



>>Entry Name: Copper selenide (Cu₂Se), 10CI

Synonym(s): Dicopper selenide

CAS Registry Number: 20405-64-5

Related CAS Registry Numbers(s): 61026-44-6

Cu₂Se

Molecular Formula: Cu₂Se

Molecular Weight: 206.052

Accurate Mass: 205.795716

Percentage Composition: Cu 61.68%; Se 38.32%

General Statement: The α -form transforms to a γ (fcc)-form at 123°

Source/Synthesis: Mineral

Use/Importance: Ionic conductor

Physical Description: Cryst.

>>Variant: Mineral-form

Synonym(s): Berzelianite

CAS Registry Number: 12015-78-0

Molecular Formula: Cu₂Se

Molecular Weight: 206.052

Accurate Mass: 205.795716

Percentage Composition: Cu 61.68%; Se 38.32%

Physical Description: Cubic shiny grey cryst. with bluish tint

>>Variant: Mineral-form

Synonym(s): Bellidoite

Molecular Formula: Cu₂Se

Molecular Weight: 206.052

Accurate Mass: 205.795716

Percentage Composition: Cu 61.68%; Se 38.32%

General Statement: β -form. Dimorphous with berzelianite

Source/Synthesis: Occurs in Czechoslovakia

Physical Description: Tetragonal cryst.

References:

Murray, R.M. *et al.*, *Can. J. Chem.*, 1975, **53**, 878, (*cryst struct*)

De Montreuil, L.A., *Econ. Geol.*, 1975, **70**, 384, (*bellidoite*)

Bahl, M.K., *J. Phys. C: Solid State Phys.*, 1975, **8**, 4107, (*x-ray absorption*)

Heyding, R.D. *et al.*, *Can. J. Chem.*, 1976, **54**, 841, (*cryst struct*)

Romand, M. *et al.*, *J. Electron Spectrosc. Relat. Phenom.*, 1978, **13**, 229, (*pe, esca*)

Becker, K.D. *et al.*, *Solid State Commun.*, 1979, **32**, 1109, (*Cu-63 nmr*)

Povarennykh, A.S. *et al.*, *Mineral. Zh.*, 1981, **3**, 16, (*ir*)

Berezin, V.M. *et al.*, *Fiz. Tverd. Tela (Leningrad)*, 1986, **28**, 1177, (*conductivity*)