SECTION-1: Identification of the substance / mixture and the company / undertaking

Catalogue Number	CS-ED-41933
Product Name	propionate
CAS No.	72-03-7
Category	Fine Chemicals
Synonyms	Not available
Brand	Clearsynth Labs Ltd.
Identified uses	Laboratory Chemicals
Uses advised against	Not available
Company	Clearsynth Labs Ltd. Mumbai, India
Emergency Phone #	+91-22-245045900
REACH No.	Not available

SECTION 2: Hazards identification

Disclaimer: This is sample MSDS. Please email **sales@clearsynth.com** for more details.

2.1 Classification of the substance or mixture-Regulation (EC) No 1272/2008:

Not available

2.2 Label Elements

Signal Word: Not available

Not available

Hazard Statement(s)

Code	Statement
Not available	Not available

Precautionary Statement(s)

Code	Statement
Not available	Not available

SECTION 3: Composition / information on ingredients

3.1 Substance

Component : propionate
CAS Number : 72-03-7
Molecular Formula : .
Molecular Weight : .
Parent Chemical : .
Synonyms : Not available
Concentration : Not available

SECTION 4: First aid measures

SECTION 4: First-aid measures

4.1 Description of first aid measures
- General advice: Seek medical attention if symptoms persist or if you feel unwell. Show this SDS to the physician.
- Inhalation: Move person to fresh air. If breathing is difficult, seek medical attention.
- Skin contact: Wash with plenty of water and soap. Remove contaminated clothing and wash before reuse. Seek medical attention if irritation develops or persists.
- Eye contact: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing. Seek medical attention.
- Ingestion: Rinse mouth. Do NOT induce vomiting unless directed by medical personnel. Seek medical attention.

4.2 Most important symptoms and effects, both acute and delayed
- Not available.

4.3 Indication of any immediate medical attention and special treatment needed
- Treat symptomatically. No data available.

SECTION 5: Firefighting measures

SECTION 5: Fire-fighting measures

5.1 Extinguishing media
- Suitable extinguishing media: Use extinguishing measures appropriate to surrounding fire (e.g., water spray, alcohol-resistant foam, dry chemical, carbon dioxide).
- Unsuitable extinguishing media: Not available.

5.2 Special hazards arising from the substance or mixture
- Specific hazards: Not available.
- Hazardous combustion products: Not available.

5.3 Advice for firefighters
- Wear self-contained breathing apparatus (SCBA) and full protective gear.
- Cool containers with water spray if exposed to fire.
- Prevent fire-fighting water from entering drains or watercourses.

SECTION 6: Accidental release measures

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

- Avoid breathing dust/vapors/mist. Avoid contact with skin and eyes.
- Provide adequate ventilation.
- Use appropriate personal protective equipment (see Section 8).

6.2 Environmental precautions
- Avoid release to the environment. Prevent entry into drains, sewers, or waterways.

6.3 Methods and material for containment and cleaning up
- Contain spill. Collect using non-sparking tools where applicable.
- Absorb with inert material if liquid; sweep/collect carefully if solid.
- Place in suitable, labeled container for disposal.

6.4 Reference to other sections
- See Section 8 for exposure controls/personal protection and Section 13 for disposal considerations.

SECTION-7: Handling and storage

SECTION 7: Handling and storage

7.1 Precautions for safe handling
- Handle in accordance with good industrial hygiene and safety practice.
- Avoid contact with skin, eyes, and clothing.
- Avoid breathing dust/vapors/mist.
- Use only with adequate ventilation.
- Keep containers tightly closed when not in use.

7.2 Conditions for safe storage, including any incompatibilities
- Store in a cool, dry, well-ventilated place.
- Keep container tightly closed.
- Incompatible materials: Not available.

7.3 Specific end use(s)
- Fine chemical / laboratory use. No further information available.

SECTION 8: Exposure controls / personal protection

SECTION 8: Exposure controls/personal protection

8.1 Control parameters
- Occupational exposure limits: Not available.
- Biological limit values: Not available.

8.2 Exposure controls
- Engineering controls: Provide adequate general and/or local exhaust ventilation to control airborne levels.
- Personal protective equipment (PPE):
- Eye/face protection: Safety glasses with side shields or chemical splash goggles.
- Skin protection: Protective gloves (material not specified). Wear protective clothing as appropriate.
- Respiratory protection: If ventilation is inadequate, use appropriate respiratory protection.
- Hygiene measures: Wash hands after handling. Do not eat, drink, or smoke when using this product.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Test	Result
Appearance	No data available
IR spectrum	No data available
pH	No data available
Solubility	No data available

Property	Value
a) Physical State	No data available
b) Color	No data available
c) Odor	No data available
d) pH	No data available
e) Vapour Pressure	No data available
f) Viscosity	No data available
g) Initial Boiling Point and boiling range	No data available
h) Melting Point / Freezing Point	No data available
i) Auto Ignition Temperature	No data available
j) Flash Point	No data available
k) Explosion Limit, Lower	No data available
l) Explosion Limit, Upper	No data available
m) Decomposition Temperature	No data available
n) Loss on Drying	No data available
o) Relative Density	No data available
p) Solubility (in DMSO)	No data available
q) Oxidizing Properties	No data available

