## Table 269: Muons in Tungsten hexafluoride ($WF_6$)

| $\langle Z/A \rangle$ | $\rho$ [g/cm$^3$] | $I$ [eV] | $a$ | $k = m_s$ | $x_0$ | $x_1$ | $\overline{C}$ | $\delta_0$ |
|---|---|---|---|---|---|---|---|---|
| 0.42976 | 2.400 | 354.4 | 0.03658 | 3.5134 | 0.3020 | 4.2602 | 5.9881 | 0.00 |

| $T$ | $p$ [MeV/$c$] | Ionization | Brems | Pair prod | Photonucl | Total | CSDA range [g/cm$^2$] |
|---|---|---|---|---|---|---|---|
| | | [MeV cm$^2$/g] | | | | | |
| 10.0 MeV | $4.704 \times 10^1$ | 4.928 | | | | 4.928 | $1.143 \times 10^0$ |
| 14.0 MeV | $5.616 \times 10^1$ | 3.880 | | | | 3.880 | $2.067 \times 10^0$ |
| 20.0 MeV | $6.802 \times 10^1$ | 3.057 | | | | 3.057 | $3.828 \times 10^0$ |
| 30.0 MeV | $8.509 \times 10^1$ | 2.393 | | | | 2.393 | $7.574 \times 10^0$ |
| 40.0 MeV | $1.003 \times 10^2$ | 2.056 | | | | 2.056 | $1.211 \times 10^1$ |
| 80.0 MeV | $1.527 \times 10^2$ | 1.565 | | | | 1.565 | $3.509 \times 10^1$ |
| 100. MeV | $1.764 \times 10^2$ | 1.479 | | | | 1.479 | $4.827 \times 10^1$ |
| 140. MeV | $2.218 \times 10^2$ | 1.396 | | | | 1.396 | $7.623 \times 10^1$ |
| 200. MeV | $2.868 \times 10^2$ | 1.353 | | | | 1.353 | $1.200 \times 10^2$ |
| 253. MeV | $3.431 \times 10^2$ | 1.346 | | | 0.000 | 1.346 | *Minimum ionization* |
| 300. MeV | $3.917 \times 10^2$ | 1.349 | 0.000 | | 0.000 | 1.349 | $1.942 \times 10^2$ |
| 400. MeV | $4.945 \times 10^2$ | 1.367 | 0.000 | | 0.000 | 1.367 | $2.679 \times 10^2$ |
| 800. MeV | $8.995 \times 10^2$ | 1.451 | 0.001 | | 0.000 | 1.452 | $5.516 \times 10^2$ |
| 1.00 GeV | $1.101 \times 10^3$ | 1.485 | 0.001 | | 0.000 | 1.486 | $6.877 \times 10^2$ |
| 1.40 GeV | $1.502 \times 10^3$ | 1.539 | 0.002 | | 0.001 | 1.541 | $9.517 \times 10^2$ |
| 2.00 GeV | $2.103 \times 10^3$ | 1.598 | 0.003 | 0.001 | 0.001 | 1.602 | $1.333 \times 10^3$ |
| 3.00 GeV | $3.104 \times 10^3$ | 1.665 | 0.004 | 0.002 | 0.001 | 1.673 | $1.943 \times 10^3$ |
| 4.00 GeV | $4.104 \times 10^3$ | 1.711 | 0.006 | 0.004 | 0.002 | 1.724 | $2.531 \times 10^3$ |
| 8.00 GeV | $8.105 \times 10^3$ | 1.816 | 0.016 | 0.014 | 0.003 | 1.851 | $4.762 \times 10^3$ |
| 10.0 GeV | $1.011 \times 10^4$ | 1.848 | 0.021 | 0.020 | 0.004 | 1.894 | $5.830 \times 10^3$ |
| 14.0 GeV | $1.411 \times 10^4$ | 1.894 | 0.032 | 0.033 | 0.006 | 1.966 | $7.901 \times 10^3$ |
