## Muons in polyvinylacetate [$(CH_2CHOCOCH_3)_n$]

| $\langle Z/A\rangle$ | $\rho$ [g/cm$^3$] | $I$ [eV] | $a$ | $k = m_s$ | $x_0$ | $x_1$ | $\overline{C}$ | $\delta_0$ |
|---|---|---|---|---|---|---|---|---|
| 0.53432 | 1.190 | 73.7 | 0.11442 | 3.3762 | 0.1769 | 2.6747 | 3.3309 | 0.00 |

| $T$ | $p$ [MeV/$c$] | Ionization | Brems | Pair prod | Photonucl | Total | CSDA range [g/cm$^2$] |
|---|---|---|---|---|---|---|---|
| | | [MeV cm$^2$/g] | | | | | |
| 10.0 MeV | $4.704 \times 10^1$ | 7.684 | | | | 7.684 | $7.191 \times 10^{-1}$ |
| 14.0 MeV | $5.616 \times 10^1$ | 5.993 | | | | 5.994 | $1.315 \times 10^0$ |
| 20.0 MeV | $6.802 \times 10^1$ | 4.680 | | | | 4.680 | $2.461 \times 10^0$ |
| 30.0 MeV | $8.509 \times 10^1$ | 3.631 | | | | 3.631 | $4.921 \times 10^0$ |
| 40.0 MeV | $1.003 \times 10^2$ | 3.100 | | | | 3.100 | $7.921 \times 10^0$ |
| 80.0 MeV | $1.527 \times 10^2$ | 2.327 | | | | 2.327 | $2.329 \times 10^1$ |
| 100. MeV | $1.764 \times 10^2$ | 2.182 | | | | 2.182 | $3.218 \times 10^1$ |
| 140. MeV | $2.218 \times 10^2$ | 2.032 | | | | 2.032 | $5.127 \times 10^1$ |
| 200. MeV | $2.868 \times 10^2$ | 1.945 | | | | 1.945 | $8.157 \times 10^1$ |
| 300. MeV | $3.917 \times 10^2$ | 1.912 | | | 0.000 | 1.912 | $1.336 \times 10^2$ |
| 318. MeV | $4.105 \times 10^2$ | 1.911 | | | 0.000 | 1.912 | *Minimum ionization* |
| 400. MeV | $4.945 \times 10^2$ | 1.918 | | | 0.000 | 1.918 | $1.858 \times 10^2$ |
| 800. MeV | $8.995 \times 10^2$ | 1.990 | 0.000 | | 0.000 | 1.990 | $3.906 \times 10^2$ |
| 1.00 GeV | $1.101 \times 10^3$ | 2.023 | 0.000 | | 0.000 | 2.023 | $4.903 \times 10^2$ |
| 1.40 GeV | $1.502 \times 10^3$ | 2.076 | 0.000 | | 0.001 | 2.077 | $6.853 \times 10^2$ |
| 2.00 GeV | $2.103 \times 10^3$ | 2.135 | 0.001 | 0.000 | 0.001 | 2.137 | $9.698 \times 10^2$ |
| 3.00 GeV | $3.104 \times 10^3$ | 2.203 | 0.001 | 0.001 | 0.001 | 2.206 | $1.430 \times 10^3$ |
| 4.00 GeV | $4.104 \times 10^3$ | 2.249 | 0.001 | 0.001 | 0.002 | 2.254 | $1.878 \times 10^3$ |
| 8.00 GeV | $8.105 \times 10^3$ | 2.357 | 0.003 | 0.003 | 0.004 | 2.367 | $3.605 \times 10^3$ |
| 10.0 GeV | $1.011 \times 10^4$ | 2.389 | 0.004 | 0.004 | 0.005 | 2.403 | $4.443 \times 10^3$ |
| 14.0 GeV | $1.411 \times 10^4$ | 2.436 | 0.007 | 0.007 | 0.007 | 2.457 | $6.089 \times 10^3$ |