SECTION 10: Stability and reactivity

SECTION 10: Stability and reactivity

10.1 Reactivity
- Not available.

10.2 Chemical stability
- Stable under recommended storage conditions. No data available.

10.3 Possibility of hazardous reactions
- Not available.

10.4 Conditions to avoid
- Not available.

10.5 Incompatible materials
- Not available.

10.6 Hazardous decomposition products
- Not available.

SECTION 11: Toxicological information

11.1 Information on toxicological effects
- Acute toxicity: Ingestion of large doses of zinc causes stomach cramps, nausea, and vomiting. Acute inhalation of large amounts of zinc causes metal fume fever, which is characterized by chills, fever, headache, weakness, dryness of the nose and throat, chest pain, and coughing. Dermal contact with zinc results in skin irritation. (L49)
- Skin corrosion/irritation: Anaemia results from the excessive absorption of zinc suppressing copper and iron absorption, most likely through competitive binding of intestinal mucosal cells. Unbalanced levels of copper and zinc binding to Cu,Zn-superoxide dismutase has been linked to amyotrophic lateral sclerosis (ALS). Stomach acid dissolves metallic zinc to give corrosive zinc chloride, which can cause damage to the stomach lining. Metal fume fever is thought to be an immune response to inhaled zinc. (L48, L49, A49) Ingestion of large doses of zinc causes stomach cramps, nausea, and vomiting. Acute inhalation of large amounts of zinc causes metal fume fever, which is characterized by chills, fever, headache, weakness, dryness of the nose and throat, chest pain, and coughing. Dermal contact with zinc results in skin irritation. (L49)
- Serious eye damage/eye irritation: No data available.
- Respiratory or skin sensitization: No data available.
- Germ cell mutagenicity: No data available.
- Carcinogenicity: No data available.
- Reproductive toxicity: Chronic exposure to zinc causes anemia, atazia, lethargy, and decreases the level of good cholesterol in the body. It is also believed to cause pancreatic and reproductive damage. (L49)
- STOT-single exposure: No data available.
- STOT-repeated exposure: Chronic exposure to zinc causes anemia, atazia, lethargy, and decreases the level of good cholesterol in the body. It is also believed to cause pancreatic and reproductive damage. (L49) Propionic acid occurs in chronically high levels in propionic acidemia. Propionic acidemia, also known as propionic aciduria, propionyl-CoA carboxylase deficiency and ketotic glycinemia, is an autosomal recessive metabolic disorder, classified as a branched-chain organic acidemia. The disorder presents in the early neonatal period with progressive encephalopathy. Death can occur quickly, due to secondary hyperammonemia, infection, cardiomyopathy, or basal ganglial stroke. In many cases, propionic acidemia can damage the brain, heart, and liver, cause seizures, and delays to normal development like walking and talking. (Wikipedia)
- Aspiration hazard: No data available.

Likely routes of exposure
- Ingestion of large doses of zinc causes stomach cramps, nausea, and vomiting. Acute inhalation of large amounts of zinc causes metal fume fever, which is characterized by chills, fever, headache, weakness, dryness of the nose and throat, chest pain, and coughing. Dermal contact with zinc results in skin irritation. (L49)

Symptoms related to the physical, chemical and toxicological characteristics
- In healthy individuals, the enzyme propionyl CoA carboxylase converts propionyl CoA to methylmalonyl CoA. This is one step in the process of converting certain amino acids and fats into sugar for energy. Individuals with propionic acidemia cannot perform this conversion because the enzyme propionyl CoA carboxylase is nonfunctional. The essential amino acids; isoleucine, valine, threonine, and methionine and odd-chain fatty acids are simply converted to propionyl CoA, before the process stops, leading to a buildup of propionyl CoA. Instead of being converted to methylmalonyl CoA, propionyl CoA is then converted into propionic acid, which builds up in the bloodstream. Propionyl-CoA, propionic acid, ketones, ammonia, and other toxic compounds accumulate in the blood, causing the signs and symptoms of propionic acidemia. Propionate acts as a metabolic toxin in liver cells by accumulating in mitochondria. Propanoate is metabolized oxidatively by glia, which suggests astrocytic vulnerability in propanoic acidemia when intramitochondrial propionyl-CoA may accumulate. Propanoic acidemia may alter both neuronal and glial gene expression by affecting histone acetylation (A15452, A15453). (Wikipedia)

SECTION 12: Ecological information

SECTION 12: Ecological information

12.1 Toxicity
- No data available.

12.2 Persistence and degradability
- No data available.

12.3 Bioaccumulative potential
- No data available.

12.4 Mobility in soil
- No data available.

12.5 Results of PBT and vPvB assessment
- Not available.

12.6 Endocrine disrupting properties
- Not available.

12.7 Other adverse effects
- No data available.

SECTION 13: Disposal considerations

SECTION 13: Disposal considerations

13.1 Waste treatment methods
- Dispose of contents/container in accordance with local/regional/national/international regulations.
- Do not discharge to drains or the environment.
- Contaminated packaging: Dispose of as unused product or according to local regulations.

- Waste code: Not available.

SECTION 14: Transport information

SECTION 14: Transport information

- UN number: Not available.
- UN proper shipping name: Not available.
- Transport hazard class(es): Not available.
- Packing group: Not available.
- Environmental hazards: Not available.
- Special precautions for user: Not available.
- Transport in bulk according to IMO instruments: Not available.

SECTION 15: Regulatory information

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
- Not available.

15.2 Chemical safety assessment
- Not available.

SECTION 16: Other information

SECTION 16: Other information

- Product name: propionate
- Catalog No.: CS-ED-41933
- CAS No.: 72-03-7
- Supplier: Clearsynth Labs Ltd., Mumbai, India
- Emergency phone: +91-22-245045900

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- The information provided is believed to be accurate based on available data; however, no warranty is expressed or implied. Users are responsible for determining suitability for their particular application and for compliance with applicable laws and regulations.

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