$$
\begin{aligned}
\Psi_{246} &= C_1 \left( |22dd\rangle - i\,|2dd2\rangle - i\,|d22d\rangle - |dd22\rangle \right) \\
&\quad + C_2 \left( |2d2d\rangle - i\,|d2d2\rangle \right)
\end{aligned}
$$

$$
C_1 = -\left(\frac{1}{4}\right) - \frac{i}{4}
$$

$$
C_2 = \frac{-i}{2}
$$