| 20.0 GeV | $2.011 \times 10^4$ | 1.940 | 0.050 | 0.055 | 0.008 | 2.053 | $1.089 \times 10^4$ |
| 30.0 GeV | $3.011 \times 10^4$ | 1.988 | 0.082 | 0.096 | 0.012 | 2.179 | $1.561 \times 10^4$ |
| 40.0 GeV | $4.011 \times 10^4$ | 2.021 | 0.116 | 0.141 | 0.015 | 2.294 | $2.008 \times 10^4$ |
| 80.0 GeV | $8.011 \times 10^4$ | 2.093 | 0.262 | 0.341 | 0.030 | 2.727 | $3.604 \times 10^4$ |
| 100. GeV | $1.001 \times 10^5$ | 2.115 | 0.340 | 0.449 | 0.037 | 2.942 | $4.310 \times 10^4$ |
| 140. GeV | $1.401 \times 10^5$ | 2.147 | 0.499 | 0.671 | 0.052 | 3.369 | $5.580 \times 10^4$ |
| 200. GeV | $2.001 \times 10^5$ | 2.180 | 0.748 | 1.023 | 0.074 | 4.025 | $7.208 \times 10^4$ |
| 234. GeV | $2.339 \times 10^5$ | 2.194 | 0.890 | 1.218 | 0.086 | 4.389 | *Muon critical energy* |
| 300. GeV | $3.001 \times 10^5$ | 2.217 | 1.173 | 1.611 | 0.111 | 5.112 | $9.408 \times 10^4$ |
| 400. GeV | $4.001 \times 10^5$ | 2.243 | 1.613 | 2.221 | 0.147 | 6.224 | $1.118 \times 10^5$ |
| 800. GeV | $8.001 \times 10^5$ | 2.305 | 3.427 | 4.724 | 0.298 | 10.755 | $1.601 \times 10^5$ |
| 1.00 TeV | $1.000 \times 10^6$ | 2.325 | 4.360 | 6.005 | 0.375 | 13.065 | $1.770 \times 10^5$ |
| 1.40 TeV | $1.400 \times 10^6$ | 2.355 | 6.228 | 8.560 | 0.531 | 17.675 | $2.032 \times 10^5$ |
| 2.00 TeV | $2.000 \times 10^6$ | 2.388 | 9.086 | 12.459 | 0.768 | 24.702 | $2.318 \times 10^5$ |
| 3.00 TeV | $3.000 \times 10^6$ | 2.425 | 13.858 | 18.940 | 1.175 | 36.399 | $2.649 \times 10^5$ |
| 4.00 TeV | $4.000 \times 10^6$ | 2.453 | 18.692 | 25.490 | 1.588 | 48.224 | $2.887 \times 10^5$ |
| 8.00 TeV | $8.000 \times 10^6$ | 2.519 | 38.184 | 51.823 | 3.304 | 95.831 | $3.464 \times 10^5$ |
| 10.0 TeV | $1.000 \times 10^7$ | 2.541 | 48.006 | 65.060 | 4.186 | 119.794 | $3.651 \times 10^5$ |
| 14.0 TeV | $1.400 \times 10^7$ | 2.575 | 67.596 | 91.471 | 5.997 | 167.640 | $3.932 \times 10^5$ |
| 20.0 TeV | $2.000 \times 10^7$ | 2.611 | 97.154 | 131.258 | 8.775 | 239.799 | $4.229 \times 10^5$ |
| 30.0 TeV | $3.000 \times 10^7$ | 2.652 | 146.362 | 197.456 | 13.581 | 360.052 | $4.567 \times 10^5$ |
| 40.0 TeV | $4.000 \times 10^7$ | 2.682 | 195.745 | 263.814 | 18.504 | 480.747 | $4.807 \times 10^5$ |
| 80.0 TeV | $8.000 \times 10^7$ | 2.756 | 393.572 | 529.421 | 39.088 | 964.838 | $5.383 \times 10^5$ |
| 100. TeV | $1.000 \times 10^8$ | 2.781 | 492.651 | 662.343 | 49.730 | 1207.507 | $5.568 \times 10^5$ |