

## Material Safety Data Sheet

### 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

#### 1.1 Product identifiers

|                |                         |
|----------------|-------------------------|
| Product name   | Methyl 3-aminocrotonate |
| Product number | A020062                 |
| Brand          | 3ASenrise               |
| CAS number     | 14205-39-1              |

#### 1.2 Details of the supplier of the safety data sheet

Company: Anhui Senrise Technology Co., Ltd.

Address: No.88 Weisan Road, High-Tech Industrial Development Zone, Anqing, Anhui

Post code: 246003

Tel: 400-005-6266

Fax: 0556-5555368

Email: service@3asenrise.com

#### 1.3 Emergency telephone

Emergency telephone: 0556-5500208

#### 1.4 Relevant identified uses of the substance or mixture and uses advised against

Identified uses: For R&D use only. Not for pharmaceutical, household or other uses.

### 2 HAZARDS IDENTIFICATION

#### 2.1 Classification of the substance or mixture

Acute toxicity, Oral (Category 4), H302

Serious eye damage/eye irritation (Category 1), H318

Skin sensitization (Category 1), H317

Short-term (acute) aquatic hazard (Category 3), H402

#### 2.2 GHS label elements, including precautionary statements

##### Pictogram



**Signal word: Danger**

##### Hazard statement(s)

H302 Harmful if swallowed.

H317 May cause an allergic skin reaction.

H318 Causes serious eye damage.

H402 Harmful to aquatic life.

##### Precautionary statement(s)

## Prevention

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.

P264 Wash hands thoroughly after handling.

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

P272 Contaminated work clothing should not be allowed out of the workplace.

P273 Avoid release to the environment.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

## Response

P301+P312+P330 IF SWALLOWED: Call a POISON CENTER/ doctor if you feel unwell. Rinse mouth.

P302+P352 IF ON SKIN: wash with plenty of soap and water.

P305+P351+P338+P310 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/ doctor.

P333+P313 IF SKIN irritation or rash occurs: Get medical advice/attention.

## Storage

No data available

## Disposal

P501 Dispose of contents/ container to an approved waste disposal plant.

## 2.3 Physical and chemical hazards

No data available

## 2.4 Health hazards

H302 Harmful if swallowed.

H317 May cause an allergic skin reaction.

H318 Causes serious eye damage.

## 2.5 Environmental hazards Code

H402 Harmful to aquatic life.

## 2.6 Other hazards

No data available

## 3 COMPOSITION/INFORMATION ON INGREDIENTS

### Substance / Mixture: Substance

#### 3.1 Substance

|                  |   |
|------------------|---|
| Name             | Methyl 3-aminocrotonate                       |
| Formula          | C <sub>5</sub> H <sub>9</sub> N <sub>02</sub> |
| Molecular Weight | 115.13  |
| CAS              | 14205-39-1                                    |
| Concentration    | 98%   |

## 4 FIRST AID MEASURES

### 4.1 Description of first aid measures

#### General advice

Consult a physician. Show this safety data sheet to the doctor in attendance.

#### If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration.

Consult a physician.

#### In case of skin contact

Wash off with soap and plenty of water. Consult a physician.

#### In case of eye contact

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

#### If swallowed

Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

#### **4.2 Most important symptoms and effects, both acute and delayed**

No data available.

### **5 FIREFIGHTING MEASURES**

#### **5.1 Extinguishing media**

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

#### **5.2 Special hazards arising from the substance or mixture**

Carbon oxides Nitrogen oxides (NO<sub>x</sub>) Combustible.

#### **5.3 Advice for firefighters**

Wear self-contained breathing apparatus for firefighting if necessary.

### **6 ACCIDENTAL RELEASE MEASURES**

#### **6.1 Personal precautions, protective equipment and emergency procedures**

Use personal protective equipment. Avoid breathing vapours, mist or gas. Ensure adequate ventilation.

#### **6.2 Environmental precautions**

Do not let product enter drains.

#### **6.3 Methods and materials for containment and cleaning up**

Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations.

#### **6.4 Reference to other section**

For disposal see section 13.

### **7 HANDLING AND STORAGE**

#### **7.1 Precautions for safe handling**

##### **Advice on safe handling**

Work under hood. Do not inhale substance/mixture. Avoid generation of vapours/aerosols.

##### **Advice on protection against fire and explosion**

Keep away from open flames, hot surfaces and sources of ignition. Take precautionary measures against static discharge.

##### **Hygiene measures**

Change contaminated clothing. Preventive skin protection recommended. Wash hands after working with substance.

#### **7.2 Conditions for safe storage, including any incompatibilities**

##### **Storage conditions**

Keep container tightly closed in a dry and well-ventilated place. Keep away from heat and sources of ignition.

Long term storage: RT

### **8 EXPOSURE CONTROLS/PERSONAL PROTECTION**

#### **8.1 Control parameters**

No data available.

#### **8.2 Personal protective equipment**

##### **Eye/face protection**

Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU). Safety glasses.

##### **Skin protection**

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal

technique (without touching glove's outer surface) to avoid skin contact with this product.

### **Body protection**

Flame retardant antistatic protective clothing.

### **Respiratory protection**

If the exposure limits are exceeded, irritation or other symptoms are experienced, use a full-face respirator.

### **Control of environmental exposure**

Do not let product enter drains. Risk of explosion.

