

Muons in liquid neon (Ne)

| Z | A [g/mol] | ρ [g/cm ³] | I [eV] | a | $k = m_s$ | x_0 | x_1 | \bar{C} | δ_0 |
|---------|-------------|-----------------------------|--------|---------|-----------|--------|--------|-----------|------------|
| 10 (Ne) | 20.1797 (6) | 1.204 | 137.0 | 0.16916 | 3.0000 | 0.2000 | 3.0000 | 4.6345 | 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 | 6.548 | | | | 6.548 | 8.507×10^{-1} |
| 14.0 MeV | 5.616×10^1 | 5.126 | | | | 5.126 | 1.548×10^0 |
| 20.0 MeV | 6.802×10^1 | 4.016 | | | | 4.017 | 2.886×10^0 |
| 30.0 MeV | 8.509×10^1 | 3.126 | | | | 3.126 | 5.747×10^0 |
| 40.0 MeV | 1.003×10^2 | 2.675 | | | | 2.675 | 9.227×10^0 |
| 80.0 MeV | 1.527×10^2 | 2.019 | | | | 2.019 | 2.698×10^1 |
| 100. MeV | 1.764×10^2 | 1.900 | | | | 1.900 | 3.722×10^1 |
| 140. MeV | 2.218×10^2 | 1.779 | | | | 1.779 | 5.907×10^1 |
| 200. MeV | 2.868×10^2 | 1.713 | | | | 1.713 | 9.357×10^1 |
| 283. MeV | 3.738×10^2 | 1.695 | | | 0.000 | 1.695 | <i>Minimum ionization</i> |
| 300. MeV | 3.917×10^2 | 1.695 | | | 0.000 | 1.696 | 1.524×10^2 |
| 400. MeV | 4.945×10^2 | 1.709 | | | 0.000 | 1.709 | 2.112×10^2 |
| 800. MeV | 8.995×10^2 | 1.792 | 0.000 | | 0.000 | 1.793 | 4.396×10^2 |
| 1.00 GeV | 1.101×10^3 | 1.828 | 0.000 | | 0.000 | 1.829 | 5.501×10^2 |
| 1.40 GeV | 1.502×10^3 | 1.885 | 0.000 | 0.000 | 0.001 | 1.886 | 7.652×10^2 |
| 2.00 GeV | 2.103×10^3 | 1.947 | 0.001 | 0.000 | 0.001 | 1.950 | 1.078×10^3 |
| 3.00 GeV | 3.104×10^3 | 2.018 | 0.001 | 0.001 | 0.001 | 2.022 | 1.581×10^3 |
| 4.00 GeV | 4.104×10^3 | 2.066 | 0.002 | 0.001 | 0.002 | 2.072 | 2.069×10^3 |
| 8.00 GeV | 8.105×10^3 | 2.176 | 0.005 | 0.005 | 0.004 | 2.190 | 3.941×10^3 |
| 10.0 GeV | 1.011×10^4 | 2.209 | 0.006 | 0.006 | 0.005 | 2.227 | 4.846×10^3 |
| 14.0 GeV | 1.411×10^4 | 2.257 | 0.010 | 0.010 | 0.006 | 2.283 | 6.619×10^3 |
| 20.0 GeV | 2.011×10^4 | 2.304 | 0.015 | 0.017 | 0.009 | 2.345 | 9.210×10^3 |
| 30.0 GeV | 3.011×10^4 | 2.354 | 0.024 | 0.030 | 0.013 | 2.421 | 1.340×10^4 |
| 40.0 GeV | 4.011×10^4 | 2.388 | 0.034 | 0.043 | 0.017 | 2.483 | 1.748×10^4 |
| 80.0 GeV | 8.011×10^4 | 2.463 | 0.077 | 0.105 | 0.033 | 2.679 | 3.296×10^4 |
| 100. GeV | 1.001×10^5 | 2.487 | 0.100 | 0.138 | 0.041 | 2.766 | 4.031×10^4 |
| 140. GeV | 1.401×10^5 | 2.521 | 0.148 | 0.206 | 0.057 | 2.933 | 5.435×10^4 |
| 200. GeV | 2.001×10^5 | 2.558 | 0.222 | 0.315 | 0.081 | 3.177 | 7.399×10^4 |
| 300. GeV | 3.001×10^5 | 2.599 | 0.350 | 0.500 | 0.122 | 3.571 | 1.037×10^5 |
| 400. GeV | 4.001×10^5 | 2.628 | 0.482 | 0.692 | 0.162 | 3.965 | 1.302×10^5 |
| 760. GeV | 7.599×10^5 | 2.694 | 0.976 | 1.406 | 0.311 | 5.388 | <i>Muon critical energy</i> |
| 800. GeV | 8.001×10^5 | 2.699 | 1.032 | 1.488 | 0.328 | 5.548 | 2.151×10^5 |
| 1.00 TeV | 1.000×10^6 | 2.722 | 1.316 | 1.899 | 0.413 | 6.350 | 2.488×10^5 |
| 1.40 TeV | 1.400×10^6 | 2.757 | 1.886 | 2.715 | 0.585 | 7.944 | 3.050×10^5 |
| 2.00 TeV | 2.000×10^6 | 2.795 | 2.762 | 3.965 | 0.847 | 10.369 | 3.710×10^5 |
| 3.00 TeV | 3.000×10^6 | 2.838 | 4.227 | 6.044 | 1.297 | 14.407 | 4.524×10^5 |
| 4.00 TeV | 4.000×10^6 | 2.870 | 5.716 | 8.151 | 1.754 | 18.492 | 5.136×10^5 |
| 8.00 TeV | 8.000×10^6 | 2.947 | 11.738 | 16.631 | 3.659 | 34.975 | 6.683×10^5 |
| 10.0 TeV | 1.000×10^7 | 2.972 | 14.780 | 20.900 | 4.639 | 43.291 | 7.196×10^5 |
| 14.0 TeV | 1.400×10^7 | 3.010 | 20.849 | 29.408 | 6.656 | 59.924 | 7.978×10^5 |
| 20.0 TeV | 2.000×10^7 | 3.052 | 30.022 | 42.236 | 9.754 | 85.064 | 8.814×10^5 |
| 30.0 TeV | 3.000×10^7 | 3.100 | 45.295 | 63.586 | 15.126 | 127.107 | 9.770×10^5 |
| 40.0 TeV | 4.000×10^7 | 3.135 | 60.640 | 85.002 | 20.637 | 169.413 | 1.045×10^6 |
| 80.0 TeV | 8.000×10^7 | 3.220 | 122.163 | 170.729 | 43.730 | 339.843 | 1.208×10^6 |
| 100. TeV | 1.000×10^8 | 3.248 | 153.000 | 213.640 | 55.690 | 425.579 | 1.261×10^6 |