

## Material Safety Data Sheet

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

#### 1.1 Product identifiers

Product name	3-Amino-1-propanol
Product number	A040224
Brand	3ASenrise
CAS number	156-87-6

#### 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

Skin corrosion (Sub-category 1B), H314

Serious eye damage (Category 1), H318

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

##### Pictogram



**Signal word: Danger**

##### Hazard statement(s)

H302 Harmful if swallowed.

H314 Causes severe skin burns and eye damage.

##### Precautionary statement(s)

##### Prevention

P264 Wash hands thoroughly after handling.

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

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.

P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

P303+P361+P353 IF ON SKIN (or hair): Remove/Take off Immediately all contaminated clothing. Rinse SKIN with water/shower.

P304+P340+P310 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/ doctor.

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.

P363 Wash contaminated clothing before reuse.

## Storage

P405 Store locked up.

## 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.

H314 Causes severe skin burns and eye damage.

H318 Causes serious eye damage.

## 2.5 Environmental hazards Code

No data available

## 2.6 Other hazards

No data available

## 3 COMPOSITION/INFORMATION ON INGREDIENTS

### Substance / Mixture: Substance

#### 3.1 Substance

Name	3-Amino-1-propanol
Formula	C3H9NO
Molecular Weight	75.11
CAS	156-87-6
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**

Carbon dioxide (CO<sub>2</sub>) Foam Dry powder

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

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

#### **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	Colorless liquid or solid
b) Odor	amine-like
c) pH	11,6 at 10 g/l at 20 ° C
d) Melting point/freezing point	10 - 12 ° C
e) Initial boiling point and boiling range	184 - 187 ° C
f) Upper/lower flammability or explosive limits	Upper explosion limit: 10.6 %(V) Lower explosion limit: 2.5 %(V)
g) Flash point	100 ° C - closed cup
h) Evaporation rate	No data available
i) Vapor pressure	0.149 hPa at 25 ° C
j) Vapor density	No data available
k) Density	0.987 g/cm <sup>3</sup> at 20 ° C
l) Water solubility	at 20 ° C soluble
m) Partition coefficient: n-octanol/water	No data available
n) Autoignition temperature	385 ° C
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**

Metals

### **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 - 1,348 mg/kg

LC50 Inhalation

- Rat - male and female - 4 h - > 4.1 mg/l - aerosol

LD50 Dermal

- Rat - male and female - > 2,000 mg/kg

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

Skin - Rabbit Result: Causes burns. - 3 min - 1 h(Draize Test)

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

Eyes - Rabbit Result: Risk of serious damage to eyes. Remarks: Causes serious eye damage.

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

- Guinea pig Result: Does not cause skin sensitization.

### **11.5 Germ cell mutagenicity**

Test Type: Ames test Test system: Salmonella typhimurium Metabolic activation: with and without metabolic activation Method: OECD Test Guideline 471 Result: negative Test Type: sister chromatid exchange assay Test system: Chinese hamster ovary cells Metab

### **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: UA5600000 burning sensation, Cough, wheezing, laryngitis, Shortness of breath, spasm, inflammation and edema of the larynx, spasm, inflammation and edema of the bronchi, pneumonitis, pulmonary edema, Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes, and skin.

## **12 ECOLOGICAL INFORMATION**

### **12.1 Toxicity**

Toxicity to fish:

static test LC50 - Leuciscus idus (Golden orfe) - > 100 - < 215 mg/l - 96 h

Toxicity to daphnia and other aquatic:

static test EC50 - Daphnia magna (Water flea) - > 500 mg/l - 48 h

Toxicity to algae:

static test EC50 - Desmodesmus subspicatus (green algae) - 145.41 mg/l - 72 h

Toxicity to bacteria:

static test EC20 - activated sludge - > 1,995 mg/l - 0,5 h static test EC50 - Pseudomonas putida - 155.3 mg/l - 17 h

### **12.2 Persistence and degradability**

Biodegradability aerobic - Exposure time 28 d Result: 86 % - Readily biodegradable.

### **12.3 Bioaccumulative potential**

No data available

### **12.4 Mobility in soil**

No data available

### **12.5 Other adverse effects**

No data available

## **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: 2735 IMDG: 2735 IATA: 2735

### 14.2 UN proper shipping name

ADR/RID: AMINES, LIQUID, CORROSIVE, N. O. S. or POLYAMINES, LIQUID, CORROSIVE,  
N. O. S. (3-Amino-1-propanol)

IMDG: AMINES, LIQUID, CORROSIVE, N. O. S. or POLYAMINES, LIQUID, CORROSIVE,  
N. O. S. (3-Amino-1-propanol)

IATA-DGR: Amines, liquid, corrosive, n.o.s. (3-Amino-1-propanol)

### 14.3 Transport hazard class(es)

ADR/RID: 8 IMDG: 8 IATA: 8

### 14.4 Packaging group

ADR/RID: II IMDG: II IATA: II

### 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.

Tel: +86 -400-005-6266 Fax: +86 -0556-5555368 E-mail: Service@3asenrise.com

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