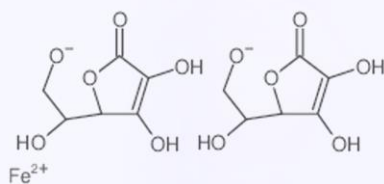


FERROUS ASCORBATE



PRODUCT IN FOCUS

EXSYN[®]
ESSENTIAL CHEMISTRY

Ferrous Ascorbate

INTRODUCTION

Ferrous Ascorbate is a combination of vitamin C and iron. Ferrum or iron helps to replenish the iron stores in the human body. Ascorbate contains vitamin C that improves iron levels in the body by increasing its absorption from different sources.

Manufacture

By reacting alkali or alkaline earth metals with ferrous sulfate, the corresponding ferrous salts are formed, which are then reacted with ascorbic acid in slightly acidic or neutral conditions in an aqueous medium. To obtain ferrous ascorbate, the mother liquor must be filtered.

APPLICATIONS

Ferrous Ascorbate has several applications in the pharmaceutical industry and is a valuable component in many medications and supplements.

Iron supplement: It is commonly used as an iron supplement in the pharmaceutical industry to treat iron-deficiency anemia. It is available in various forms such as tablets, capsules, and syrups.

Nutraceutical: It is also used as a nutraceutical, which is a dietary supplement that provides health benefits beyond basic nutrition. It is often used in combination with other vitamins and minerals to promote overall health and wellness.

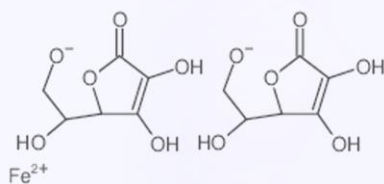
Antioxidant: Ascorbate, the other component of Ferrous ascorbate, is a powerful antioxidant. Antioxidants help to neutralize harmful free radicals in the body, which can cause damage to cells and contribute to the development of various diseases.

Anti-inflammatory: Ascorbate also has anti-inflammatory properties and can help to reduce inflammation in the body. This makes it useful in the treatment of conditions such as arthritis and other inflammatory disorders.

Immune system support: Ascorbate is also essential for the proper functioning of the immune system. It plays a vital role in the production of white blood cells and helps to protect the body against infections and diseases.

Synonyms	Ascorbic acid ferrous salt Vitamin C iron(II) salt L-(+)-Ascorbic acid iron(II) salt
CAS no.	24808-52-4
EINECS no.	246-469-7
Molecular formula	C ₁₂ H ₁₆ FeO ₁₂
Molecular weight	406.08
Structure	<p>The image shows the chemical structure of ferrous ascorbate, which consists of two ascorbate anions coordinated to a central iron(II) ion (Fe²⁺). Each ascorbate anion is a five-membered lactone ring with two hydroxyl groups at the 2 and 3 positions and a dihydroxyethyl side chain at the 4 position.</p>

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SPECIFICATIONS

Test	Unit	Specification
Appearance	-	A dark violet colored powder
Solubility	-	Freely soluble in water
Identification		
A. Iron test	-	The solution will give blue colour
B. Ascorbic test	-	A grey precipitate is formed
Loss on Drying	%	≤ 10
Heavy metals	ppm	≤ 25
pH (aq. solution)	% w/v	1.0
Assay (ODB)		
1. Content of Iron	%	14.0 - 17.0
2. Content of Ascorbic acid	%	60.0 - 70.0
Residual solvent	-	No organic solvent
Microbiological contamination		
1. Total aerobic microbial count	cfu/g	≤ 10 ³
2. Total Yeast & Mold count	cfu/g	≤ 10 ²
3. Specific micro organisms		
a. Escherichia Coli	absent/g	Should comply
b. Pseudomonas aeruginosa	absent/g	Should comply
c. Staphylococcus aureus	absent/g	Should comply
d. Salmonella. sp.	absent/10 g	Should comply

PACKING

20 kg HDPE drum.

STORAGE

Store in cool place. Keep container tightly closed in a dry and well-ventilated place.

CERTIFICATION

GMP & DMF

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 contact us.