

Table 278: Muons in Xylene C₈H₁₀

| | $\langle Z/A \rangle$ | ρ [g/cm ³] | I [eV] | a | $k = m_s$ | x_0 | x_1 | \bar{C} | δ_0 |
|----------|-----------------------|-----------------------------|----------|---------------------------------------|-----------|---------|------------------------------------|-----------|------------|
| | 0.54631 | 0.870 | 61.8 | 0.13216 | 3.3564 | 0.1695 | 2.5675 | 3.2698 | 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 | 8.035 | | | | 8.035 | 6.866×10^{-1} | | |
| 14.0 MeV | 5.616×10^1 | 6.262 | | | | 6.262 | 1.257×10^0 | | |
| 20.0 MeV | 6.802×10^1 | 4.886 | | | | 4.886 | 2.354×10^0 | | |
| 30.0 MeV | 8.509×10^1 | 3.787 | | | | 3.787 | 4.711×10^0 | | |
| 40.0 MeV | 1.003×10^2 | 3.232 | | | | 3.232 | 7.588×10^0 | | |
| 80.0 MeV | 1.527×10^2 | 2.423 | | | | 2.423 | 2.234×10^1 | | |
| 100. MeV | 1.764×10^2 | 2.271 | | | | 2.271 | 3.089×10^1 | | |
| 140. MeV | 2.218×10^2 | 2.113 | | | | 2.114 | 4.923×10^1 | | |
| 200. MeV | 2.868×10^2 | 2.022 | | | | 2.023 | 7.837×10^1 | | |
| 300. MeV | 3.917×10^2 | 1.987 | | | 0.000 | 1.987 | 1.284×10^2 | | |
| 325. MeV | 4.171×10^2 | 1.986 | | | 0.000 | 1.986 | <i>Minimum ionization</i> | | |
| 400. MeV | 4.945×10^2 | 1.992 | | | 0.000 | 1.992 | 1.787×10^2 | | |
| 800. MeV | 8.995×10^2 | 2.064 | 0.000 | | 0.000 | 2.065 | 3.760×10^2 | | |
| 1.00 GeV | 1.101×10^3 | 2.097 | 0.000 | | 0.000 | 2.098 | 4.721×10^2 | | |
| 1.40 GeV | 1.502×10^3 | 2.152 | 0.000 | | 0.001 | 2.153 | 6.602×10^2 | | |
| 2.00 GeV | 2.103×10^3 | 2.211 | 0.000 | 0.000 | 0.001 | 2.213 | 9.349×10^2 | | |
| 3.00 GeV | 3.104×10^3 | 2.279 | 0.001 | 0.001 | 0.001 | 2.282 | 1.379×10^3 | | |
| 4.00 GeV | 4.104×10^3 | 2.327 | 0.001 | 0.001 | 0.002 | 2.331 | 1.813×10^3 | | |
| 8.00 GeV | 8.105×10^3 | 2.435 | 0.003 | 0.003 | 0.004 | 2.445 | 3.483×10^3 | | |
| 10.0 GeV | 1.011×10^4 | 2.468 | 0.004 | 0.004 | 0.005 | 2.481 | 4.295×10^3 | | |
| 14.0 GeV | 1.411×10^4 | 2.516 | 0.006 | 0.006 | 0.007 | 2.535 | 5.889×10^3 | | |
| 20.0 GeV | 2.011×10^4 | 2.564 | 0.009 | 0.010 | 0.009 | 2.593 | 8.228×10^3 | | |
| 30.0 GeV | 3.011×10^4 | 2.617 | 0.015 | 0.018 | 0.014 | 2.664 | 1.203×10^4 | | |
| 40.0 GeV | 4.011×10^4 | 2.652 | 0.021 | 0.027 | 0.018 | 2.718 | 1.575×10^4 | | |
| 80.0 GeV | 8.011×10^4 | 2.735 | 0.048 | 0.065 | 0.035 | 2.883 | 3.001×10^4 | | |
| 100. GeV | 1.001×10^5 | 2.761 | 0.063 | 0.086 | 0.043 | 2.952 | 3.686×10^4 | | |
| 140. GeV | 1.401×10^5 | 2.799 | 0.093 | 0.129 | 0.060 | 3.080 | 5.013×10^4 | | |
| 200. GeV | 2.001×10^5 | 2.839 | 0.140 | 0.197 | 0.085 | 3.261 | 6.905×10^4 | | |
| 300. GeV | 3.001×10^5 | 2.884 | 0.221 | 0.314 | 0.127 | 3.546 | 9.845×10^4 | | |
| 400. GeV | 4.001×10^5 | 2.916 | 0.305 | 0.436 | 0.169 | 3.826 | 1.256×10^5 | | |
| 800. GeV | 8.001×10^5 | 2.995 | 0.656 | 0.944 | 0.341 | 4.936 | 2.174×10^5 | | |
| 1.00 TeV | 1.000×10^6 | 3.020 | 0.838 | 1.207 | 0.428 | 5.494 | 2.558×10^5 | | |
| 1.21 TeV | 1.214×10^6 | 3.042 | 1.033 | 1.486 | 0.524 | 6.085 | <i>Muon critical energy</i> | | |
| 1.40 TeV | 1.400×10^6 | 3.059 | 1.204 | 1.731 | 0.608 | 6.602 | 3.221×10^5 | | |
| 2.00 TeV | 2.000×10^6 | 3.100 | 1.768 | 2.534 | 0.880 | 8.283 | 4.031×10^5 | | |
| 3.00 TeV | 3.000×10^6 | 3.148 | 2.713 | 3.872 | 1.349 | 11.082 | 5.071×10^5 | | |
| 4.00 TeV | 4.000×10^6 | 3.183 | 3.675 | 5.230 | 1.825 | 13.914 | 5.875×10^5 | | |
| 8.00 TeV | 8.000×10^6 | 3.267 | 7.576 | 10.701 | 3.811 | 25.356 | 7.974×10^5 | | |
| 10.0 TeV | 1.000×10^7 | 3.295 | 9.550 | 13.457 | 4.835 | 31.138 | 8.684×10^5 | | |
| 14.0 TeV | 1.400×10^7 | 3.338 | 13.490 | 18.948 | 6.944 | 42.720 | 9.777×10^5 | | |
| 20.0 TeV | 2.000×10^7 | 3.384 | 19.452 | 27.233 | 10.186 | 60.255 | 1.095×10^6 | | |
| 30.0 TeV | 3.000×10^7 | 3.437 | 29.382 | 41.014 | 15.816 | 89.649 | 1.231×10^6 | | |
| 40.0 TeV | 4.000×10^7 | 3.475 | 39.368 | 54.842 | 21.596 | 119.281 | 1.327×10^6 | | |
| 80.0 TeV | 8.000×10^7 | 3.569 | 79.397 | 110.202 | 45.869 | 239.037 | 1.559×10^6 | | |
| 100. TeV | 1.000×10^8 | 3.600 | 99.461 | 137.917 | 58.457 | 299.435 | 1.634×10^6 | | |