$$
\begin{aligned}
\Psi_{98} \quad = \quad & C_1\left(|02uu\rangle + i\,|0uu2\rangle + |20uu\rangle + i\,|2uu0\rangle + i\,|u02u\rangle + i\,|u20u\rangle - |uu02\rangle - |uu20\rangle\right) \\
& + C_2\left(i\,|duuu\rangle - |uduu\rangle - i\,|uudu\rangle + |uuud\rangle\right)
\end{aligned}
\tag{1}
$$

$$
C_1 \quad = \quad \frac{\left(-\left(\frac{1}{16}\right) - \frac{i}{16}\right)\,\left(U + \sqrt{16\,t^2 + U^2}\right)}{t} \tag{2}
$$

$$
C_2 \quad = \quad \frac{i}{2} \tag{3}
$$