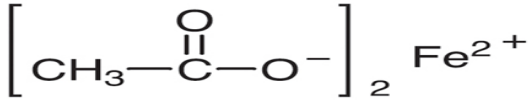
RASHDEEP CHEMICALS

Technical Data Sheet - Iron(II) Acetate

1	**Chemical Name**	Iron acetate Anhydrous
2	**CAS No**	3094-87-9
3	**Synonym (s)**	Ferrous acetate
4	**Chemical Formula**	Fe(C2H3O2)2
5	**Chemical Structure**	
6	**Molecular Weight**	232.98gm/mol
7	**Description**	A white or light brown solid
8	**Solubility**	Highly soluble in water
9	**Storage and Handling**	Keep the container tightly closed in a cool, dry, well-ventilated place, away from heat and incompatible materials, and store under an inert gas
10	**Uses**	• **Nanoparticles:** Iron(II) acetate is a key starting material for synthesizing iron oxide nanoparticles, which have diverse applications in various fields. • **Nanostructures:** It can be used to create iron-based nanostructures for applications in lithium-ion batteries and supercapacitors.

		• **Coordination Compounds:** It serves as a precursor in the preparation of various iron coordination compounds. • **Organic Oxidation Reactions:** Iron(II) acetate can act as a catalyst in certain organic oxidation reactions. • **Carbon Nanotube Synthesis:** It can also be used as a catalyst for the synthesis of carbon nanotubes. • **Mordant in Dyeing:** Historically, iron(II) acetate has been used as a mordant in the dye industry. • **Wood Aging:** Materials prepared by heating iron, acetic acid, and air, loosely described as basic iron acetates, are used as dyes and mordants. Iron acetate is often brushed upon untreated wood to give it an aged appearance. • **Battery Technology:** Iron oxide nanoparticles, synthesized from iron(II) acetate, can be incorporated into carbon nanofibers for use in supercapacitor applications. • **Solar Cells:** Iron(II) acetate can be used to synthesize hematite nanoparticles for applications in solar cells.