>> **Name: Ammonium iron(*II*) sulfate ($(NH_4)_2Fe(SO_4)_2$)**
Synonym(s): Ferrous ammonium sulfate. Iron(*II*) ammonium sulfate

CAS Registry Number: 10045-89-3
$FeSO_4.(NH_4)_2SO_4$

Molecular Formula: $FeH_8N_2O_8S_2$
Molecular Weight: 284.051
Accurate Mass: 283.907147
Percentage Composition: Fe 19.66%; H 2.84%; N 9.86%; O 45.06%; S 22.58%

Use/Importance: Catalyst; fertiliser component, fire retardant

>>**Derivative:** Hexahydrate
Synonym(s): Ferrous ammonium sulfate hexahydrate. Mohr's salt. Tutton's salt

CAS Registry Number: 7783-85-9
Molecular Formula: $FeH_{20}N_2O_{14}S_2$
Molecular Weight: 392.142
Accurate Mass: 391.970537
Percentage Composition: Fe 14.24%; H 5.14%; N 7.14%; O 57.12%; S 16.35%
Source/Synthesis: Obt. by mixing solns. of ferrous and ammonium sulfates
Use/Importance: Analytical reagent; metallurgical applications, polym. catalyst. Commercially available
Physical Description: Pale green cryst. (H_2O); deliquescent; light sensitive
Melting Point: Mp 100-110 dec.°
Solubility: Sol. H_2O; insol. EtOH
Other Data: In soln., contains $[Fe(OH_2)_6]^{2(+)}$ ion. More resistant to oxidation than simple ferrous sulfate

Aldrich: 34290-4
Fluka: 9721
Sigma: F2262

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