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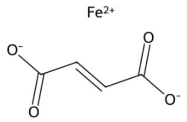
CIN U46909GJ2025PTC164345

CERTIFICATE OF ANALYSIS Standard product specification

Ferrous Fumarate

CAS 141-01-5 · C4H2FeO4 · 99% USP/BP/EP



STRUCTURAL FORMULA

1. PRODUCT IDENTITY

Product name	Ferrous Fumarate
C.A.S. number	141-01-5
Molecular formula	C4H2FeO4
Molecular weight	169.90 g/mol
Grade / standard	99% USP/BP/EP
Description	Red-brown to brick red powder
Product group	Iron Minerals
Category	Vitamins, Minerals & Amino Acids
Country of origin	India
Packing	Bags, drums, carboys, IBC or ISO tank as applicable — customer-specified packing available
Storage	Cool, dry, well-ventilated place in tightly closed original packing

2. ANALYTICAL SPECIFICATION

S. NO.	TEST PARAMETER	SPECIFICATION	TYPICAL RESULT	METHOD
1	Description	Red-brown to brick red powder	Complies	Visual
2	Identification (A) — Infrared absorption	Concordant with reference spectrum	Complies	IR Spectrophotometry
3	Identification (B) — Chemical / chromatographic	Positive for the substance	Complies	As per monograph
4	Solubility	As per specification	Complies	Visual / Monograph

5	Assay	Not less than 99.0 % w/w	99.37	HPLC / Titrimetry (Monograph)
6	Specific Optical Rotation	As per monograph	Conforms	Polarimetry
7	Loss on Drying	Not more than 0.5 % w/w	0.21	Gravimetry
8	Residue on Ignition	Not more than 0.1 % w/w	0.015	Gravimetry
9	Chloride	Not more than 0.05 %	0.0040	Turbidimetry
10	Lead (Pb)	Not more than 3 ppm	Less than 0.5 ppm	ICP-MS
11	Heavy Metals	Not more than 20 ppm	Less than 10 ppm	ICP-OES / Limit test
12	Related Substances — any individual impurity	Not more than 0.10 %	0.043	HPLC
13	Related Substances — total impurities	Not more than 0.50 %	0.123	HPLC
14	Residual Solvents	Complies with ICH Q3C limits	Complies	Headspace GC
15	Total Aerobic Microbial Count	Not more than 1000 cfu/g	95 cfu/g	IP / USP <61>
16	Total Yeast & Mould Count	Not more than 100 cfu/g	4 cfu/g	IP / USP <61>
17	Escherichia coli	Absent in 1 g	Absent	IP / USP <62>
18	Salmonella species	Absent in 10 g	Absent	IP / USP <62>

3. DECLARATION

This document sets out the standard specification for Ferrous Fumarate and applies to all consignments of this product and grade supplied by Scapex Exports Pvt. Ltd. It is not a lot-specific release document; a lot-specific certificate carrying the analysis of the material actually shipped is issued with, and travels with, each consignment. Scapex Exports supplies against customer-specified assay limits and pharmacopoeial standards — send your specification sheet and we confirm compliance in writing before the order is accepted.

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