Ammonium iron(III) sulfate dodecahydrate

Product Number  F3629
Store at Room Temperature

**Product Description**
Molecular Formula: $\text{FeNH}_4(\text{SO}_4)_2 \cdot 12\text{H}_2\text{O}$
Molecular Weight: 482.2
CAS Number: 7783-83-7
Melting Point: approximately 37 °C
Density: 1.71 g/cc

Synonym(s): ammonium ferric sulfate dodecahydrate, ferric ammonium sulfate dodecahydrate, ferric alum, iron alum

Ammonium ferric sulfate is a reagent that is used as a mordant in dyeing and textile printing. It is also utilized in analytical chemistry as an iron standard.

In biochemistry, ammonium ferric sulfate is used as a catalyst for the generation of free radicals. Increased xanthine oxidase and xanthine oxidoreductase activity in cultured rat cells has been demonstrated in the presence of ammonium ferric sulfate. Ammonium ferric sulfate may be used as an iron source to restore enzymatic activity in apoenzymes, such as for soybean lipoxygenase 3.

**Precautions and Disclaimer**
For Laboratory Use Only. Not for drug, household or other uses.

**Preparation Instructions**
This product is soluble in 1% (v/v) aqueous HCl (100 mg/ml), with heat as needed, yielding a clear, yellow to brown solution. A 0.1 M aqueous solution of ferric ammonium sulfate has a pH of 2.5.

**References**
1. The Merck Index, 12th Ed., Entry# 549.

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