

## Material Safety Data Sheet

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

#### 1.1 Product identifiers

|                |                               |
|----------------|-------------------------------|
| Product name   | 3-Hydroxy-N, N-diethylaniline |
| Product number | B010397                       |
| Brand          | 3ASenrise                     |
| CAS number     | 91-68-9                       |

#### 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 3), H301

Short-term (acute) aquatic hazard (Category 2), H401

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

##### Pictogram



**Signal word: Danger**

##### Hazard statement(s)

H301 Toxic if swallowed.

H401 Toxic to aquatic life.

##### Precautionary statement(s)

##### Prevention

P264 Wash hands thoroughly after handling.

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

P273 Avoid release to the environment.

## Response

P301+P310+P330 IF SWALLOWED: Immediately call a POISON CENTER/ doctor. Rinse mouth.

## 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

H301 Toxic if swallowed.

## 2.5 Environmental hazards Code

H401 Toxic to aquatic life.

## 2.6 Other hazards

No data available

## 3 COMPOSITION/INFORMATION ON INGREDIENTS

### Substance / Mixture: Substance

#### 3.1 Substance

|                  |                               |
|------------------|-------------------------------|
| Name             | 3-Hydroxy-N, N-diethylaniline |
| Formula          | C10H15NO                      |
| Molecular Weight | 165.24                        |
| CAS              | 91-68-9                       |
| 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

Water Foam Carbon dioxide (CO2) Dry powder

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

Carbon oxides Nitrogen oxides (NOx) Combustible. Vapors are heavier than air and may spread along floors. Forms explosive mixtures with air on intense heating. Development of hazardous combustion gases or vapours possible in the event of fire.

### 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 | Red to purple to brown to black solid |
| b) Odor       | stinging                              |

|   |   |
|---|---|
| c) pH   | 8.11 at ca. 10 g/l at 24 ° C suspension |
| d) Melting point/freezing point                 | 69 – 72 ° C                             |
| e) Initial boiling point and boiling range      | 170 ° C at 20 hPa                       |
| f) Upper/lower flammability or explosive limits | No data available                       |
| g) Flash point                                  | 141 ° C                                 |
| h) Evaporation rate                             | No data available                       |
| i) Vapor pressure                               | 0.2 hPa at 30 ° C                       |
| j) Vapor density                                | No data available                       |
| k) Density                                      | 1.04 g/cm <sup>3</sup> at 23 ° C        |
| l) Water solubility                             | 1.5 g/l at 23 ° 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

- Mammal - > 50 - 200 mg/kg

LC50 Inhalation

No data available

LD50 Dermal

No data available

### 11.2 Skin corrosion/irritation

No data available

### 11.3 Serious eye damage/eye irritation

No data available

### 11.4 Respiratory or skin sensitization

In animal experiments: Result: negative Remarks: (Dimethylformamide)

### 11.5 Germ cell mutagenicity

Test Type: Ames test Test system: Salmonella typhimurium Metabolic activation: 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: SL0550500 Depending on the intensity and duration of exposure, effects may vary from mild irritation to severe destruction of tissue. prolonged or repeated exposure can cause: Damage to the eyes. To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated. The following applies to aromatic amines in general: systemic effect: methaemoglobinaemia with headache, cardiac dysrhythmia, drop in blood pressure, dyspnoea, and spasms, principal symptom: cyanosis (blue discolouration of the blood). 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:

static test LC50 - *S. gairdnerii* - 5.6 - 10 mg/l - 96 h

Toxicity to daphnia and other aquatic:

static test EC50 - *Daphnia* - 9.81 mg/l - 48 h

Toxicity to algae:

static test ErC50 - *Desmodesmus subspicatus* (green algae) - 7.5 mg/l - 72 h

Toxicity to bacteria:

EC50 - Bacteria - > 1,000 mg/l - 30 min

### 12.2 Persistence and degradability

Biodegradability Result: > 70 % - Readily eliminated from water

### 12.3 Bioaccumulative potential

No data available

### 12.4 Mobility in soil

No data available

### 12.5 Other adverse effects

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: 2811 IMDG: 2811 IATA: 2811

### 14.2 UN proper shipping name

ADR/RID: TOXICSOLID, ORGANIC, N. O. S. (3-Hydroxy-N, N-diethylaniline)

IMDG: TOXICSOLID, ORGANIC, N. O. S. (3-Hydroxy-N, N-diethylaniline)

IATA-DGR: Toxic solid, organic, n. o. s. (3-Hydroxy-N, N-diethylaniline)

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

ADR/RID: 6.1 IMDG: 6.1 IATA: 6.1

#### **14.4 Packaging group**

ADR/RID: III IMDG: III IATA: III

#### **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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