

Notes on naming coordination compounds

JJ/2007

Notice special ligand names

Name	Formula	Ligand name
water	H ₂ O	aqua
ammonia	NH ₃	ammine
(methyl)amine	CH ₃ NH ₂	-amine
nitrogenmonoxide	NO	nitrosyl
carbonmonoxid	CO	carbonyl
dinitrogen	N ₂	dinitrogen
dioxygen	O ₂	dioxygen

Problems

Write formulas for the following compounds and draw their structure

In English	in Danish
<i>cis</i> -Tetraaquadichlorochromium(III) chloride	<i>cis</i> -Tetraaquadichlorochrom(III)chlorid
Potassium pentachloronitrosmate(IV)	Kaliumpentachloronitrosmat(IV)
<i>mer</i> -Trihydridotris(triphenylphosphin)ruthenium(III)	<i>mer</i> -Trihydridotris(triphenylphosphin)ruthenium(III)
Pentaamminechlorocobalt(III) nitrate	Pentaamminchlorocobalt(III)nitrat
Potassium trioxalatocobaltate(III)	Kaliumtrioxalatocobaltat(III)
Bis(1,2-ethandiamine)diiodocobalt(III) perchlorate	Bis(1,2-ethandiamin)diiodocobalt(III)perchlorat
Dichlorobis(1,2-ethandiamine)cobalt(III) tetrafluoroborate	Dichlorobis(1,2-ethandiamin)cobalt(III)tetrafluoroborat
Pentaamminedinitrogenruthenium(II) chloride	Pentaammindinitrogenruthenium(II)chlorid
Sodiumpentacyanonitrosylferrat(II) dihydrate	Natriumpentacyanonitrosylferrat(II)dihydrat
Tetraamminaquacobalt(III)-μ-cyanobromotetracyanocobaltate(III)	Tetraamminaquacobalt(III)-μ-cyanobromotetracyanocobaltat(III)

Name the following compounds: (and draw their structure)

