

Goethite var. Turgite [FeO(OH)]

Goethite is an iron hydroxide that normally occurs as tabular or stalactitic aggregates although it can also form from prismatic crystals. Turgite is a name given to specimens consisting of a mixture of two minerals—hematite and goethite—due to the chemical alteration of goethite. Colors vary from yellowish brown to red and can also be iridescent and contribute to the main constituents of iron oxide (rust). The color has made it a source for pigments, such as the yellow ocher, which has been used in cave paintings from prehistoric times to modern day canvas art. OR50



Goethite OR50



Goethite B52

Goethite (Stalactite)

Goethite is a “replacement” mineral forming as a weathering product in the oxidation zones of veins of iron-rich minerals, such as magnetite, pyrite and siderite. This mineral has also been nicknamed “iron hat”, as it is often found layered over other iron-rich minerals. Color variations—such as those within this specimen—are indicative of specimens that have a multitude of iron-rich minerals present, and where goethite replacement is occurring (orange coloration). B52