

Table 235: Muons in Polyvinyl pyrrolidone (C₆H₉NO)_n

| | $\langle Z/A \rangle$ | ρ [g/cm ³] | I [eV] | a | $k = m_s$ | x_0 | x_1 | \bar{C} | δ_0 |
|----------|-----------------------|-----------------------------|----------|--------------------------|-----------|---------|------------------------------------|-----------|------------|
| | 0.53984 | 1.250 | 67.7 | 0.12504 | 3.3326 | 0.1324 | 2.5867 | 3.1017 | 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 | 7.849 | | | | 7.849 | 7.035×10^{-1} | | |
| 14.0 MeV | 5.616×10^1 | 6.119 | | | | 6.119 | 1.287×10^0 | | |
| 20.0 MeV | 6.802×10^1 | 4.777 | | | | 4.777 | 2.409×10^0 | | |
| 30.0 MeV | 8.509×10^1 | 3.704 | | | | 3.704 | 4.820×10^0 | | |
| 40.0 MeV | 1.003×10^2 | 3.162 | | | | 3.162 | 7.761×10^0 | | |
| 80.0 MeV | 1.527×10^2 | 2.368 | | | | 2.368 | 2.284×10^1 | | |
| 100. MeV | 1.764×10^2 | 2.217 | | | | 2.217 | 3.159×10^1 | | |
| 140. MeV | 2.218×10^2 | 2.062 | | | | 2.062 | 5.039×10^1 | | |
| 200. MeV | 2.868×10^2 | 1.972 | | | | 1.972 | 8.026×10^1 | | |
| 300. MeV | 3.917×10^2 | 1.937 | | | 0.000 | 1.937 | 1.316×10^2 | | |
| 324. MeV | 4.161×10^2 | 1.936 | | | 0.000 | 1.936 | <i>Minimum ionization</i> | | |
| 400. MeV | 4.945×10^2 | 1.941 | | | 0.000 | 1.942 | 1.832×10^2 | | |
| 800. MeV | 8.995×10^2 | 2.012 | 0.000 | | 0.000 | 2.012 | 3.856×10^2 | | |
| 1.00 GeV | 1.101×10^3 | 2.044 | 0.000 | | 0.000 | 2.045 | 4.842×10^2 | | |
| 1.40 GeV | 1.502×10^3 | 2.097 | 0.000 | | 0.001 | 2.099 | 6.772×10^2 | | |
| 2.00 GeV | 2.103×10^3 | 2.156 | 0.001 | 0.000 | 0.001 | 2.158 | 9.589×10^2 | | |
| 3.00 GeV | 3.104×10^3 | 2.223 | 0.001 | 0.001 | 0.001 | 2.226 | 1.415×10^3 | | |
| 4.00 GeV | 4.104×10^3 | 2.270 | 0.001 | 0.001 | 0.002 | 2.274 | 1.859×10^3 | | |
| 8.00 GeV | 8.105×10^3 | 2.377 | 0.003 | 0.003 | 0.004 | 2.387 | 3.570×10^3 | | |
| 10.0 GeV | 1.011×10^4 | 2.410 | 0.004 | 0.004 | 0.005 | 2.423 | 4.402×10^3 | | |
| 14.0 GeV | 1.411×10^4 | 2.457 | 0.006 | 0.007 | 0.007 | 2.477 | 6.034×10^3 | | |
| 20.0 GeV | 2.011×10^4 | 2.505 | 0.010 | 0.011 | 0.009 | 2.535 | 8.427×10^3 | | |
| 30.0 GeV | 3.011×10^4 | 2.557 | 0.016 | 0.019 | 0.014 | 2.606 | 1.231×10^4 | | |
| 40.0 GeV | 4.011×10^4 | 2.592 | 0.023 | 0.028 | 0.018 | 2.661 | 1.611×10^4 | | |
| 80.0 GeV | 8.011×10^4 | 2.673 | 0.051 | 0.069 | 0.034 | 2.829 | 3.066×10^4 | | |
| 100. GeV | 1.001×10^5 | 2.699 | 0.067 | 0.091 | 0.043 | 2.900 | 3.765×10^4 | | |
| 140. GeV | 1.401×10^5 | 2.737 | 0.099 | 0.137 | 0.059 | 3.032 | 5.113×10^4 | | |
| 200. GeV | 2.001×10^5 | 2.776 | 0.149 | 0.210 | 0.084 | 3.219 | 7.033×10^4 | | |
| 300. GeV | 3.001×10^5 | 2.821 | 0.235 | 0.334 | 0.126 | 3.517 | 1.000×10^5 | | |
| 400. GeV | 4.001×10^5 | 2.853 | 0.324 | 0.464 | 0.168 | 3.809 | 1.273×10^5 | | |
| 800. GeV | 8.001×10^5 | 2.930 | 0.698 | 1.004 | 0.339 | 4.971 | 2.190×10^5 | | |
| 1.00 TeV | 1.000×10^6 | 2.955 | 0.890 | 1.283 | 0.426 | 5.555 | 2.570×10^5 | | |
| 1.13 TeV | 1.133×10^6 | 2.969 | 1.018 | 1.466 | 0.485 | 5.939 | <i>Muon critical energy</i> | | |
| 1.40 TeV | 1.400×10^6 | 2.993 | 1.279 | 1.839 | 0.605 | 6.716 | 3.224×10^5 | | |
| 2.00 TeV | 2.000×10^6 | 3.035 | 1.877 | 2.691 | 0.876 | 8.479 | 4.018×10^5 | | |
| 3.00 TeV | 3.000×10^6 | 3.082 | 2.879 | 4.110 | 1.342 | 11.414 | 5.031×10^5 | | |
| 4.00 TeV | 4.000×10^6 | 3.116 | 3.899 | 5.550 | 1.817 | 14.382 | 5.810×10^5 | | |
| 8.00 TeV | 8.000×10^6 | 3.200 | 8.032 | 11.351 | 3.793 | 26.375 | 7.833×10^5 | | |
| 10.0 TeV | 1.000×10^7 | 3.227 | 10.123 | 14.273 | 4.811 | 32.434 | 8.516×10^5 | | |
| 14.0 TeV | 1.400×10^7 | 3.269 | 14.295 | 20.094 | 6.909 | 44.568 | 9.564×10^5 | | |
| 20.0 TeV | 2.000×10^7 | 3.314 | 20.609 | 28.877 | 10.134 | 62.934 | 1.069×10^6 | | |
| 30.0 TeV | 3.000×10^7 | 3.367 | 31.123 | 43.487 | 15.733 | 93.710 | 1.199×10^6 | | |
| 40.0 TeV | 4.000×10^7 | 3.405 | 41.696 | 58.146 | 21.480 | 124.727 | 1.291×10^6 | | |
| 80.0 TeV | 8.000×10^7 | 3.498 | 84.082 | 116.834 | 45.609 | 250.023 | 1.513×10^6 | | |
| 100. TeV | 1.000×10^8 | 3.528 | 105.331 | 146.213 | 58.121 | 313.193 | 1.584×10^6 | | |