$$
H_{80} \quad = \quad \left[\begin{array}{cccccccc}
-6\,\mu + 2\,U & 0 & 0 & 0 & 0 & \sqrt{2}\,t & -2\,t & 0 \\
0 & -6\,\mu + 2\,U & -\left(\sqrt{2}\,t\right) & -2\,t & 0 & -t & \sqrt{2}\,t & 0 \\
0 & -\left(\sqrt{2}\,t\right) & -6\,\mu + 2\,U & 0 & 0 & 0 & 0 & 2\,t \\
0 & -2\,t & 0 & -6\,\mu + 2\,U & 0 & 0 & 0 & 0 \\
0 & 0 & 0 & 0 & -6\,\mu + U & -2\,t & 0 & 0 \\
\sqrt{2}\,t & -t & 0 & 0 & -2\,t & -6\,\mu + U & 0 & \sqrt{2}\,t \\
-2\,t & \sqrt{2}\,t & 0 & 0 & 0 & 0 & -6\,\mu + U & 0 \\
0 & 0 & 2\,t & 0 & 0 & \sqrt{2}\,t & 0 & -6\,\mu + U
\end{array} \right]
$$