

Related Problems with Solutions

Problem 1:

9.7 Using IUPAC norms write the systematic names of the following:

- | | | |
|---|--|---|
| (i) $[\text{Co}(\text{NH}_3)_6]\text{Cl}_3$ | (iv) $[\text{Co}(\text{NH}_3)_4\text{Cl}(\text{NO}_2)]\text{Cl}$ | (vii) $[\text{Ni}(\text{NH}_3)_6]\text{Cl}_2$ |
| (ii) $[\text{Pt}(\text{NH}_3)_2\text{Cl}(\text{NH}_2\text{CH}_3)]\text{Cl}$ | (v) $[\text{Mn}(\text{H}_2\text{O})_6]^{2+}$ | (viii) $[\text{Co}(\text{en})_3]^{3+}$ |
| (iii) $[\text{Ti}(\text{H}_2\text{O})_6]^{3+}$ | (vi) $[\text{NiCl}_4]^{2-}$ | (ix) $[\text{Ni}(\text{CO})_4]$ |

Solution: **Ans:** (i) Hexaammine cobalt (III) chloride.

(ii) Diammine chlorido (methylamine) platinum (II) chloride.

(iii) Hexaaquatitanium (III) ion.

(iv) Tetraammine chlorido nitrito-N-cobalt (IV) chloride.

(v) Hexaaquamanganese (II) ion.

(vi) Tetrachloridonickelate (II) ion.

(vii) Hexaammine nickel (II) chloride.

(viii) Tris (ethane -1,2-diamine) cobalt (III) ion.

(ix) Tetra carbonyl nickel (0).