

## Sphalerite

Mineral Reference Profile • Sulfides

### Chemical / compositional reference

ZnS

### Mohs hardness

3.5–4

### Physical properties

Commonly metallic to submetallic, relatively dense and opaque; hardness and cleavage vary by species.

### Geological occurrence

Common in hydrothermal veins, magmatic sulfide systems, volcanogenic massive sulfides, skarns and sediment-hosted ore deposits.

### Economic, technological and cultural relevance

Important sources of copper, lead, zinc, nickel, antimony, mercury, molybdenum and other metals; also significant in ore-deposit studies.

### Museum learning value

In the museum context, Sphalerite is used to connect observation with mineral identification, geological formation, material science, responsible resource use and the relationship between natural resources and society. Specimen-specific analytical data should always be read from the verified museum catalogue or laboratory record.