

Muons in polyethylene terephthalate (Mylar) [(C₁₀H₈O₄)_n]

| $\langle Z/A \rangle$ | ρ [g/cm ³] | I [eV] | a | $k = m_s$ | x_0 | x_1 | \bar{C} | δ_0 |
|-----------------------|-----------------------------|------------|---------|---------------------------------------|-----------|---------|------------------------------------|------------|
| 0.52037 | 1.400 | 78.7 | 0.12679 | 3.3076 | 0.1562 | 2.6507 | 3.3262 | 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 | 7.420 | | | | 7.420 | 7.451×10^{-1} | |
| 14.0 MeV | 5.616×10^1 | 5.789 | | | | 5.789 | 1.362×10^0 | |
| 20.0 MeV | 6.802×10^1 | 4.522 | | | | 4.522 | 2.548×10^0 | |
| 30.0 MeV | 8.509×10^1 | 3.509 | | | | 3.509 | 5.093×10^0 | |
| 40.0 MeV | 1.003×10^2 | 2.997 | | | | 2.997 | 8.197×10^0 | |
| 80.0 MeV | 1.527×10^2 | 2.250 | | | | 2.250 | 2.409×10^1 | |
| 100. MeV | 1.764×10^2 | 2.108 | | | | 2.108 | 3.329×10^1 | |
| 140. MeV | 2.218×10^2 | 1.963 | | | | 1.964 | 5.305×10^1 | |
| 200. MeV | 2.868×10^2 | 1.880 | | | | 1.880 | 8.440×10^1 | |
| 300. MeV | 3.917×10^2 | 1.849 | | | 0.000 | 1.849 | 1.382×10^2 | |
| 317. MeV | 4.096×10^2 | 1.848 | | | 0.000 | 1.849 | <i>Minimum ionization</i> | |
| 400. MeV | 4.945×10^2 | 1.855 | | | 0.000 | 1.855 | 1.922×10^2 | |
| 800. MeV | 8.995×10^2 | 1.926 | 0.000 | | 0.000 | 1.926 | 4.039×10^2 | |
| 1.00 GeV | 1.101×10^3 | 1.958 | 0.000 | | 0.000 | 1.959 | 5.069×10^2 | |
| 1.40 GeV | 1.502×10^3 | 2.010 | 0.000 | | 0.001 | 2.011 | 7.083×10^2 | |
| 2.00 GeV | 2.103×10^3 | 2.068 | 0.001 | 0.000 | 0.001 | 2.070 | 1.002×10^3 | |
| 3.00 GeV | 3.104×10^3 | 2.134 | 0.001 | 0.001 | 0.001 | 2.137 | 1.477×10^3 | |
| 4.00 GeV | 4.104×10^3 | 2.180 | 0.001 | 0.001 | 0.002 | 2.184 | 1.940×10^3 | |
| 8.00 GeV | 8.105×10^3 | 2.284 | 0.003 | 0.003 | 0.004 | 2.294 | 3.721×10^3 | |
| 10.0 GeV | 1.011×10^4 | 2.316 | 0.004 | 0.004 | 0.005 | 2.329 | 4.586×10^3 | |
| 14.0 GeV | 1.411×10^4 | 2.362 | 0.007 | 0.007 | 0.007 | 2.382 | 6.283×10^3 | |
| 20.0 GeV | 2.011×10^4 | 2.408 | 0.010 | 0.012 | 0.009 | 2.439 | 8.770×10^3 | |
| 30.0 GeV | 3.011×10^4 | 2.458 | 0.017 | 0.020 | 0.013 | 2.509 | 1.281×10^4 | |
| 40.0 GeV | 4.011×10^4 | 2.492 | 0.024 | 0.030 | 0.018 | 2.564 | 1.675×10^4 | |
| 80.0 GeV | 8.011×10^4 | 2.571 | 0.054 | 0.073 | 0.034 | 2.732 | 3.184×10^4 | |
| 100. GeV | 1.001×10^5 | 2.595 | 0.070 | 0.096 | 0.042 | 2.804 | 3.906×10^4 | |
| 140. GeV | 1.401×10^5 | 2.632 | 0.104 | 0.144 | 0.059 | 2.939 | 5.299×10^4 | |
| 200. GeV | 2.001×10^5 | 2.670 | 0.156 | 0.221 | 0.084 | 3.131 | 7.276×10^4 | |
| 300. GeV | 3.001×10^5 | 2.713 | 0.246 | 0.351 | 0.125 | 3.436 | 1.032×10^5 | |
| 400. GeV | 4.001×10^5 | 2.744 | 0.340 | 0.487 | 0.167 | 3.738 | 1.311×10^5 | |
| 800. GeV | 8.001×10^5 | 2.818 | 0.731 | 1.052 | 0.337 | 4.939 | 2.239×10^5 | |
| 1.00 TeV | 1.000×10^6 | 2.843 | 0.932 | 1.345 | 0.424 | 5.544 | 2.621×10^5 | |
| 1.05 TeV | 1.051×10^6 | 2.848 | 0.984 | 1.418 | 0.446 | 5.696 | <i>Muon critical energy</i> | |
| 1.40 TeV | 1.400×10^6 | 2.879 | 1.339 | 1.926 | 0.601 | 6.746 | 3.274×10^5 | |
| 2.00 TeV | 2.000×10^6 | 2.919 | 1.964 | 2.818 | 0.871 | 8.572 | 4.062×10^5 | |
| 3.00 TeV | 3.000×10^6 | 2.965 | 3.011 | 4.303 | 1.334 | 11.612 | 5.061×10^5 | |
| 4.00 TeV | 4.000×10^6 | 2.997 | 4.076 | 5.809 | 1.806 | 14.688 | 5.825×10^5 | |
| 8.00 TeV | 8.000×10^6 | 3.078 | 8.390 | 11.874 | 3.769 | 27.112 | 7.799×10^5 | |
| 10.0 TeV | 1.000×10^7 | 3.105 | 10.572 | 14.929 | 4.781 | 33.387 | 8.463×10^5 | |
| 14.0 TeV | 1.400×10^7 | 3.145 | 14.925 | 21.017 | 6.865 | 45.952 | 9.480×10^5 | |
| 20.0 TeV | 2.000×10^7 | 3.189 | 21.511 | 30.199 | 10.067 | 64.966 | 1.057×10^6 | |
| 30.0 TeV | 3.000×10^7 | 3.239 | 32.477 | 45.477 | 15.625 | 96.818 | 1.183×10^6 | |
| 40.0 TeV | 4.000×10^7 | 3.276 | 43.502 | 60.804 | 21.330 | 128.912 | 1.272×10^6 | |
| 80.0 TeV | 8.000×10^7 | 3.365 | 87.697 | 122.167 | 45.272 | 258.501 | 1.487×10^6 | |
| 100. TeV | 1.000×10^8 | 3.395 | 109.848 | 152.885 | 57.684 | 323.812 | 1.556×10^6 | |