

SPECIFICATION

Product Name: Ferrous Gluconate IP Grade
Chemical Formula: $C_{12}H_{22}FeO_{14}$
CAS Number: 299-29-6
Molecular Weight: 446.10 g/mol
Appearance: Greenish yellow fine powder.
Odor: Odorless.

Chemical Composition

Parameter	Unit	Typical Value	Specification (Min/Max)
Identification			
Test - A	-	Complies	Passes to I.P. Test
Test - B	-	Complies	Passes to I.P. Test
Appearance of soin.	-	Complies	As per I.P.
PH	-	4.36	Limit 4.0 to 5.5
Loss on drying	%	8.6%	Limit 5% to 10.0%
Chloride	PPM	Complies	NMT 625 PPM
Sulphate	PPM	Complies	NMT 500 PPM
Arsenic	PPM	Complies	NMT 2 PPM
Reducing sugar	-	Complies	Limit to pass the test
Barium	-	Complies	No turbidity is produced.
Oxalic Acid	-	Complies	No turbidity is produced.
Heavy metals	PPM	Complies	NMT 20 PPM
Microbial Contamination	Cfu/gm	Complies	NMT 10 Cfu/gm
Ferric iron	%	0.35%	NMT 1%
Assay	%	98.48%	95% to 102% on dry basis.

Physical Properties

- Solubility: Freely soluble in water. Practically insoluble in ethanol. Insoluble in acetone. Insoluble in ether.

Shelf Life & Storage

- Shelf Life: 5 years from date of manufacture under recommended storage.
- Storage Conditions: Store in a tightly closed, light-resistant container in a cool, dry, and well-ventilated place, protected from moisture, humidity, heat, and direct sunlight. Keep the container tightly sealed when not in use to prevent oxidation and maintain product quality.

Applications

- Use: Widely used as an iron supplement and iron fortification ingredient in pharmaceutical, nutraceutical, and food products. It provides a bioavailable source of iron to support hemoglobin production, red blood cell formation, and oxygen transport.
- Dosage: Depends on the intended application, age group, and desired elemental iron intake.

Packaging

- Standard Packing: 25 kg woven PP bags with inner liner, 1 kgs and 100 grams, or as per customer requirement.
- Labeling: Product name, batch number, net weight, manufacture date, expiry date, and manufacturer details.

* Specifications are based on the manufacturer's provided specifications.