>>**Entry Name: Tetrachlorocuprate(*II*)(2–)**

CAS Registry Number: 15489-36-8
Related CAS Registry Numbers(s): 44000-59-1 52150-20-6
$[CuCl_4]^{2(-)}$

Molecular Formula: $Cl_4Cu^{2(-)}$
Molecular Weight: 205.357
Accurate Mass: 202.815006
Percentage Composition: Cl 69.06%; Cu 30.94%

>>**Derivative:** Di-Li salt

CAS Registry Number: 15489-27-7

Molecular Formula: Cl_4CuLi_2
Molecular Weight: 219.239
Accurate Mass: 216.847012
Percentage Composition: Cl 64.68%; Cu 28.98%; Li 6.33%
Source/Synthesis: Generated in THF from LiCl and $CuCl_2$
Use/Importance: Grignard coupling reagent, also effects ring-opening of epoxides and aziridines
Melting Point: Fp –17°
Aldrich: 22430-8

>>**Variant:** Octahedral-form

Molecular Formula: Cl_4Cu
Molecular Weight: 205.357
Accurate Mass: 202.815006
Percentage Composition: Cl 69.06%; Cu 30.94%

>>**Derivative:** Di-NH_4 salt

CAS Registry Number: 15610-76-1
Physical Description: Hygroscopic yellow cryst. (EtOH)

>>**Derivative:** Di-NH_4 salt, dihydrate

CAS Registry Number: 10060-13-6
Molecular Formula: $Cl_4CuH_{12}N_2O_2$
Molecular Weight: 277.464
Accurate Mass: 274.904884
Percentage Composition: Cl 51.11%; Cu 22.90%; H 4.36%; N 10.10%; O 11.53%
Aldrich: 38855-6

>>**Derivative:** Bis-$MeNH_3$ salt

CAS Registry Number: 16950-47-3
Physical Description: Yellow

>>**Derivative:** Bis-(2-ammonioethyl)ammonium salt, monochloride
Synonym(s): Trihydrogen, compd. with *N*-(2-aminoethyl)-1,2-ethanediamine (1:1)

CAS Registry Number: 19121-74-5
Use/Importance: Shows thermochromism above and below r.t.
Physical Description: Yellow plates at r.t., pale green below r.t. and orange-brown at 120°. Cryst. obt. from aq. soln.
Solubility: Sol. H_2O; insol. EtOH
Other Data: $CuCl_6$ octahedra are corner-linked into layers

>>**Variant:** Tetrahedral-form

Molecular Formula: Cl_4Cu
Molecular Weight: 205.357
Accurate Mass: 202.815006
Percentage Composition: Cl 69.06%; Cu 30.94%