

## SAFETY DATA SHEET

### 1. Identification

**Product Identifier:**

Epinephrine Bitartrate

**Synonyms:** L-Adrenaline bitartrate, L-Epinephrine bitartrate

**CAS No.:** 51-42-3

**EC No.:** 200-097-1

**Recommended use:** Laboratory chemicals, manufacture of substances

**Uses advised against:** Not for drug, food, or household use

**Manufacturer / Supplier:**

Qingdao Sigma Chemical Co., Ltd.

Room 2-1-2301, Jiahe Xinxing, No. 130, Shandong Road, Shibe District,  
Qingdao City, Shandong Province, China

**E-mail:** 786099005@qq.com

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### 2. Hazards Identification

**GHS Classification:**

Acute toxicity (oral): Category 1

Specific target organ toxicity (single exposure, cardiovascular): Category 1

**Signal word:** Danger

**Hazard statements:**

H300: Fatal if swallowed

H370: Causes damage to organs (cardiovascular system)

**Precautionary statements:**

P261: Avoid breathing dust/vapors

P264: Wash hands thoroughly after handling

P270: Do not eat, drink, or smoke when using this product

P301+P310: IF SWALLOWED: Immediately call a POISON CENTER/doctor

P330: Rinse mouth

P405: Store locked up

P501: Dispose of contents/container in accordance with local regulations

**Hazards not otherwise classified (HNOC):** None known

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### 3. Composition/Information on Ingredients

Chemical Name	CAS Number	EC Number	% Content
Epinephrine Bitartrate	51-42-3	200-097-1	≥98%

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### 4. First-Aid Measures

**General:** Move victim out of exposure. Seek medical advice. Show this SDS to the attending physician.

**Inhalation:** Move to fresh air. Provide oxygen if breathing is difficult. Call a physician.

**Skin contact:** Wash with soap and water. Seek medical advice if irritation occurs.

**Eye contact:** Rinse cautiously with water for several minutes. Remove contact lenses if easy to do.

**Ingestion:** Rinse mouth. Do not induce vomiting. Immediately call poison control or a physician.

**Most Important Symptoms/Effects:** Cardiovascular stimulation, seizures, breathing difficulty.

**Special Treatment:** Symptomatic and supportive care; monitor vital signs and ECG.

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### 5. Fire-Fighting Measures

**Suitable extinguishing media:** Water spray, foam, dry chemical, carbon dioxide

**Special hazards:** Carbon and nitrogen oxides may form

**Protective equipment:** Self-contained breathing apparatus recommended

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### 6. Accidental Release Measures

**Personal precautions:** Avoid dust formation. Ensure proper ventilation. Wear suitable PPE.

**Environmental precautions:** Do not allow to enter drains or environment.

**Cleanup methods:** Sweep up and collect in suitable container. Avoid creating dust.

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## 7. Handling and Storage

**Handling:** Use in well-ventilated areas. Avoid contact with skin/eyes and dust inhalation.

**Storage:** Store tightly closed at 2–8 °C. Protect from light, moisture, and air. Store under inert gas.

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## 8. Exposure Controls / Personal Protection

**Engineering Controls:** Use containment devices or local exhaust ventilation.

**PPE:**

**Eye:** Safety goggles or face shield

**Skin:** Protective gloves and clothing

**Respiratory:** NIOSH-approved respirators if ventilation is insufficient

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## 9. Physical and Chemical Properties

Property	Value
Appearance	White to off-white powder
Odor	Odorless
Melting Point	~147–154 °C (decomposes)

Property	Value
Solubility (Water)	Freely soluble
Molecular Formula	C <sub>9</sub> H <sub>13</sub> NO <sub>3</sub> ·C <sub>4</sub> H <sub>6</sub> O <sub>6</sub>
Molecular Weight	333.29 g/mol
Vapor Pressure	< 1.0 × 10 <sup>-7</sup> kPa @ 25 °C
Partition Coefficient (log P)	Not available

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## 10. Stability and Reactivity

**Stability:** Stable under recommended conditions

**Hazardous reactions:** None under normal use

**Incompatible materials:** Strong bases, oxidizers, iron and copper salts

**Decomposition products:** Carbon oxides, nitrogen oxides

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## 11. Toxicological Information

**Acute toxicity (oral):** LD<sub>50</sub> Mouse: 4 mg/kg

**STOT – Single Exposure:** Cardiovascular toxicity

**Other effects:** CNS stimulation, respiratory effects, possible teratogenicity

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## 12. Ecological Information

**Ecotoxicity:** No data available

**Persistence/Degradability:** No data available

**Bioaccumulation:** Not expected

**Other hazards:** Avoid environmental release

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### 13. Disposal Considerations

Dispose in accordance with local, regional, and national regulations. Do not allow material to reach environment. Burn with proper afterburner and scrubber if incinerated.

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### 14. Transport Information

Mode	UN Number	Proper Shipping Name	Class	Packing Group
DOT	UN2811	Toxic solid, organic, n.o.s. (Epinephrine Bitartrate)	6.1	I
IATA	UN2811	Same as above	6.1	I
IMDG	UN2811	Same as above	6.1	I

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### 15. Regulatory Information

**TSCA:** Not listed

**SARA 311/312:** Acute toxicity; STOT (single exposure)

**California Prop. 65:** Not listed

**EU REACH:** Not registered

**Other Inventories:** May not be listed in China IECSC

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### 16. Other Information

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