

Coordination Compounds Overview



Here's a drill for IUPAC naming of 15 coordination compounds:

IUPAC Naming Drill

1. $[Cr(H_2O)_6]Cl_3$
2. $[Co(NH_3)_4Cl_2]Cl$
3. $[Cu(NH_3)_4]SO_4$
4. $[Fe(CN)_6]^{4-}$
5. $[Pt(NH_3)_2Cl_4]$
6. $[Ni(CO)_4]$
7. $[Ag(NH_3)_2]^+$
8. $[Zn(OH)_4]^{2-}$
9. $[Co(NH_3)_5Cl]^{2+}$
10. $[Fe(H_2O)_5(NO)]^{2+}$
11. $[MnO_4]^-$
12. $[PdCl_2(en)_2]$
13. $[Fe(C_2O_4)_3]^{3-}$
14. $[CoCl_3(PPh_3)_3]$
15. $[AlF_6]^{3-}$

Answer Key:

1. Hexaaquachromium(III) chloride
2. Tetraamminedichloridocobalt(III) chloride
3. Tetraamminecopper(II) sulfate
4. Hexacyanidoferrate(II)
5. Diamminetetrachloridoplatinum(IV)
6. Tetracarbonylnickel(0)
7. Diamminesilver(I)
8. Tetrahydroxidozincate(II)
9. Pentaamminechloridocobalt(III) ion
10. Pentaquanitrosyliron(II)
11. Permanganate
12. Dichloridobis(ethylenediamine)palladium(II)
13. Tris(oxalato)ferrate(III)
14. Trichloridotris(triphenylphosphine)cobalt(III)
15. Hexafluoroaluminate(III)

This exercise will help reinforce your understanding of IUPAC nomenclature for coordination compounds!