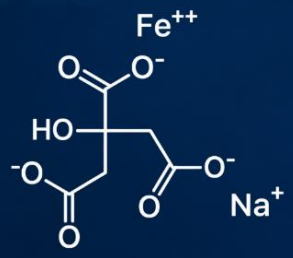
Sodium Ferrous Citrate

26
Fe
Iron



PRODUCT IN FOCUS

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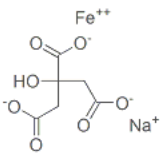
Sodium ferrous citrate

INTRODUCTION

Sodium ferrous citrate is an iron-containing compound used as a source of iron in pharmaceutical and nutritional formulations. It helps prevent and treat iron deficiency and iron-deficiency anemia by providing bioavailable iron for hemoglobin formation and red blood cell production. It is used in iron supplements and selected pharmaceutical preparations.

MANUFACTURE

It is generally manufactured by reacting a suitable ferrous iron source, such as ferrous sulfate, with sodium citrate under controlled conditions. The resulting iron–citrate complex is processed through suitable purification, concentration, and drying steps to obtain the desired product. Manufacturing conditions are controlled to maintain iron content, purity, and product stability.

Synonym(s)	Iron(II) sodium 2-hydroxypropane-1,2,3-tricarboxylate
CAS no.	43160-25-4
EINECS no.	-
Molecular formula	$C_{12}H_{10}O_{14}Fe\ Na_4$
Molecular weight	526.01
Structure	

APPLICATIONS

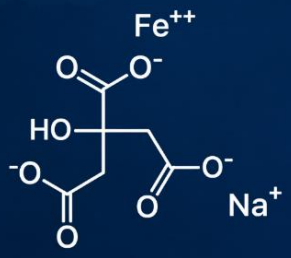
Sodium ferrous citrate is an important iron compound used mainly in pharmaceutical and nutritional applications, particularly for iron supplementation and food fortification.:

- **Pharmaceutical industry:** Used in iron supplements for the prevention and treatment of iron deficiency.
- **Nutritional supplements:** Provides iron to support normal hemoglobin formation and red blood cell production.
- **Food fortification:** Can be used as an iron source in food products, subject to applicable regulatory requirements.
- **Healthcare products:** Used as an ingredient in formulations designed to address inadequate dietary iron intake.

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SPECIFICATIONS

Test	Unit	Specification
Description	-	Odorless, green-white to greenish yellow powder
Solubility	-	Readily soluble in acidic solvents, practically insoluble in water & insoluble in basic solvents.
Identification	-	Positive for Sodium Citrate and Ferrous Iron
Arsenic	mg/kg	Max 4.0
Lead	mg/kg	Max 1.0
Ferric Iron	-	Meets test
Sulfate	g/kg	Max 4.8
Tartrate	-	No white, crystalline precipitate is formed.
Assay (Iron content)	%	10.0 – 11.0

PACKING
25 kg & 50 kg bag / drum

STORAGE
Store in light-resistant, well-closed container

REACH status
Not registered

ExSyn offers Sodium ferrous citrate on commercial scales and welcomes enquiries. Our exceptional quality and service will make ExSyn your supplier of choice! If you need additional information or SDS, please contact us.

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