## Table 257: Muons in Terphenyl $C_{18}H_{10}$

| $\langle Z/A \rangle$ | $\rho$ [g/cm$^3$] | $I$ [eV] | $a$ | $k = m_s$ | $x_0$ | $x_1$ | $\overline{C}$ | $\delta_0$ |
|---|---|---|---|---|---|---|---|---|
| 0.52148 | 1.234 | 71.7 | 0.14964 | 3.2685 | 0.1322 | 2.5429 | 3.2639 | 0.00 |

| $T$ | $p$ [MeV/$c$] | Ionization | Brems | Pair prod | Photonucl | Total | CSDA range [g/cm$^2$] |
|---|---|---|---|---|---|---|---|
| | | [MeV cm$^2$/g] | | | | | |
| 10.0 MeV | $4.704 \times 10^1$ | 7.526 | | | | 7.526 | $7.340 \times 10^{-1}$ |
| 14.0 MeV | $5.616 \times 10^1$ | 5.869 | | | | 5.870 | $1.342 \times 10^0$ |
| 20.0 MeV | $6.802 \times 10^1$ | 4.583 | | | | 4.583 | $2.512 \times 10^0$ |
| 30.0 MeV | $8.509 \times 10^1$ | 3.555 | | | | 3.555 | $5.025 \times 10^0$ |
| 40.0 MeV | $1.003 \times 10^2$ | 3.035 | | | | 3.035 | $8.089 \times 10^0$ |
| 80.0 MeV | $1.527 \times 10^2$ | 2.274 | | | | 2.274 | $2.379 \times 10^1$ |
| 100. MeV | $1.764 \times 10^2$ | 2.131 | | | | 2.131 | $3.290 \times 10^1$ |
| 140. MeV | $2.218 \times 10^2$ | 1.984 | | | | 1.984 | $5.245 \times 10^1$ |
| 200. MeV | $2.868 \times 10^2$ | 1.900 | | | | 1.900 | $8.347 \times 10^1$ |
| 300. MeV | $3.917 \times 10^2$ | 1.868 | | | 0.000 | 1.868 | $1.367 \times 10^2$ |
| 318. MeV | $4.105 \times 10^2$ | 1.867 | | | 0.000 | 1.867 | *Minimum ionization* |
| 400. MeV | $4.945 \times 10^2$ | 1.873 | | | 0.000 | 1.874 | $1.902 \times 10^2$ |
| 800. MeV | $8.995 \times 10^2$ | 1.944 | 0.000 | | 0.000 | 1.944 | $3.998 \times 10^2$ |
| 1.00 GeV | $1.101 \times 10^3$ | 1.976 | 0.000 | | 0.000 | 1.977 | $5.018 \times 10^2$ |
| 1.40 GeV | $1.502 \times 10^3$ | 2.028 | 0.000 | | 0.001 | 2.029 | $7.014 \times 10^2$ |
| 2.00 GeV | $2.103 \times 10^3$ | 2.086 | 0.000 | 0.000 | 0.001 | 2.087 | $9.927 \times 10^2$ |
| 3.00 GeV | $3.104 \times 10^3$ | 2.151 | 0.001 | 0.001 | 0.001 | 2.154 | $1.464 \times 10^3$ |
| 4.00 GeV | $4.104 \times 10^3$ | 2.196 | 0.001 | 0.001 | 0.002 | 2.200 | $1.923 \times 10^3$ |
| 8.00 GeV | $8.105 \times 10^3$ | 2.300 | 0.003 | 0.003 | 0.004 | 2.310 | $3.692 \times 10^3$ |
| 10.0 GeV | $1.011 \times 10^4$ | 2.332 | 0.004 | 0.004 | 0.005 | 2.344 | $4.551 \times 10^3$ |
| 14.0 GeV | $1.411 \times 10^4$ | 2.377 | 0.006 | 0.006 | 0.007 | 2.396 | $6.238 \times 10^3$ |
