

Muons in naphthalene (C₁₀H₈)

| | $\langle Z/A \rangle$ | ρ [g/cm ³] | I [eV] | a | $k = m_s$ | x_0 | x_1 | \bar{C} | δ_0 |
|----------|-----------------------|-----------------------------|----------|--------------------------|-----------|---------|------------------------------------|-----------|-----------------------------|
| | 0.53053 | 1.145 | 68.4 | 0.14766 | 3.2654 | 0.1374 | 2.5429 | 3.2274 | 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 | 7.703 | | | | 7.703 | | | 7.168×10^{-1} |
| 14.0 MeV | 5.616×10^1 | 6.006 | | | | 6.006 | | | 1.311×10^0 |
| 20.0 MeV | 6.802×10^1 | 4.689 | | | | 4.689 | | | 2.455×10^0 |
| 30.0 MeV | 8.509×10^1 | 3.636 | | | | 3.636 | | | 4.911×10^0 |
| 40.0 MeV | 1.003×10^2 | 3.104 | | | | 3.104 | | | 7.907×10^0 |
| 80.0 MeV | 1.527×10^2 | 2.326 | | | | 2.326 | | | 2.326×10^1 |
| 100. MeV | 1.764×10^2 | 2.178 | | | | 2.178 | | | 3.217×10^1 |
| 140. MeV | 2.218×10^2 | 2.028 | | | | 2.028 | | | 5.130×10^1 |
| 200. MeV | 2.868×10^2 | 1.941 | | | | 1.941 | | | 8.166×10^1 |
| 300. MeV | 3.917×10^2 | 1.907 | | | 0.000 | 1.907 | | | 1.338×10^2 |
| 318. MeV | 4.105×10^2 | 1.906 | | | 0.000 | 1.907 | | | <i>Minimum ionization</i> |
| 400. MeV | 4.945×10^2 | 1.912 | | | 0.000 | 1.913 | | | 1.862×10^2 |
| 800. MeV | 8.995×10^2 | 1.983 | 0.000 | | 0.000 | 1.984 | | | 3.916×10^2 |
| 1.00 GeV | 1.101×10^3 | 2.016 | 0.000 | | 0.000 | 2.016 | | | 4.916×10^2 |
| 1.40 GeV | 1.502×10^3 | 2.069 | 0.000 | | 0.001 | 2.070 | | | 6.873×10^2 |
| 2.00 GeV | 2.103×10^3 | 2.127 | 0.000 | 0.000 | 0.001 | 2.129 | | | 9.729×10^2 |
| 3.00 GeV | 3.104×10^3 | 2.193 | 0.001 | 0.001 | 0.001 | 2.196 | | | 1.435×10^3 |
| 4.00 GeV | 4.104×10^3 | 2.239 | 0.001 | 0.001 | 0.002 | 2.243 | | | 1.885×10^3 |
| 8.00 GeV | 8.105×10^3 | 2.345 | 0.003 | 0.003 | 0.004 | 2.354 | | | 3.620×10^3 |
| 10.0 GeV | 1.011×10^4 | 2.377 | 0.004 | 0.004 | 0.005 | 2.389 | | | 4.463×10^3 |
| 14.0 GeV | 1.411×10^4 | 2.423 | 0.006 | 0.006 | 0.007 | 2.442 | | | 6.118×10^3 |
| 20.0 GeV | 2.011×10^4 | 2.470 | 0.009 | 0.011 | 0.009 | 2.499 | | | 8.545×10^3 |
| 30.0 GeV | 3.011×10^4 | 2.521 | 0.015 | 0.018 | 0.014 | 2.568 | | | 1.249×10^4 |
| 40.0 GeV | 4.011×10^4 | 2.556 | 0.021 | 0.027 | 0.018 | 2.622 | | | 1.634×10^4 |
| 80.0 GeV | 8.011×10^4 | 2.636 | 0.049 | 0.066 | 0.034 | 2.785 | | | 3.112×10^4 |
| 100. GeV | 1.001×10^5 | 2.661 | 0.064 | 0.087 | 0.043 | 2.854 | | | 3.821×10^4 |
| 140. GeV | 1.401×10^5 | 2.698 | 0.094 | 0.130 | 0.059 | 2.982 | | | 5.191×10^4 |
| 200. GeV | 2.001×10^5 | 2.737 | 0.142 | 0.200 | 0.084 | 3.163 | | | 7.144×10^4 |
| 300. GeV | 3.001×10^5 | 2.781 | 0.224 | 0.318 | 0.126 | 3.449 | | | 1.017×10^5 |
| 400. GeV | 4.001×10^5 | 2.812 | 0.309 | 0.442 | 0.168 | 3.731 | | | 1.296×10^5 |
| 800. GeV | 8.001×10^5 | 2.888 | 0.665 | 0.956 | 0.340 | 4.849 | | | 2.233×10^5 |
| 1.00 TeV | 1.000×10^6 | 2.913 | 0.848 | 1.223 | 0.427 | 5.411 | | | 2.623×10^5 |
| 1.16 TeV | 1.161×10^6 | 2.929 | 0.996 | 1.435 | 0.498 | 5.859 | | | <i>Muon critical energy</i> |
| 1.40 TeV | 1.400×10^6 | 2.950 | 1.219 | 1.753 | 0.606 | 6.528 | | | 3.296×10^5 |
| 2.00 TeV | 2.000×10^6 | 2.991 | 1.789 | 2.567 | 0.877 | 8.223 | | | 4.113×10^5 |
| 3.00 TeV | 3.000×10^6 | 3.037 | 2.744 | 3.921 | 1.344 | 11.047 | | | 5.159×10^5 |
| 4.00 TeV | 4.000×10^6 | 3.071 | 3.717 | 5.295 | 1.819 | 13.902 | | | 5.964×10^5 |
| 8.00 TeV | 8.000×10^6 | 3.153 | 7.659 | 10.832 | 3.798 | 25.442 | | | 8.060×10^5 |
| 10.0 TeV | 1.000×10^7 | 3.180 | 9.653 | 13.621 | 4.818 | 31.272 | | | 8.768×10^5 |
| 14.0 TeV | 1.400×10^7 | 3.221 | 13.633 | 19.178 | 6.919 | 42.951 | | | 9.855×10^5 |
| 20.0 TeV | 2.000×10^7 | 3.266 | 19.655 | 27.561 | 10.149 | 60.631 | | | 1.102×10^6 |
| 30.0 TeV | 3.000×10^7 | 3.317 | 29.682 | 41.508 | 15.757 | 90.264 | | | 1.237×10^6 |
| 40.0 TeV | 4.000×10^7 | 3.354 | 39.766 | 55.501 | 21.513 | 120.135 | | | 1.333×10^6 |
| 80.0 TeV | 8.000×10^7 | 3.446 | 80.181 | 111.525 | 45.682 | 240.834 | | | 1.563×10^6 |
| 100. TeV | 1.000×10^8 | 3.476 | 100.436 | 139.571 | 58.215 | 301.698 | | | 1.637×10^6 |