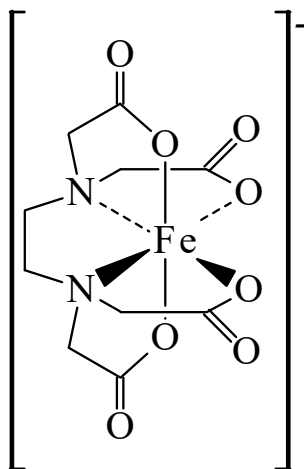




>>Entry Name: (Ethylenediaminetetraacetato)ferrate(III)(1-)

Synonym(s): [[N,N'-Ethanediylbis[N-(carboxymethyl)glycinato](4-)]-N,N',O,O',O^N,O^{N'}]ferrate(1-), 11Cl. [(Ethylenedinitrilo)tetraacetato]ferrate(1-). (EDTA)ferrate(1-). Ferric edetate



CAS Registry Number: 15275-07-7

Related CAS Registry Numbers(s): 18154-32-0 85528-55-8

Molecular Formula: C₁₀H₁₂FeN₂O₈⁽⁻⁾

Molecular Weight: 344.06

Accurate Mass: 343.994307

Percentage Composition: C 34.91%; H 3.52%; Fe 16.23%; N 8.14%; O 37.20%

General Statement: Octahedral anion, but usually obt. with coordinated H₂O see Aqua(ethylenediaminetetraacetato)ferrate(III)(1-) [HQC74-N](#)

Use/Importance: Iron source for diet and agriculture; oxidation and photo-catalyst; redox agent; DNA cleavage

>>Derivative: Na salt

Synonym(s): Ferric sodium edate. **Sodium feredetate**, INN. Sodium iron edetate, BAN. Ferrostrane. Ferrostrene. Sybron. Sytron. Many other names

CAS Registry Number: 15708-41-5

Use/Importance: Photographic bleach; commercially available. Used in treatment of anaemia

Physical Description: Cryst. (EtOH aq.)

Other Data: Salts with other alkali metals also known

Hazard & Toxicity: LD₅₀ (rat, orl) 5000 mg/kg

Sigma: E6760

>>Derivative: H compd.

CAS Registry Number: 17099-81-9

Use/Importance: Anticatalyst, photographic bleach, used in fuel cells, oxidation

Hazard & Toxicity: LD₅₀ (mus, ipr) 600 mg/kg

>>Derivative: NH₄ salt

CAS Registry Number: 21265-50-9

Use/Importance: Photographic bleaching agent

References:

Takeda, M., *Hyperfine Interact.*, 1986, **28**, 737; *CA*, **105**, 90029e, (Mössbauer)

Sakane, H. *et al.*, *Inorg. Chim. Acta*, 1990, **178**, 67, (struct, pe, exafs)

Negwer, M., *Organic-Chemical Drugs and their Synonyms*, 7th edn., Akademie-Verlag, 1994, 2092, (synonyms)

Lewis, R.J., *Sax's Dangerous Properties of Industrial Materials*, 8th edn., Van Nostrand Reinhold, 1992, EJA379; HIA000