>>**Entry Name: Iron(*III*) hydroxide oxide (Fe(OH)O),** 11Cl
Synonym(s): Iron(*III*) oxyhydroxide

CAS Registry Number: 20344-49-4
Related CAS Registry Numbers(s): 79468-83-0 89287-18-3 90119-54-3 94218-62-9 97396-85-5 99085-14-0 99085-15-1 99400-51-8 100984-47-2
FeO(OH)

Molecular Formula: $FeHO_2$
Molecular Weight: 88.854
Accurate Mass: 88.932594
Percentage Composition: Fe 62.85%; H 1.13%; O 36.01%

Source/Synthesis: Corrosion product
Physical Description: Red-brown gel

Aldrich: 37125-4

>>**Derivative:** α-form
Synonym(s): Goethite

CAS Registry Number: 1310-14-1
Use/Importance: Widespread, occurs in combination with other iron minerals
Physical Description: Red-brown or yellow solid or black-brown cryst.
Other Data: Isostructural with diaspore (AlO(OH))

>>**Derivative:** α-form, monohydrate
Synonym(s): Goethite monohydrate

CAS Registry Number: 12181-28-1

>>**Derivative:** β-form
Synonym(s): Akageneite

CAS Registry Number: 12134-57-5
Source/Synthesis: Occurs in Japan, New Zealand, Arizona, Red Sea brines and lunar rocks. Corrosion product of Fe particularly in a marine environment
Use/Importance: Mineral
Other Data: Isostructural with α-MnO_2. Formulated as β-FeO(OH,Cl) stable only when interstitial ions eg. $Cl^{(-)}$ are present in lattice

>>**Derivative:** γ-form
Synonym(s): Lepidocrocite

CAS Registry Number: 12022-37-6
Source/Synthesis: Secondary mineral associated with Goethite

>>**Derivative:** δ-form
Synonym(s): Feroxyhyte

CAS Registry Number: 60497-39-4
Source/Synthesis: Found in iron-maganese nodules of the Pacific Ocean
Other Data: Readily tranforms to Goethite on exp. to air

>>**Derivative:** ε-form

Other Data: Struct. related to rutile; isostructural with InO(OH)

>>**Derivative:** Hydrogoethite

CAS Registry Number: 14590-27-3

>>**Derivative:** Protein-form
Synonym(s): Ferritin. Epadora. Ferrofolin. Ferrol. Ferrosprint. Sanifer. Sideros. Unifer

CAS Registry Number: 9007-73-2