$$
\begin{aligned}
\Psi_{243} &= C_1 \left(|22dd\rangle + i\,|2dd2\rangle + i\,|d22d\rangle - |dd22\rangle \right) \\
&\quad + C_2 \left(|2d2d\rangle + i\,|d2d2\rangle \right)
\end{aligned}
$$

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

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