## **9 PHYSICAL AND CHEMICAL PROPERTIES**

### **9.1 Information on basic physical and chemical properties**

|   |                           |
|---|---------------------------|
| a) Appearance                                   | White to yellow solid     |
| b) Odor   | ammoniacal                |
| c) pH   | 8 - 9 at 18 g/l at 20 ° C |
| d) Melting point/freezing point                 | 81 - 83 ° C - lit.        |
| e) Initial boiling point and boiling range      | 112 ° C at 55 hPa         |
| f) Upper/lower flammability or explosive limits | No data available         |
| g) Flash point                                  | 101 ° C - closed cup      |
| h) Evaporation rate                             | No data available         |
| i) Vapor pressure                               | No data available         |
| j) Vapor density                                | No data available         |
| k) Density                                      | No data available         |
| l) Water solubility                             | 18 g/l at 20 ° C          |
| m) Partition coefficient: n-octanol/water       | No data available         |
| n) Autoignition temperature                     | No data available         |
| o) Decomposition temperature                    | No data available         |
| p) Flammability                                 | No data available         |

## **10 STABILITY AND REACTIVITY**

### **10.1 Chemical stability**

No data available.

### **10.2 Conditions to avoid**

No data available.

### **10.3 Incompatible materials**

No data available

### **10.4 Hazardous decomposition products**

In the event of fire: see section 5.

## **11 TOXICOLOGICAL INFORMATION**

### **11.1 Acute toxicity**

LD50 Oral

- Rat - male and female - 1,760 mg/kg

LC50 Inhalation

- Rat - male and female - 4 h - > 0.023 mg/l - dust/mist

LD50 Dermal

- Rat - > 2,000 mg/kg

### **11.2 Skin corrosion/irritation**

Skin - Rabbit Result: slight irritation - 4 h Remarks: Based on available data, the classification criteria are not met.

### **11.3 Serious eye damage/eye irritation**

Eyes – Rabbit Result: Irreversible effects on the eye

#### **11.4 Respiratory or skin sensitization**

Sensitisation test (Magnusson and Kligman): – Guinea pig Result: positive

#### **11.5 Germ cell mutagenicity**

Test Type: Ames test Test system: Salmonella typhimurium Metabolic activation: with and without metabolic activation Result: negative

#### **11.6 Carcinogenicity**

No data available

#### **11.7 Reproductive toxicity**

No data available

#### **11.8 Specific target organ toxicity - single exposure**

No data available

#### **11.9 Specific target organ toxicity - repeated exposure**

No data available

#### **11.10 Aspiration hazard**

no data available.

#### **11.11 Additional Information**

RTECS: EM9092500 To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated. Under given conditions, contact with nitrites or nitric acid can lead to the formation of nitrosamines, which have shown themselves to be carcinogenic in animal experiments. Further data: Other dangerous properties can not be excluded. Handle in accordance with good industrial hygiene and safety practice.

### **12 ECOLOGICAL INFORMATION**

#### **12.1 Toxicity**

Toxicity to fish:

LC50 – Oncorhynchus mykiss (rainbow trout) – 35.4 mg/l – 96 h

Toxicity to daphnia and other aquatic:

static test EC50 – Daphnia magna (Water flea) – > 100 mg/l – 48 h

Toxicity to algae:

No data available

Toxicity to bacteria:

static test EC50 – activated sludge – 11,400 mg/l – 3 h

#### **12.2 Persistence and degradability**

Biodegradability aerobic – Exposure time 28 d Result: 98 % – Readily biodegradable.

#### **12.3 Bioaccumulative potential**

No data available

#### **12.4 Mobility in soil**

No data available

#### **12.5 Other adverse effects**

Harmful to aquatic life. Discharge into the environment must be avoided.

### **13 DISPOSAL CONSIDERATIONS**

#### **13.1 Waste treatment methods**

##### **Product**

Burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material is highly flammable. Offer surplus and non-recyclable solutions to a licensed disposal company. Observe all federal, state and local regulations when disposing of the substance.

## **Contaminated packaging**

Disposal must be made according to official regulations.

## **14 TRANSPORT INFORMATION**

### **14.1 UN number**

ADR/RID: - IMDG: - IATA: -

### **14.2 UN proper shipping name**

ADR/RID: Methyl 3-aminocrotonate

IMDG: Methyl 3-aminocrotonate

IATA-DGR: Methyl 3-aminocrotonate

### **14.3 Transport hazard class(es)**

ADR/RID: - IMDG: - IATA: -

### **14.4 Packaging group**

ADR/RID: - IMDG: - IATA: -

### **14.5 Environmental hazards**

ADR/RID: no IMDG Marine pollutant: no IATA: no

### **14.6 Special precautions for user**

No data available

## **15. REGULATORY INFORMATION**

### **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**

Applicable regulations

Please pay attention to waste disposal and meet the requirements of local regulations.

## **16. OTHER INFORMATION**

### **Abbreviations and acronyms**

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road

IMDG: International Maritime Dangerous Goods

IATA: International Air Transport Association

RID: Regulation concerning the International Carriage of Dangerous Goods by Rail

CAS: Chemical Abstracts Service (division of the American Chemical Society)

### **Further information**

The above safety technical information is for reference only, because many physical and chemical properties are not entirely clear. Please consult information carefully before use and use after confirmation.

Anhui Senrise Technology Co., Ltd. shall not be held liable for any damage resulting from handling or from contact with the above product. More terms of use, see invoice information for details.

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