

Table 271: Muons in Uranium monocarbide UC

| $\langle Z/A \rangle$ | ρ [g/cm ³] | I [eV] | a | $k = m_s$ | x_0 | x_1 | \bar{C} | δ_0 |
|-----------------------|-----------------------------|------------|---------|---------------------------------------|-----------|----------|------------------------------------|------------|
| 0.39194 | 13.630 | 862.0 | 0.22972 | 2.6169 | -0.2524 | 3.4941 | 6.1210 | 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 | 3.848 | | | | 3.848 | 1.488×10^0 | |
| 14.0 MeV | 5.616×10^1 | 3.053 | | | | 3.053 | 2.666×10^0 | |
| 20.0 MeV | 6.802×10^1 | 2.428 | | | | 2.428 | 4.893×10^0 | |
| 30.0 MeV | 8.509×10^1 | 1.918 | | | | 1.918 | 9.586×10^0 | |
| 40.0 MeV | 1.003×10^2 | 1.656 | | | | 1.656 | 1.523×10^1 | |
| 80.0 MeV | 1.527×10^2 | 1.271 | | | | 1.271 | 4.362×10^1 | |
| 100. MeV | 1.764×10^2 | 1.202 | | | | 1.202 | 5.984×10^1 | |
| 140. MeV | 2.218×10^2 | 1.137 | | | | 1.137 | 9.419×10^1 | |
| 200. MeV | 2.868×10^2 | 1.107 | | | | 1.108 | 1.478×10^2 | |
| 236. MeV | 3.250×10^2 | 1.105 | 0.000 | | | 1.105 | <i>Minimum ionization</i> | |
| 300. MeV | 3.917×10^2 | 1.110 | 0.000 | | 0.000 | 1.111 | 2.382×10^2 | |
| 400. MeV | 4.945×10^2 | 1.129 | 0.000 | | 0.000 | 1.130 | 3.275×10^2 | |
| 800. MeV | 8.995×10^2 | 1.211 | 0.001 | | 0.000 | 1.212 | 6.688×10^2 | |
| 1.00 GeV | 1.101×10^3 | 1.243 | 0.002 | | 0.000 | 1.245 | 8.315×10^2 | |
| 1.40 GeV | 1.502×10^3 | 1.294 | 0.002 | | 0.001 | 1.297 | 1.146×10^3 | |
| 2.00 GeV | 2.103×10^3 | 1.350 | 0.004 | 0.001 | 0.001 | 1.356 | 1.598×10^3 | |
| 3.00 GeV | 3.104×10^3 | 1.413 | 0.007 | 0.003 | 0.001 | 1.425 | 2.316×10^3 | |
| 4.00 GeV | 4.104×10^3 | 1.456 | 0.011 | 0.006 | 0.002 | 1.475 | 3.006×10^3 | |
| 8.00 GeV | 8.105×10^3 | 1.556 | 0.026 | 0.022 | 0.003 | 1.607 | 5.593×10^3 | |
| 10.0 GeV | 1.011×10^4 | 1.585 | 0.034 | 0.031 | 0.004 | 1.655 | 6.819×10^3 | |
| 14.0 GeV | 1.411×10^4 | 1.628 | 0.053 | 0.051 | 0.005 | 1.738 | 9.175×10^3 | |
| 20.0 GeV | 2.011×10^4 | 1.671 | 0.082 | 0.084 | 0.007 | 1.846 | 1.252×10^4 | |
| 30.0 GeV | 3.011×10^4 | 1.716 | 0.134 | 0.149 | 0.011 | 2.012 | 1.771×10^4 | |
| 40.0 GeV | 4.011×10^4 | 1.746 | 0.190 | 0.221 | 0.014 | 2.172 | 2.249×10^4 | |
| 80.0 GeV | 8.011×10^4 | 1.813 | 0.429 | 0.536 | 0.028 | 2.808 | 3.864×10^4 | |
| 100. GeV | 1.001×10^5 | 1.832 | 0.556 | 0.707 | 0.034 | 3.132 | 4.539×10^4 | |
| 136. GeV | 1.361×10^5 | 1.859 | 0.790 | 1.022 | 0.047 | 3.719 | <i>Muon critical energy</i> | |
| 140. GeV | 1.401×10^5 | 1.861 | 0.817 | 1.058 | 0.048 | 3.785 | 5.699×10^4 | |
| 200. GeV | 2.001×10^5 | 1.891 | 1.224 | 1.615 | 0.068 | 4.799 | 7.105×10^4 | |
| 300. GeV | 3.001×10^5 | 1.924 | 1.919 | 2.543 | 0.102 | 6.489 | 8.891×10^4 | |
| 400. GeV | 4.001×10^5 | 1.947 | 2.636 | 3.506 | 0.136 | 8.227 | 1.026×10^5 | |
| 800. GeV | 8.001×10^5 | 2.003 | 5.596 | 7.454 | 0.275 | 15.330 | 1.377×10^5 | |
| 1.00 TeV | 1.000×10^6 | 2.021 | 7.115 | 9.474 | 0.346 | 18.957 | 1.494×10^5 | |
| 1.40 TeV | 1.400×10^6 | 2.049 | 10.157 | 13.500 | 0.490 | 26.198 | 1.672×10^5 | |
| 2.00 TeV | 2.000×10^6 | 2.079 | 14.808 | 19.644 | 0.709 | 37.242 | 1.864×10^5 | |
| 3.00 TeV | 3.000×10^6 | 2.113 | 22.567 | 29.852 | 1.083 | 55.617 | 2.082×10^5 | |
| 4.00 TeV | 4.000×10^6 | 2.138 | 30.425 | 40.168 | 1.463 | 74.196 | 2.237×10^5 | |
| 8.00 TeV | 8.000×10^6 | 2.199 | 62.086 | 81.629 | 3.038 | 148.954 | 2.610×10^5 | |
| 10.0 TeV | 1.000×10^7 | 2.219 | 78.031 | 102.468 | 3.846 | 186.566 | 2.730×10^5 | |
| 14.0 TeV | 1.400×10^7 | 2.249 | 109.835 | 144.049 | 5.505 | 261.640 | 2.910×10^5 | |
| 20.0 TeV | 2.000×10^7 | 2.282 | 157.803 | 206.684 | 8.046 | 374.817 | 3.101×10^5 | |
| 30.0 TeV | 3.000×10^7 | 2.320 | 237.658 | 310.883 | 12.435 | 563.298 | 3.317×10^5 | |
| 40.0 TeV | 4.000×10^7 | 2.347 | 317.779 | 415.322 | 16.925 | 752.376 | 3.470×10^5 | |
| 80.0 TeV | 8.000×10^7 | 2.415 | 638.678 | 833.372 | 35.663 | 1510.130 | 3.838×10^5 | |
| 100. TeV | 1.000×10^8 | 2.437 | 799.369 | 1042.588 | 45.336 | 1889.731 | 3.956×10^5 | |