| 20.0 GeV | $2.011 \times 10^4$ | 2.484 | 0.010 | 0.012 | 0.009 | 2.515 | $8.501 \times 10^3$ |
| 30.0 GeV | $3.011 \times 10^4$ | 2.535 | 0.017 | 0.020 | 0.014 | 2.586 | $1.242 \times 10^4$ |
| 40.0 GeV | $4.011 \times 10^4$ | 2.570 | 0.024 | 0.030 | 0.018 | 2.642 | $1.624 \times 10^4$ |
| 80.0 GeV | $8.011 \times 10^4$ | 2.651 | 0.054 | 0.073 | 0.034 | 2.812 | $3.089 \times 10^4$ |
| 100. GeV | $1.001 \times 10^5$ | 2.676 | 0.070 | 0.096 | 0.043 | 2.885 | $3.791 \times 10^4$ |
| 140. GeV | $1.401 \times 10^5$ | 2.714 | 0.104 | 0.144 | 0.059 | 3.020 | $5.146 \times 10^4$ |
| 200. GeV | $2.001 \times 10^5$ | 2.753 | 0.156 | 0.221 | 0.084 | 3.213 | $7.071 \times 10^4$ |
| 300. GeV | $3.001 \times 10^5$ | 2.797 | 0.246 | 0.351 | 0.126 | 3.520 | $1.004 \times 10^5$ |
| 400. GeV | $4.001 \times 10^5$ | 2.829 | 0.340 | 0.486 | 0.167 | 3.822 | $1.277 \times 10^5$ |
| 800. GeV | $8.001 \times 10^5$ | 2.905 | 0.730 | 1.051 | 0.338 | 5.025 | $2.187 \times 10^5$ |
| 1.00 TeV | $1.000 \times 10^6$ | 2.930 | 0.932 | 1.344 | 0.425 | 5.631 | $2.562 \times 10^5$ |
| 1.08 TeV | $1.083 \times 10^6$ | 2.939 | 1.015 | 1.462 | 0.461 | 5.878 | *Muon critical energy* |
| 1.40 TeV | $1.400 \times 10^6$ | 2.968 | 1.339 | 1.925 | 0.603 | 6.834 | $3.206 \times 10^5$ |
| 2.00 TeV | $2.000 \times 10^6$ | 3.008 | 1.964 | 2.816 | 0.873 | 8.661 | $3.985 \times 10^5$ |
| 3.00 TeV | $3.000 \times 10^6$ | 3.055 | 3.011 | 4.301 | 1.337 | 11.705 | $4.974 \times 10^5$ |
| 4.00 TeV | $4.000 \times 10^6$ | 3.089 | 4.078 | 5.806 | 1.810 | 14.783 | $5.733 \times 10^5$ |
| 8.00 TeV | $8.000 \times 10^6$ | 3.172 | 8.396 | 11.870 | 3.778 | 27.216 | $7.697 \times 10^5$ |
| 10.0 TeV | $1.000 \times 10^7$ | 3.199 | 10.580 | 14.924 | 4.792 | 33.496 | $8.359 \times 10^5$ |
| 14.0 TeV | $1.400 \times 10^7$ | 3.241 | 14.938 | 21.010 | 6.882 | 46.072 | $9.373 \times 10^5$ |
| 20.0 TeV | $2.000 \times 10^7$ | 3.285 | 21.533 | 30.190 | 10.093 | 65.101 | $1.046 \times 10^6$ |
| 30.0 TeV | $3.000 \times 10^7$ | 3.337 | 32.513 | 45.464 | 15.667 | 96.981 | $1.171 \times 10^6$ |
| 40.0 TeV | $4.000 \times 10^7$ | 3.375 | 43.554 | 60.787 | 21.388 | 129.104 | $1.260 \times 10^6$ |
| 80.0 TeV | $8.000 \times 10^7$ | 3.467 | 87.817 | 122.134 | 45.404 | 258.822 | $1.475 \times 10^6$ |
| 100. TeV | $1.000 \times 10^8$ | 3.497 | 110.006 | 152.844 | 57.854 | 324.202 | $1.544 \times 10^6$ |