



>>Entry Name: Copper(II) trifluoromethanesulfonate

Synonym(s): Trifluoromethanesulfonic acid copper(2+) salt, 9CI. Bis(trifluoromethanesulfonato)copper. Cupric triflate

CAS Registry Number: 34946-82-2

$\text{Cu}(\text{OSO}_2\text{CF}_3)_2$

Molecular Formula: $\text{C}_2\text{CuF}_6\text{O}_6\text{S}_2$

Molecular Weight: 361.687

Accurate Mass: 360.843646

Percentage Composition: C 6.64%; Cu 17.57%; F 31.52%; O 26.54%; S 17.73%

Source/Synthesis: Synth. from CuCO_3 slurried with MeCN and $\text{F}_3\text{CSO}_3\text{H}$, or from $\text{F}_3\text{CSO}_3\text{H}$ and $\text{Cu}(\text{OH})_2$ in MeOH

Use/Importance: Used as catalyst for many reactions, e.g. cyclopropylation of alkenes or oxidative polym. of aniline by pyrrole

Physical Description: Colourless or pale blue solid

Aldrich: 28367-3

Fluka: 61249

References:

Solomon, R.G. *et al.*, *Chem. Comm.*, 1972, 559, (synth)

Clinton, N.A. *et al.*, *J. Organomet. Chem.*, 1972, **42**, 241, (synth)

Jenkins, C.L. *et al.*, *J.A.C.S.*, 1972, **94**, 843, (synth, ir)

Japan. Pat., 1976, 76 26 806; *CA*, **85**, 62625w, (synth)

Fieser and Fieser's Reagents for Organic Synthesis, Wiley, 1989, **14**, 102, (use)