

外国語 (英語①)

Compounds that form chelates are called chelating agents. Various chelating agents have been developed for the purpose of separating or quantifying metal ions. EDTA, which forms stable water-soluble chelates with many metal ions, is used as a typical standard solution for quantifying metal ions. Some chelating agents react with metal ions to produce color, and some are used as colorimetric reagents for metal ions. 8-quinolinol and dithizone are called extractive chelating agents because they form chelates that are soluble in organic solvents. Crown ethers and cyclams are called macrocyclic chelating agents. These chelating agents and chelates are widely used not only in analytical reagents, but also pharmaceuticals and cosmetics, such as radioactive pharmaceuticals, MRI contrast agents, heavy metal excretion agents, pesticides, catalysts, fluorescent markers for immunoassays, fluorescent probes, food additives, photographic processing agents, shampoos, soaps, etc.