

Table 230: Muons in Polyvinyl alcohol (C₂H₃-O-H)_n

| $\langle Z/A \rangle$ | ρ [g/cm ³] | I [eV] | a | $k = m_s$ | x_0 | x_1 | \bar{C} | δ_0 |
|-----------------------|-----------------------------|------------|---------|---------------------------------------|-----------|---------|------------------------------------|------------|
| 0.54480 | 1.300 | 69.7 | 0.11178 | 3.3893 | 0.1401 | 2.6315 | 3.1115 | 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 | 7.891 | | | | 7.891 | 6.999×10^{-1} | |
| 14.0 MeV | 5.616×10^1 | 6.153 | | | | 6.153 | 1.280×10^0 | |
| 20.0 MeV | 6.802×10^1 | 4.804 | | | | 4.804 | 2.396×10^0 | |
| 30.0 MeV | 8.509×10^1 | 3.726 | | | | 3.726 | 4.793×10^0 | |
| 40.0 MeV | 1.003×10^2 | 3.181 | | | | 3.181 | 7.717×10^0 | |
| 80.0 MeV | 1.527×10^2 | 2.383 | | | | 2.384 | 2.270×10^1 | |
| 100. MeV | 1.764×10^2 | 2.231 | | | | 2.232 | 3.140×10^1 | |
| 140. MeV | 2.218×10^2 | 2.076 | | | | 2.076 | 5.007×10^1 | |
| 200. MeV | 2.868×10^2 | 1.986 | | | | 1.986 | 7.974×10^1 | |
| 300. MeV | 3.917×10^2 | 1.950 | | | 0.000 | 1.950 | 1.307×10^2 | |
| 324. MeV | 4.161×10^2 | 1.949 | | | 0.000 | 1.949 | <i>Minimum ionization</i> | |
| 400. MeV | 4.945×10^2 | 1.955 | | | 0.000 | 1.955 | 1.820×10^2 | |
| 800. MeV | 8.995×10^2 | 2.026 | 0.000 | | 0.000 | 2.026 | 3.830×10^2 | |
| 1.00 GeV | 1.101×10^3 | 2.059 | 0.000 | | 0.000 | 2.059 | 4.809×10^2 | |
| 1.40 GeV | 1.502×10^3 | 2.112 | 0.000 | | 0.001 | 2.113 | 6.725×10^2 | |
| 2.00 GeV | 2.103×10^3 | 2.172 | 0.001 | 0.000 | 0.001 | 2.173 | 9.523×10^2 | |
| 3.00 GeV | 3.104×10^3 | 2.239 | 0.001 | 0.001 | 0.001 | 2.242 | 1.405×10^3 | |
| 4.00 GeV | 4.104×10^3 | 2.286 | 0.001 | 0.001 | 0.002 | 2.291 | 1.846×10^3 | |
| 8.00 GeV | 8.105×10^3 | 2.395 | 0.003 | 0.003 | 0.004 | 2.405 | 3.545×10^3 | |
| 10.0 GeV | 1.011×10^4 | 2.428 | 0.004 | 0.004 | 0.005 | 2.441 | 4.370×10^3 | |
| 14.0 GeV | 1.411×10^4 | 2.475 | 0.006 | 0.007 | 0.007 | 2.496 | 5.990×10^3 | |
| 20.0 GeV | 2.011×10^4 | 2.524 | 0.010 | 0.011 | 0.009 | 2.555 | 8.364×10^3 | |
| 30.0 GeV | 3.011×10^4 | 2.576 | 0.017 | 0.020 | 0.014 | 2.627 | 1.222×10^4 | |
| 40.0 GeV | 4.011×10^4 | 2.612 | 0.023 | 0.030 | 0.018 | 2.683 | 1.599×10^4 | |
| 80.0 GeV | 8.011×10^4 | 2.694 | 0.053 | 0.072 | 0.034 | 2.854 | 3.042×10^4 | |
| 100. GeV | 1.001×10^5 | 2.720 | 0.069 | 0.095 | 0.043 | 2.927 | 3.734×10^4 | |
| 140. GeV | 1.401×10^5 | 2.758 | 0.102 | 0.142 | 0.059 | 3.062 | 5.070×10^4 | |
| 200. GeV | 2.001×10^5 | 2.798 | 0.154 | 0.218 | 0.084 | 3.254 | 6.969×10^4 | |
| 300. GeV | 3.001×10^5 | 2.843 | 0.244 | 0.347 | 0.126 | 3.560 | 9.906×10^4 | |
| 400. GeV | 4.001×10^5 | 2.875 | 0.337 | 0.481 | 0.168 | 3.861 | 1.260×10^5 | |
| 800. GeV | 8.001×10^5 | 2.953 | 0.723 | 1.041 | 0.339 | 5.056 | 2.163×10^5 | |
| 1.00 TeV | 1.000×10^6 | 2.978 | 0.923 | 1.330 | 0.426 | 5.658 | 2.536×10^5 | |
| 1.11 TeV | 1.108×10^6 | 2.990 | 1.031 | 1.485 | 0.474 | 5.980 | <i>Muon critical energy</i> | |
| 1.40 TeV | 1.400×10^6 | 3.017 | 1.326 | 1.906 | 0.604 | 6.854 | 3.178×10^5 | |
| 2.00 TeV | 2.000×10^6 | 3.058 | 1.946 | 2.789 | 0.875 | 8.668 | 3.955×10^5 | |
| 3.00 TeV | 3.000×10^6 | 3.106 | 2.984 | 4.260 | 1.340 | 11.691 | 4.945×10^5 | |
| 4.00 TeV | 4.000×10^6 | 3.140 | 4.041 | 5.751 | 1.814 | 14.747 | 5.705×10^5 | |
| 8.00 TeV | 8.000×10^6 | 3.225 | 8.323 | 11.759 | 3.788 | 27.095 | 7.676×10^5 | |
| 10.0 TeV | 1.000×10^7 | 3.253 | 10.490 | 14.785 | 4.804 | 33.332 | 8.341×10^5 | |
| 14.0 TeV | 1.400×10^7 | 3.295 | 14.813 | 20.815 | 6.899 | 45.822 | 9.360×10^5 | |
| 20.0 TeV | 2.000×10^7 | 3.341 | 21.354 | 29.910 | 10.119 | 64.725 | 1.046×10^6 | |
| 30.0 TeV | 3.000×10^7 | 3.394 | 32.247 | 45.043 | 15.709 | 96.393 | 1.171×10^6 | |
| 40.0 TeV | 4.000×10^7 | 3.432 | 43.200 | 60.225 | 21.447 | 128.304 | 1.261×10^6 | |
| 80.0 TeV | 8.000×10^7 | 3.526 | 87.118 | 121.006 | 45.535 | 257.184 | 1.477×10^6 | |
| 100. TeV | 1.000×10^8 | 3.557 | 109.135 | 151.433 | 58.024 | 322.149 | 1.546×10^6 | |