

Table 252: Muons in Sodium iodide (NaI)

| $\langle Z/A \rangle$ | ρ [g/cm ³] | I [eV] | a | $k = m_s$ | x_0 | x_1 | \bar{C} | δ_0 |
|-----------------------|-----------------------------|------------|---------|---------------------------------------|-----------|----------|------------------------------------|------------|
| 0.42697 | 3.667 | 452.0 | 0.12516 | 3.0398 | 0.1203 | 3.5920 | 6.0572 | 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 | 4.703 | | | | 4.703 | 1.202×10^0 | |
| 14.0 MeV | 5.616×10^1 | 3.710 | | | | 3.710 | 2.169×10^0 | |
| 20.0 MeV | 6.802×10^1 | 2.928 | | | | 2.928 | 4.009×10^0 | |
| 30.0 MeV | 8.509×10^1 | 2.297 | | | | 2.297 | 7.917×10^0 | |
| 40.0 MeV | 1.003×10^2 | 1.975 | | | | 1.975 | 1.264×10^1 | |
| 80.0 MeV | 1.527×10^2 | 1.509 | | | | 1.509 | 3.652×10^1 | |
| 100. MeV | 1.764×10^2 | 1.427 | | | | 1.427 | 5.019×10^1 | |
| 140. MeV | 2.218×10^2 | 1.347 | | | | 1.348 | 7.916×10^1 | |
| 200. MeV | 2.868×10^2 | 1.310 | | | | 1.310 | 1.245×10^2 | |
| 243. MeV | 3.325×10^2 | 1.305 | | | | 1.305 | <i>Minimum ionization</i> | |
| 300. MeV | 3.917×10^2 | 1.310 | 0.000 | | 0.000 | 1.310 | 2.010×10^2 | |
| 400. MeV | 4.945×10^2 | 1.329 | 0.000 | | 0.000 | 1.330 | 2.768×10^2 | |
| 800. MeV | 8.995×10^2 | 1.417 | 0.001 | | 0.000 | 1.418 | 5.677×10^2 | |
| 1.00 GeV | 1.101×10^3 | 1.452 | 0.001 | | 0.000 | 1.453 | 7.070×10^2 | |
| 1.40 GeV | 1.502×10^3 | 1.507 | 0.002 | 0.000 | 0.001 | 1.509 | 9.768×10^2 | |
| 2.00 GeV | 2.103×10^3 | 1.567 | 0.003 | 0.001 | 0.001 | 1.571 | 1.366×10^3 | |
| 3.00 GeV | 3.104×10^3 | 1.634 | 0.004 | 0.003 | 0.001 | 1.643 | 1.987×10^3 | |
| 4.00 GeV | 4.104×10^3 | 1.681 | 0.006 | 0.005 | 0.002 | 1.694 | 2.586×10^3 | |
| 8.00 GeV | 8.105×10^3 | 1.786 | 0.016 | 0.015 | 0.003 | 1.821 | 4.855×10^3 | |
| 10.0 GeV | 1.011×10^4 | 1.817 | 0.021 | 0.022 | 0.004 | 1.864 | 5.940×10^3 | |
| 14.0 GeV | 1.411×10^4 | 1.862 | 0.032 | 0.035 | 0.006 | 1.935 | 8.045×10^3 | |
| 20.0 GeV | 2.011×10^4 | 1.907 | 0.050 | 0.057 | 0.008 | 2.022 | 1.108×10^4 | |
| 30.0 GeV | 3.011×10^4 | 1.955 | 0.082 | 0.099 | 0.011 | 2.148 | 1.587×10^4 | |
| 40.0 GeV | 4.011×10^4 | 1.986 | 0.115 | 0.145 | 0.015 | 2.263 | 2.040×10^4 | |
| 80.0 GeV | 8.011×10^4 | 2.056 | 0.260 | 0.349 | 0.030 | 2.696 | 3.657×10^4 | |
| 100. GeV | 1.001×10^5 | 2.078 | 0.337 | 0.459 | 0.037 | 2.911 | 4.370×10^4 | |
| 140. GeV | 1.401×10^5 | 2.108 | 0.495 | 0.685 | 0.051 | 3.341 | 5.652×10^4 | |
| 200. GeV | 2.001×10^5 | 2.140 | 0.742 | 1.043 | 0.073 | 4.000 | 7.292×10^4 | |
| 228. GeV | 2.283×10^5 | 2.152 | 0.860 | 1.210 | 0.083 | 4.305 | <i>Muon critical energy</i> | |
| 300. GeV | 3.001×10^5 | 2.176 | 1.164 | 1.642 | 0.109 | 5.093 | 9.503×10^4 | |
| 400. GeV | 4.001×10^5 | 2.201 | 1.601 | 2.263 | 0.145 | 6.211 | 1.128×10^5 | |
| 800. GeV | 8.001×10^5 | 2.262 | 3.404 | 4.809 | 0.294 | 10.770 | 1.611×10^5 | |
| 1.00 TeV | 1.000×10^6 | 2.282 | 4.330 | 6.113 | 0.369 | 13.095 | 1.779×10^5 | |
| 1.40 TeV | 1.400×10^6 | 2.312 | 6.187 | 8.712 | 0.523 | 17.735 | 2.041×10^5 | |
| 2.00 TeV | 2.000×10^6 | 2.345 | 9.028 | 12.679 | 0.756 | 24.809 | 2.326×10^5 | |
| 3.00 TeV | 3.000×10^6 | 2.382 | 13.772 | 19.272 | 1.157 | 36.584 | 2.656×10^5 | |
| 4.00 TeV | 4.000×10^6 | 2.409 | 18.579 | 25.936 | 1.563 | 48.489 | 2.892×10^5 | |
| 8.00 TeV | 8.000×10^6 | 2.475 | 37.966 | 52.724 | 3.250 | 96.417 | 3.466×10^5 | |
| 10.0 TeV | 1.000×10^7 | 2.497 | 47.737 | 66.191 | 4.116 | 120.543 | 3.651×10^5 | |
| 14.0 TeV | 1.400×10^7 | 2.530 | 67.227 | 93.061 | 5.895 | 168.714 | 3.931×10^5 | |
| 20.0 TeV | 2.000×10^7 | 2.566 | 96.636 | 133.539 | 8.622 | 241.364 | 4.226×10^5 | |
| 30.0 TeV | 3.000×10^7 | 2.608 | 145.594 | 200.886 | 13.335 | 362.424 | 4.562×10^5 | |
| 40.0 TeV | 4.000×10^7 | 2.638 | 194.730 | 268.395 | 18.162 | 483.926 | 4.800×10^5 | |
| 80.0 TeV | 8.000×10^7 | 2.711 | 391.580 | 538.619 | 38.319 | 971.231 | 5.372×10^5 | |
| 100. TeV | 1.000×10^8 | 2.735 | 490.176 | 673.855 | 48.733 | 1215.500 | 5.556×10^5 | |