Platinum platinate

Finally, the names of some metals are based on the Latin name of the element:

- Iron ferrate
- Copper cuprate
- Silver argentate
- Gold aurate

**Rule 8:** Optical isomers are designated by the symbols \( \text{?} \) or \( \text{?} \). Geometrical isomers are designated by *cis-* or *trans-* and *mer-* or *fac-*\(^{\text{-}}\), the latter two standing for meridional or facial, respectively.

**Rule 9:** Bridging ligands are designated with the prefix \( \text{?} \). When there are two bridging ligands of the same kind, the prefix di-\( \text{?} \) is used. Bridging ligands are listed in order with other ligands, according to Rule 6, and set off between hypens. An important exception arises when the molecule is symmetrical, and a more compact name can be given by listing the bridging ligand first. Rule 9 is illustrated in the following examples:

- Pentamminecobalt(III)-\( \text{?} \)-amidotetraamineaquacobalt(III) chloride

- Tetraamminecobalt(III)-\( \text{?} \)-amido-\( \text{?} \)-superoxotetraamminecobalt(III)

The bridging –O\(_2\)- group in the above example is named form the superoxide anion O\(_2\)\(^{-}\), because the physical data suggest the –1 charge.