 MeV	8.509×10^1	3.626				3.626	4.927×10^0	
40.0 MeV	1.003×10^2	3.096				3.096	7.931×10^0	
80.0 MeV	1.527×10^2	2.324				2.324	2.332×10^1	
100. MeV	1.764×10^2	2.176				2.176	3.224×10^1	
140. MeV	2.218×10^2	2.024				2.025	5.139×10^1	
200. MeV	2.868×10^2	1.937				1.937	8.180×10^1	
300. MeV	3.917×10^2	1.903			0.000	1.903	1.340×10^2	
318. MeV	4.105×10^2	1.902			0.000	1.902	<i>Minimum ionization</i>	
400. MeV	4.945×10^2	1.908			0.000	1.908	1.866×10^2	
800. MeV	8.995×10^2	1.978	0.000		0.000	1.979	3.925×10^2	
1.00 GeV	1.101×10^3	2.011	0.000		0.000	2.012	4.927×10^2	
1.40 GeV	1.502×10^3	2.064	0.000		0.001	2.065	6.888×10^2	
2.00 GeV	2.103×10^3	2.122	0.001	0.000	0.001	2.124	9.751×10^2	
3.00 GeV	3.104×10^3	2.189	0.001	0.001	0.001	2.192	1.438×10^3	
4.00 GeV	4.104×10^3	2.235	0.001	0.001	0.002	2.240	1.889×10^3	
8.00 GeV	8.105×10^3	2.342	0.003	0.003	0.004	2.352	3.626×10^3	
10.0 GeV	1.011×10^4	2.374	0.004	0.004	0.005	2.388	4.470×10^3	
14.0 GeV	1.411×10^4	2.421	0.007	0.007	0.007	2.442	6.125×10^3	
20.0 GeV	2.011×10^4	2.469	0.011	0.012	0.009	2.501	8.552×10^3	
30.0 GeV	3.011×10^4	2.520	0.017	0.021	0.013	2.572	1.249×10^4	
40.0 GeV	4.011×10^4	2.555	0.025	0.031	0.018	2.628	1.634×10^4	
80.0 GeV	8.011×10^4	2.635	0.056	0.075	0.034	2.801	3.105×10^4	
100. GeV	1.001×10^5	2.660	0.073	0.099	0.042	2.875	3.810×10^4	
140. GeV	1.401×10^5	2.698	0.107	0.149	0.059	3.013	5.169×10^4	
200. GeV	2.001×10^5	2.737	0.161	0.228	0.084	3.210	7.098×10^4	
300. GeV	3.001×10^5	2.781	0.255	0.363	0.125	3.524	1.007×10^5	
400. GeV	4.001×10^5	2.812	0.351	0.503	0.167	3.834	1.279×10^5	
800. GeV	8.001×10^5	2.889	0.755	1.086	0.337	5.067	2.184×10^5	
1.00 TeV	1.000×10^6	2.913	0.963	1.388	0.424	5.689	2.556×10^5	
1.05 TeV	1.049×10^6	2.919	1.013	1.460	0.445	5.838	<i>Muon critical energy</i>	
1.40 TeV	1.400×10^6	2.951	1.383	1.988	0.601	6.924	3.192×10^5	
2.00 TeV	2.000×10^6	2.992	2.028	2.909	0.871	8.799	3.959×10^5	
3.00 TeV	3.000×10^6	3.038	3.109	4.441	1.334	11.923	4.932×10^5	
4.00 TeV	4.000×10^6	3.072	4.210	5.994	1.805	15.082	5.676×10^5	
8.00 TeV	8.000×10^6	3.155	8.665	12.253	3.768	27.841	7.599×10^5	
10.0 TeV	1.000×10^7	3.182	10.919	15.405	4.779	34.285	8.245×10^5	
14.0 TeV	1.400×10^7	3.223	15.416	21.685	6.863	47.188	9.236×10^5	
20.0 TeV	2.000×10^7	3.268	22.219	31.159	10.064	66.710	1.030×10^6	
30.0 TeV	3.000×10^7	3.320	33.547	46.920	15.621	99.408	1.152×10^6	
40.0 TeV	4.000×10^7	3.357	44.936	62.733	21.325	132.351	1.239×10^6	
80.0 TeV	8.000×10^7	3.449	90.611	126.039	45.264	265.363	1.448×10^6	
100. TeV	1.000×10^8	3.479	113.512	157.730	57.673	332.395	1.515×10^6	