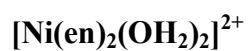


- Consider the compound with formula $[\text{Ni}(\text{en})_2(\text{H}_2\text{O})_2]\text{Br}_2 \cdot 2\text{H}_2\text{O}$.
(en = ethylenediamine = $\text{NH}_2\text{CH}_2\text{CH}_2\text{NH}_2$).

Marks
3

Write the formula of the complex ion.



Write the symbols of the ligand donor atoms.

N (× 4) and O (× 2)What is the *d* electron configuration of the metal ion in this complex? **$\text{Ni}^{2+}: 3d^8$**