

Muons in viton fluoroelastomer $[(C_5H_2F_8)_n]$

| | $\langle Z/A \rangle$ | ρ [g/cm ³] | I [eV] | a | $k = m_s$ | x_0 | x_1 | \bar{C} | δ_0 |
|----------|-----------------------|-----------------------------|----------|--------------------------|-----------|---------|------------------------------------|-----------|-----------------------------|
| | 0.48585 | 1.800 | 98.6 | 0.09965 | 3.4556 | 0.2106 | 2.7874 | 3.5943 | 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 | 6.725 | | | | 6.725 | | | 8.240×10^{-1} |
| 14.0 MeV | 5.616×10^1 | 5.253 | | | | 5.253 | | | 1.504×10^0 |
| 20.0 MeV | 6.802×10^1 | 4.108 | | | | 4.108 | | | 2.811×10^0 |
| 30.0 MeV | 8.509×10^1 | 3.191 | | | | 3.191 | | | 5.611×10^0 |
| 40.0 MeV | 1.003×10^2 | 2.727 | | | | 2.727 | | | 9.023×10^0 |
| 80.0 MeV | 1.527×10^2 | 2.052 | | | | 2.052 | | | 2.647×10^1 |
| 100. MeV | 1.764×10^2 | 1.930 | | | | 1.930 | | | 3.654×10^1 |
| 140. MeV | 2.218×10^2 | 1.800 | | | | 1.800 | | | 5.810×10^1 |
| 200. MeV | 2.868×10^2 | 1.727 | | | | 1.727 | | | 9.226×10^1 |
| 300. MeV | 3.917×10^2 | 1.701 | | | 0.000 | 1.701 | | | 1.508×10^2 |
| 308. MeV | 4.000×10^2 | 1.701 | | | 0.000 | 1.701 | | | <i>Minimum ionization</i> |
| 400. MeV | 4.945×10^2 | 1.708 | | | 0.000 | 1.709 | | | 2.095×10^2 |
| 800. MeV | 8.995×10^2 | 1.778 | 0.000 | | 0.000 | 1.778 | | | 4.390×10^2 |
| 1.00 GeV | 1.101×10^3 | 1.809 | 0.000 | | 0.000 | 1.809 | | | 5.504×10^2 |
| 1.40 GeV | 1.502×10^3 | 1.859 | 0.000 | 0.000 | 0.001 | 1.860 | | | 7.683×10^2 |
| 2.00 GeV | 2.103×10^3 | 1.914 | 0.001 | 0.000 | 0.001 | 1.915 | | | 1.086×10^3 |
| 3.00 GeV | 3.104×10^3 | 1.976 | 0.001 | 0.001 | 0.001 | 1.979 | | | 1.599×10^3 |
| 4.00 GeV | 4.104×10^3 | 2.019 | 0.002 | 0.001 | 0.002 | 2.024 | | | 2.098×10^3 |
| 8.00 GeV | 8.105×10^3 | 2.118 | 0.004 | 0.004 | 0.004 | 2.129 | | | 4.019×10^3 |
| 10.0 GeV | 1.011×10^4 | 2.148 | 0.005 | 0.005 | 0.005 | 2.162 | | | 4.951×10^3 |
| 14.0 GeV | 1.411×10^4 | 2.191 | 0.008 | 0.008 | 0.006 | 2.213 | | | 6.779×10^3 |
| 20.0 GeV | 2.011×10^4 | 2.234 | 0.012 | 0.014 | 0.009 | 2.269 | | | 9.454×10^3 |
| 30.0 GeV | 3.011×10^4 | 2.281 | 0.019 | 0.024 | 0.013 | 2.338 | | | 1.379×10^4 |
| 40.0 GeV | 4.011×10^4 | 2.313 | 0.027 | 0.035 | 0.017 | 2.393 | | | 1.802×10^4 |
| 80.0 GeV | 8.011×10^4 | 2.387 | 0.062 | 0.084 | 0.034 | 2.567 | | | 3.413×10^4 |
| 100. GeV | 1.001×10^5 | 2.410 | 0.081 | 0.111 | 0.042 | 2.643 | | | 4.181×10^4 |
| 140. GeV | 1.401×10^5 | 2.444 | 0.119 | 0.166 | 0.058 | 2.787 | | | 5.654×10^4 |
| 200. GeV | 2.001×10^5 | 2.479 | 0.179 | 0.254 | 0.082 | 2.995 | | | 7.730×10^4 |
| 300. GeV | 3.001×10^5 | 2.520 | 0.282 | 0.403 | 0.123 | 3.329 | | | 1.090×10^5 |
| 400. GeV | 4.001×10^5 | 2.548 | 0.390 | 0.559 | 0.164 | 3.661 | | | 1.376×10^5 |
| 800. GeV | 8.001×10^5 | 2.618 | 0.835 | 1.204 | 0.332 | 4.989 | | | 2.308×10^5 |
| 879. GeV | 8.795×10^5 | 2.627 | 0.925 | 1.336 | 0.366 | 5.255 | | | <i>Muon critical energy</i> |
| 1.00 TeV | 1.000×10^6 | 2.640 | 1.065 | 1.538 | 0.417 | 5.661 | | | 2.684×10^5 |
| 1.40 TeV | 1.400×10^6 | 2.675 | 1.527 | 2.201 | 0.592 | 6.995 | | | 3.319×10^5 |
| 2.00 TeV | 2.000×10^6 | 2.712 | 2.238 | 3.217 | 0.857 | 9.024 | | | 4.072×10^5 |
| 3.00 TeV | 3.000×10^6 | 2.754 | 3.428 | 4.908 | 1.313 | 12.403 | | | 5.014×10^5 |
| 4.00 TeV | 4.000×10^6 | 2.785 | 4.638 | 6.621 | 1.776 | 15.821 | | | 5.726×10^5 |
| 8.00 TeV | 8.000×10^6 | 2.860 | 9.535 | 13.522 | 3.705 | 29.622 | | | 7.545×10^5 |
| 10.0 TeV | 1.000×10^7 | 2.885 | 12.010 | 16.996 | 4.698 | 36.589 | | | 8.151×10^5 |
| 14.0 TeV | 1.400×10^7 | 2.923 | 16.947 | 23.920 | 6.744 | 50.534 | | | 9.078×10^5 |
| 20.0 TeV | 2.000×10^7 | 2.964 | 24.412 | 34.362 | 9.885 | 71.623 | | | 1.007×10^6 |
| 30.0 TeV | 3.000×10^7 | 3.011 | 36.841 | 51.738 | 15.336 | 106.925 | | | 1.121×10^6 |
| 40.0 TeV | 4.000×10^7 | 3.045 | 49.332 | 69.168 | 20.928 | 142.473 | | | 1.201×10^6 |
| 80.0 TeV | 8.000×10^7 | 3.128 | 99.412 | 138.949 | 44.382 | 285.871 | | | 1.396×10^6 |
| 100. TeV | 1.000×10^8 | 3.156 | 124.515 | 173.880 | 56.533 | 358.084 | | | 1.458×10^6 |