



Minerals

Chalcocite

Cu_2S

Crystallography:

Orthorhombic; $2/m2/m2/m$ (below 105°C); above 105°C , hexagonal. Crystals uncommon, usually small and tabular with hexagonal outline. More often fine-grained and massive.

Physical Properties:

Cleavage: {001} poor. Fracture conchoidal; rather sectile.

Hardness: 2.5-3.0.

Specific Gravity: 5.5-5.8.

Luster: Metallic.

Color: Shining lead gray; tarnishes dull black on exposure; opaque.

Streak: Grayish black (sometimes soft and sooty).

Composition/Features:

A copper sulfide distinguished by its lead-gray color and sectility. Fusible at 2-2.5.

Diagnostic copper flame test. Soluble in nitric acid.

Occurrence/Use:

A primary copper ore occurring as a supergene mineral in enriched zones of sulfide deposits. May also occur in veins with bornite, chalcopyrite, enargite and pyrite.