



>>Entry Name: Silver(I) cyanide (AgCN)

Synonym(s): Argentous cyanide

CAS Registry Number: 506-64-9

AgCN

Molecular Formula: CAgN

Molecular Weight: 133.886

Accurate Mass: 132.908166

Percentage Composition: C 8.97%; Ag 80.57%; N 10.46%

Source/Synthesis: Prepd. by adding aq. KCN or NaCN to aq. AgNO₃

Use/Importance: Used in silver plating; formerly used for prep. of dil. HCN by treatment with HCl

Physical Description: White or greyish, odourless powder. Stable in dry air. Darkens on exp. to light

Solubility: Insol. H₂O, alcohols, dil. acids. Sol. aq. alkali cyanides, boiling conc. HNO₃

Other Data: Dec. at 320°

Hazard & Toxicity: Deadly poison. Skin and severe eye irritant

Aldrich: 18453-5

Fluka: 85178

References:

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Stallcup, W.D. *et al.*, *J. Chem. Phys.*, 1942, **10**, 199, (*ir*)

Gallais, F., *Bull. Soc. Chim. Fr.*, 1945, **12**, 657, (*uv*)

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