

Magnetite

Mineral Reference Profile • Oxides & Hydroxides

Chemical / compositional reference

Fe $\blacksquare$ O $\blacksquare$

Mohs hardness

5.5–6.5

Physical properties

Typically moderate to high density; many are durable, strongly colored, magnetic or important for streak-based identification.

Geological occurrence

Worldwide; major iron ore deposits occur in banded iron formations and igneous systems.

Economic, technological and cultural relevance

Major sources of iron, titanium, tin, chromium, uranium, manganese and other metals; also used as pigments, abrasives and industrial minerals.

Museum learning value

In the museum context, Magnetite 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.