$$\Psi_{60} = C_1 \left(|0duu\rangle + |0udu\rangle + |0uud\rangle + i\,|d0uu\rangle - |du0u\rangle - i\,|duu0\rangle + i\,|u0du\rangle + i\,|u0ud\rangle - |ud0u\rangle - i\,|udu0\rangle - |uu0d\rangle - i\,|uud0\rangle \right)$$

$$C_1 = \frac{\frac{-i}{2}}{\sqrt{3}}$$