>>**Entry Name: Copper(*II*) perchlorate ($Cu(ClO_4)_2$)**
Synonym(s): Cupric perchlorate. Copper perchlorate

CAS Registry Number: 13770-18-8
$Cu(ClO_4)_2$

Molecular Formula: Cl_2CuO_8
Molecular Weight: 262.447
Accurate Mass: 260.836622
Percentage Composition: Cl 27.02%; Cu 24.21%; O 48.77%
General Statement: 8-Coord. copper
Use/Importance: Analytical reagent. Used in copper electrodeposition
Physical Description: Hygroscopic pale green cryst.
Melting Point: Mp 230-240°
Solubility: Sol. H_2O, polar org. solvs.; insol. CCl_4, hexane, C_6H_6
Other Data: Dec. above 130° to a basic perchlorate
Hazard & Toxicity: Potentially explosive

Fluka: 61210

>>**Derivative:** Hexahydrate
Synonym(s): Copper(*II*) perchlorate hexahydrate. Hexaaquacopper(*II*) diperchlorate
CAS Registry Number: 10294-46-9
Use/Importance: Commercially available
Physical Description: Deep blue monoclinic cryst.
Solubility: Sol. H_2O, EtOH, AcOH, Me_2CO; spar. sol. Et_2O, EtOAc
Aldrich: 21539-2

References:

Hathaway, B.J. *et al.*, *J.C.S.*, 1960, 648, *(synth)*
Serjeant, E.P.*, Nature (London)*, 1960, **186**, 963, *(use)*
Pascal, J.L. *et al.*, *Inorg. Chem.*, 1985, **24**, 238, *(cryst struct)*
Merck Index, 11th edn., 1989, No. 2651
Lewis, R.J.*, Sax's Dangerous Properties of Industrial Materials, 8th edn., Van Nostrand Reinhold*, 1992, CNO350