

Muons in cobalt (Co)

| Z | A [g/mol] | ρ [g/cm ³] | I [eV] | a | $k = m_s$ | x_0 | x_1 | \bar{C} | δ_0 |
|----------|---------------------|-----------------------------|---------|---------------------------------------|-----------|---------|------------------------------------|-----------|------------|
| 27 (Co) | 58.933194 (4) | 8.900 | 297.0 | 0.14474 | 2.9502 | -0.0187 | 3.1790 | 4.2601 | 0.12 |
| 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 | 5.372 | | | | 5.372 | 1.049×10^0 | | |
| 14.0 MeV | 5.616×10^1 | 4.226 | | | | 4.226 | 1.897×10^0 | | |
| 20.0 MeV | 6.802×10^1 | 3.325 | | | | 3.325 | 3.515×10^0 | | |
| 30.0 MeV | 8.509×10^1 | 2.597 | | | | 2.597 | 6.964×10^0 | | |
| 40.0 MeV | 1.003×10^2 | 2.225 | | | | 2.225 | 1.115×10^1 | | |
| 80.0 MeV | 1.527×10^2 | 1.679 | | | | 1.679 | 3.249×10^1 | | |
| 100. MeV | 1.764×10^2 | 1.580 | | | | 1.581 | 4.479×10^1 | | |
| 140. MeV | 2.218×10^2 | 1.483 | | | | 1.483 | 7.104×10^1 | | |
| 200. MeV | 2.868×10^2 | 1.431 | | | | 1.431 | 1.124×10^2 | | |
| 270. MeV | 3.602×10^2 | 1.419 | | | 0.000 | 1.420 | <i>Minimum ionization</i> | | |
| 300. MeV | 3.917×10^2 | 1.421 | | | 0.000 | 1.421 | 1.827×10^2 | | |
| 400. MeV | 4.945×10^2 | 1.435 | 0.000 | | 0.000 | 1.435 | 2.528×10^2 | | |
| 800. MeV | 8.995×10^2 | 1.514 | 0.000 | | 0.000 | 1.515 | 5.238×10^2 | | |
| 1.00 GeV | 1.101×10^3 | 1.547 | 0.001 | | 0.000 | 1.548 | 6.544×10^2 | | |
| 1.40 GeV | 1.502×10^3 | 1.600 | 0.001 | 0.000 | 0.001 | 1.602 | 9.081×10^2 | | |
| 2.00 GeV | 2.103×10^3 | 1.658 | 0.002 | 0.001 | 0.001 | 1.661 | 1.275×10^3 | | |
| 3.00 GeV | 3.104×10^3 | 1.723 | 0.003 | 0.002 | 0.001 | 1.730 | 1.865×10^3 | | |
| 4.00 GeV | 4.104×10^3 | 1.769 | 0.004 | 0.003 | 0.002 | 1.778 | 2.434×10^3 | | |
| 8.00 GeV | 8.105×10^3 | 1.872 | 0.011 | 0.011 | 0.003 | 1.897 | 4.604×10^3 | | |
| 10.0 GeV | 1.011×10^4 | 1.903 | 0.014 | 0.015 | 0.004 | 1.936 | 5.648×10^3 | | |
| 14.0 GeV | 1.411×10^4 | 1.947 | 0.021 | 0.024 | 0.006 | 1.999 | 7.679×10^3 | | |
| 20.0 GeV | 2.011×10^4 | 1.992 | 0.033 | 0.039 | 0.008 | 2.073 | 1.062×10^4 | | |
| 30.0 GeV | 3.011×10^4 | 2.039 | 0.055 | 0.068 | 0.012 | 2.174 | 1.533×10^4 | | |
| 40.0 GeV | 4.011×10^4 | 2.071 | 0.077 | 0.099 | 0.016 | 2.263 | 1.984×10^4 | | |
| 80.0 GeV | 8.011×10^4 | 2.142 | 0.174 | 0.237 | 0.031 | 2.585 | 3.635×10^4 | | |
| 100. GeV | 1.001×10^5 | 2.164 | 0.225 | 0.312 | 0.038 | 2.740 | 4.386×10^4 | | |
| 140. GeV | 1.401×10^5 | 2.196 | 0.331 | 0.466 | 0.053 | 3.047 | 5.770×10^4 | | |
| 200. GeV | 2.001×10^5 | 2.230 | 0.496 | 0.710 | 0.076 | 3.513 | 7.602×10^4 | | |
| 300. GeV | 3.001×10^5 | 2.268 | 0.779 | 1.120 | 0.114 | 4.281 | 1.018×10^5 | | |
| 336. GeV | 3.356×10^5 | 2.278 | 0.882 | 1.269 | 0.127 | 4.557 | <i>Muon critical energy</i> | | |
| 400. GeV | 4.001×10^5 | 2.295 | 1.072 | 1.544 | 0.151 | 5.063 | 1.232×10^5 | | |
| 800. GeV | 8.001×10^5 | 2.360 | 2.283 | 3.289 | 0.306 | 8.239 | 1.846×10^5 | | |
| 1.00 TeV | 1.000×10^6 | 2.382 | 2.906 | 4.183 | 0.384 | 9.855 | 2.068×10^5 | | |
| 1.40 TeV | 1.400×10^6 | 2.414 | 4.156 | 5.967 | 0.545 | 13.082 | 2.419×10^5 | | |
| 2.00 TeV | 2.000×10^6 | 2.449 | 6.070 | 8.691 | 0.788 | 17.999 | 2.808×10^5 | | |
| 3.00 TeV | 3.000×10^6 | 2.489 | 9.269 | 13.220 | 1.206 | 26.185 | 3.267×10^5 | | |
| 4.00 TeV | 4.000×10^6 | 2.518 | 12.514 | 17.800 | 1.630 | 34.462 | 3.598×10^5 | | |
| 8.00 TeV | 8.000×10^6 | 2.589 | 25.609 | 36.218 | 3.392 | 67.810 | 4.410×10^5 | | |
| 10.0 TeV | 1.000×10^7 | 2.612 | 32.214 | 45.481 | 4.298 | 84.606 | 4.674×10^5 | | |
| 14.0 TeV | 1.400×10^7 | 2.648 | 45.388 | 63.959 | 6.158 | 118.154 | 5.072×10^5 | | |
| 20.0 TeV | 2.000×10^7 | 2.686 | 65.278 | 91.802 | 9.010 | 168.777 | 5.495×10^5 | | |
| 30.0 TeV | 3.000×10^7 | 2.731 | 98.391 | 138.129 | 13.946 | 253.198 | 5.976×10^5 | | |
| 40.0 TeV | 4.000×10^7 | 2.763 | 131.636 | 184.575 | 19.003 | 337.979 | 6.316×10^5 | | |
| 80.0 TeV | 8.000×10^7 | 2.842 | 264.858 | 370.503 | 40.143 | 678.346 | 7.135×10^5 | | |
| 100. TeV | 1.000×10^8 | 2.868 | 331.600 | 463.560 | 51.070 | 849.099 | 7.398×10^5 | | |