



PRODUCT IN FOCUS



Ferric ammonium citrate (FAC)

INTRODUCTION

Ferric Ammonium Citrate (FAC) is a mixture of indefinite composition that contains ferric and ammonium cations and citrate(3-) anions. It may be obtained as red crystals or a brownish yellow powder or as green crystals or powder.

Distinguishing feature of this compound is that it is very soluble in water, in contrast to ferric citrate which is not very soluble.

APPLICATIONS

FAC has a wide range of applications and therapeutic uses, including:

- ✔ As a food ingredient, it has an INS number 381, and is used as an acidity regulator.
- ✔ As a nutritional supplement.
- ✔ As a hematinic that tends to stimulate blood cell formation or to increase the hemoglobin in the blood.
- ✔ Source of iron in treating iron-deficiency anemia. It is less constipating than inorg forms of iron. It is free from astringent & irritant properties.
- ✔ As a reducing agent of metal salts of low activity like gold and silver.
- ✔ In medical imaging, it is used as a contrast medium.
- ✔ With potassium ferricyanide as part of the cyanotype photographic process.
- ✔ Used in Kligler iron deeps to determine hydrogen sulfide production in microbial metabolism.
- ✔ Inks & Digital Inks.
- ✔ Water purification & Pool chemicals.
- ✔ Finishing & Flux.

Synonyms	Ammonium ferric citrate Iron(III) ammonium citrate
CAS no.	1185-57-5
EINECS no.	214-686-6
Molecular formula	Variable (Complex Salt)
Molecular weight	Variable (Complex Salt)
Structure	<p style="text-align: center;"> $x\text{Fe}^{3+}$ $y\text{NH}_3$ </p>



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SPECIFICATIONS – reference BP

Test	Unit	Specification
Description	-	Thin, transparent, dark red scales or granules or brownish red powder, odorless; deliquescent in moist air and is affected by light
Solubility (at 20°C)	-	Soluble in 0.5% part of water. Almost insoluble in 95% ethanol
Identification	-	Should be positive for Iron, Ammonia and Citrates as per BP
Arsenic	ppm	Max 4
Lead (Pb)	ppm	Max 30
Zinc (Zn)	-	Sample should be less turbid than standard
Sulphate	%	NMT 0.3
Assay (as Fe) as such basis	% w/w	20.5 – 22.5

- Also available in USP (brown) & BPC (green)
- Spray dried homogeneous powder & granules

STORAGE

Keep well closed, protected against light, dry and at room temperature.

ExSyn offers this product on commercial scale and welcomes inquiries. No matter the quantity you need, our exceptional quality and service will make ExSyn your supplier of choice! If you need any additional information or SDS, please get in touch with us.