

Ilmenite

Mineral Reference Profile • Oxides & Hydroxides

Chemical / compositional reference

FeTiO₃ ■

Mohs hardness

5–6

Physical properties

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

Geological occurrence

Occurs in igneous, metamorphic, sedimentary and weathering environments; many species are important metal ores.

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, Ilmenite 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.