## **Technical Data Sheet - Zinc Acetate**

1	Chemical Name	Acetate Anhydrous
2	CAS No	5970-45-6
3	Synonym (s)	Acetic Acid - Zinc Salt
4	Chemical Formula	Zn(CH3COO)2
5	Chemical Structure	Zn <sup>2+</sup>
		$O \longrightarrow O^{-}$ $CH_{3}$ $O \longrightarrow O^{-}$
6	Molecular Weight	183.48 g/mol
7	Description	White crystalline powder
8	Solubility	Soluble in water
9	Storage and Handling	Highly hygroscopic / store in dry placeZinc
10	Uses	<ul> <li>1. Chemical Synthesis and Materials Science:         <ul> <li>Precursor in Ceramics and Glass:</li> <li>Zinc acetate decomposes into zinc oxide upon heating, enhancing the mechanical strength, thermal stability, and optical properties of ceramics and glass.</li> <li>Synthesis of Nanomaterials:</li></ul></li></ul>

phosphonates, zinc sulfide nanoparticles coated on silica particles, and ZnO/ZnS composites.

## Catalyst:

Zinc acetate acts as a catalyst in the production of vinyl acetate from acetylene, and in other chemical reactions and organic synthesis.

Coatings and Pigments:
 It can be involved in the preparation of certain coatings and pigments.

## 2. Pharmaceutical and Medical Applications:

- Lozenges and Dietary Supplements:
   Zinc acetate is a component of some
   lozenges used to treat the common cold,
   and it can also be used as a dietary
   supplement.
- Treatment of Wilson's Disease:
   As an oral daily supplement, it inhibits copper absorption, aiding in the treatment of Wilson's disease.
- Topical Treatments:
   It's used in topical ointments and lotions for relieving itching and rashes, and in acne treatments, often combined with antibiotics.
- Zinc Deficiency: It's used in treating zinc deficiencies.

## 3. Industrial Applications:

- **Wood Preservation:** Zinc acetate is used in the wood preservation industry.
- Manufacturing of Zinc Salts: It's used in the production of other commercially useful zinc salts.
- Manufacturing of Polymers and Ethyl Acetate: It's used in the manufacture of polymers and ethyl acetate.



	<ul> <li>Dye Mordant: Zinc acetate serves as a dye mordant.</li> <li>Plating Inhibitor: It acts as a plating inhibitor on primary water piping.</li> <li>Analytical Reagent: It's used as an analytical reagent in analytical chemistry.</li> </ul>
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