| 20.0 GeV | $2.011 \times 10^4$ | 2.423 | 0.009 | 0.011 | 0.009 | 2.453 | $8.711 \times 10^3$ |
| 30.0 GeV | $3.011 \times 10^4$ | 2.474 | 0.015 | 0.019 | 0.014 | 2.521 | $1.273 \times 10^4$ |
| 40.0 GeV | $4.011 \times 10^4$ | 2.508 | 0.022 | 0.027 | 0.018 | 2.575 | $1.665 \times 10^4$ |
| 80.0 GeV | $8.011 \times 10^4$ | 2.586 | 0.049 | 0.066 | 0.034 | 2.737 | $3.170 \times 10^4$ |
| 100. GeV | $1.001 \times 10^5$ | 2.611 | 0.064 | 0.088 | 0.043 | 2.805 | $3.891 \times 10^4$ |
| 140. GeV | $1.401 \times 10^5$ | 2.647 | 0.095 | 0.132 | 0.059 | 2.933 | $5.285 \times 10^4$ |
| 200. GeV | $2.001 \times 10^5$ | 2.686 | 0.143 | 0.202 | 0.084 | 3.114 | $7.270 \times 10^4$ |
| 300. GeV | $3.001 \times 10^5$ | 2.729 | 0.225 | 0.321 | 0.126 | 3.401 | $1.034 \times 10^5$ |
| 400. GeV | $4.001 \times 10^5$ | 2.760 | 0.311 | 0.445 | 0.168 | 3.684 | $1.316 \times 10^5$ |
| 800. GeV | $8.001 \times 10^5$ | 2.834 | 0.669 | 0.964 | 0.339 | 4.807 | $2.264 \times 10^5$ |
| 1.00 TeV | $1.000 \times 10^6$ | 2.859 | 0.854 | 1.232 | 0.426 | 5.371 | $2.658 \times 10^5$ |
| 1.13 TeV | $1.134 \times 10^6$ | 2.872 | 0.978 | 1.409 | 0.485 | 5.745 | *Muon critical energy* |
| 1.40 TeV | $1.400 \times 10^6$ | 2.895 | 1.227 | 1.766 | 0.604 | 6.494 | $3.334 \times 10^5$ |
| 2.00 TeV | $2.000 \times 10^6$ | 2.935 | 1.801 | 2.585 | 0.875 | 8.197 | $4.155 \times 10^5$ |
| 3.00 TeV | $3.000 \times 10^6$ | 2.981 | 2.762 | 3.949 | 1.342 | 11.034 | $5.203 \times 10^5$ |
| 4.00 TeV | $4.000 \times 10^6$ | 3.014 | 3.741 | 5.332 | 1.816 | 13.903 | $6.009 \times 10^5$ |
| 8.00 TeV | $8.000 \times 10^6$ | 3.095 | 7.706 | 10.906 | 3.791 | 25.498 | $8.102 \times 10^5$ |
| 10.0 TeV | $1.000 \times 10^7$ | 3.121 | 9.712 | 13.715 | 4.808 | 31.356 | $8.808 \times 10^5$ |
| 14.0 TeV | $1.400 \times 10^7$ | 3.162 | 13.714 | 19.309 | 6.905 | 43.091 | $9.892 \times 10^5$ |
| 20.0 TeV | $2.000 \times 10^7$ | 3.206 | 19.771 | 27.749 | 10.128 | 60.853 | $1.106 \times 10^6$ |
| 30.0 TeV | $3.000 \times 10^7$ | 3.256 | 29.855 | 41.791 | 15.722 | 90.625 | $1.240 \times 10^6$ |
| 40.0 TeV | $4.000 \times 10^7$ | 3.293 | 39.995 | 55.879 | 21.466 | 120.633 | $1.335 \times 10^6$ |
| 80.0 TeV | $8.000 \times 10^7$ | 3.382 | 80.630 | 112.283 | 45.576 | 241.871 | $1.565 \times 10^6$ |
| 100. TeV | $1.000 \times 10^8$ | 3.412 | 100.995 | 140.519 | 58.076 | 303.003 | $1.638 \times 10^6$ |