

Table 304: Muons in Fermium

| Z | A [g/mol] | ρ [g/cm ³] | I [eV] | a | $k = m_s$ | x_0 | x_1 | \bar{C} | δ_0 |
|----------|---------------------|-----------------------------|---------|---------------------------------------|-----------|----------|------------------------------------|-----------|------------|
| 100 (Fm) | [257.0951] | ?? | 994.0 | 0.26219 | 3.0000 | 0.5821 | 3.0000 | 6.3868 | 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 | 3.586 | | | | 3.586 | 1.643×10^0 | | |
| 14.0 MeV | 5.616×10^1 | 2.881 | | | | 2.881 | 2.899×10^0 | | |
| 20.0 MeV | 6.802×10^1 | 2.308 | | | | 2.308 | 5.249×10^0 | | |
| 30.0 MeV | 8.509×10^1 | 1.834 | | | | 1.834 | 1.017×10^1 | | |
| 40.0 MeV | 1.003×10^2 | 1.589 | | | | 1.590 | 1.606×10^1 | | |
| 80.0 MeV | 1.527×10^2 | 1.231 | | | | 1.231 | 4.549×10^1 | | |
| 100. MeV | 1.764×10^2 | 1.169 | | | | 1.169 | 6.220×10^1 | | |
| 140. MeV | 2.218×10^2 | 1.112 | | | | 1.112 | 9.744×10^1 | | |
| 200. MeV | 2.868×10^2 | 1.090 | | | | 1.090 | 1.521×10^2 | | |
| 213. MeV | 3.008×10^2 | 1.090 | 0.000 | | | 1.090 | <i>Minimum ionization</i> | | |
| 300. MeV | 3.917×10^2 | 1.103 | 0.000 | | 0.000 | 1.103 | 2.435×10^2 | | |
| 400. MeV | 4.945×10^2 | 1.129 | 0.000 | | 0.000 | 1.130 | 3.330×10^2 | | |
| 800. MeV | 8.995×10^2 | 1.223 | 0.001 | | 0.000 | 1.225 | 6.722×10^2 | | |
| 1.00 GeV | 1.101×10^3 | 1.258 | 0.002 | | 0.000 | 1.260 | 8.331×10^2 | | |
| 1.40 GeV | 1.502×10^3 | 1.312 | 0.003 | | 0.000 | 1.315 | 1.143×10^3 | | |
| 2.00 GeV | 2.103×10^3 | 1.369 | 0.005 | 0.001 | 0.001 | 1.375 | 1.589×10^3 | | |
| 3.00 GeV | 3.104×10^3 | 1.432 | 0.008 | 0.003 | 0.001 | 1.444 | 2.297×10^3 | | |
| 4.00 GeV | 4.104×10^3 | 1.474 | 0.012 | 0.006 | 0.001 | 1.495 | 2.978×10^3 | | |
| 8.00 GeV | 8.105×10^3 | 1.569 | 0.029 | 0.024 | 0.003 | 1.625 | 5.534×10^3 | | |
| 10.0 GeV | 1.011×10^4 | 1.596 | 0.039 | 0.034 | 0.004 | 1.674 | 6.746×10^3 | | |
| 14.0 GeV | 1.411×10^4 | 1.636 | 0.060 | 0.056 | 0.005 | 1.757 | 9.077×10^3 | | |
| 20.0 GeV | 2.011×10^4 | 1.674 | 0.093 | 0.093 | 0.007 | 1.869 | 1.239×10^4 | | |
| 30.0 GeV | 3.011×10^4 | 1.715 | 0.152 | 0.165 | 0.011 | 2.045 | 1.750×10^4 | | |
| 40.0 GeV | 4.011×10^4 | 1.742 | 0.216 | 0.245 | 0.014 | 2.217 | 2.219×10^4 | | |
| 80.0 GeV | 8.011×10^4 | 1.802 | 0.488 | 0.598 | 0.027 | 2.915 | 3.788×10^4 | | |
| 100. GeV | 1.001×10^5 | 1.820 | 0.632 | 0.788 | 0.034 | 3.275 | 4.435×10^4 | | |
| 122. GeV | 1.222×10^5 | 1.836 | 0.793 | 1.002 | 0.041 | 3.674 | <i>Muon critical energy</i> | | |
| 140. GeV | 1.401×10^5 | 1.847 | 0.927 | 1.180 | 0.047 | 4.004 | 5.539×10^4 | | |
| 200. GeV | 2.001×10^5 | 1.876 | 1.390 | 1.803 | 0.067 | 5.137 | 6.860×10^4 | | |
| 300. GeV | 3.001×10^5 | 1.908 | 2.178 | 2.841 | 0.100 | 7.029 | 8.519×10^4 | | |
| 400. GeV | 4.001×10^5 | 1.931 | 2.992 | 3.917 | 0.134 | 8.976 | 9.775×10^4 | | |
| 800. GeV | 8.001×10^5 | 1.986 | 6.350 | 8.331 | 0.270 | 16.939 | 1.297×10^5 | | |
| 1.00 TeV | 1.000×10^6 | 2.005 | 8.073 | 10.588 | 0.340 | 21.008 | 1.403×10^5 | | |
| 1.40 TeV | 1.400×10^6 | 2.032 | 11.523 | 15.089 | 0.481 | 29.128 | 1.564×10^5 | | |
| 2.00 TeV | 2.000×10^6 | 2.062 | 16.797 | 21.958 | 0.695 | 41.514 | 1.735×10^5 | | |
| 3.00 TeV | 3.000×10^6 | 2.096 | 25.594 | 33.369 | 1.063 | 62.123 | 1.931×10^5 | | |
| 4.00 TeV | 4.000×10^6 | 2.120 | 34.501 | 44.900 | 1.435 | 82.959 | 2.070×10^5 | | |
| 8.00 TeV | 8.000×10^6 | 2.181 | 70.387 | 91.246 | 2.979 | 166.795 | 2.403×10^5 | | |
| 10.0 TeV | 1.000×10^7 | 2.201 | 88.458 | 114.540 | 3.771 | 208.972 | 2.510×10^5 | | |
| 14.0 TeV | 1.400×10^7 | 2.231 | 124.501 | 161.020 | 5.396 | 293.150 | 2.671×10^5 | | |
| 20.0 TeV | 2.000×10^7 | 2.263 | 178.858 | 231.034 | 7.884 | 420.042 | 2.841×10^5 | | |
| 30.0 TeV | 3.000×10^7 | 2.301 | 269.438 | 347.508 | 12.180 | 631.430 | 3.034×10^5 | | |
| 40.0 TeV | 4.000×10^7 | 2.328 | 360.339 | 464.250 | 16.576 | 843.496 | 3.170×10^5 | | |
| 80.0 TeV | 8.000×10^7 | 2.395 | 723.919 | 931.531 | 34.909 | 1692.757 | 3.499×10^5 | | |
| 100. TeV | 1.000×10^8 | 2.417 | 905.820 | 1165.380 | 44.370 | 2117.990 | 3.604×10^5 | | |