

## Material Safety Data Sheet

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

#### 1.1 Product identifiers

Product name	Potassium iodide
Product number	A67642
Brand	3ASenrise
CAS number	7681-11-0

#### 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

Specific target organ toxicity – repeated exposure, Oral (Category 1), Thyroid, H372

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

##### Pictogram



##### Signal word: Danger

##### Hazard statement(s)

H372 Causes damage to organs through prolonged or repeated exposure.

##### Precautionary statement(s)

##### Prevention

P260 Do not breathe dust/fume/gas/mist/vapours/spray.

P264 Wash hands thoroughly after handling.

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

##### Response

P314 Get medical advice/attention if you feel unwell.

## **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**

H372 Causes damage to organs through prolonged or repeated exposure.

## **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	Potassium iodide
Formula	KI
Molecular Weight	166.00
CAS	7681-11-0
Concentration	99%

## **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 extinguishing measures that are appropriate to local circumstances and the surrounding environment.

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

Hydrogen iodide Potassium oxides Not combustible. Ambient fire may liberate hazardous vapours.

### **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 crystals/(crystalline) powder
b) Odor	odorless
c) pH	ca. 6.9 at 50 g/l at 20 ° C
d) Melting point/freezing point	680 ° C

e) Initial boiling point and boiling range	1,330 ° C
f) Upper/lower flammability or explosive limits	No data available
g) Flash point	No data available
h) Evaporation rate	No data available
i) Vapor pressure	ca. 1 hPa at 745 ° C
j) Vapor density	No data available
k) Density	3.13 g/cm3
l) Water solubility	ca. 1,430 g/l at 25 ° C – completely soluble
m) Partition coefficient: n-octanol/water	No data available
n) Autoignition temperature	No data available
o) Decomposition temperature	No data available
p) Flammability	The product is not flammable.

## 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

No data available

LC50 Inhalation

No data available

LD50 Dermal

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

### 11.2 Skin corrosion/irritation

Skin – Rabbit Result: No skin irritation – 4 h

### 11.3 Serious eye damage/eye irritation

No data available

### 11.4 Respiratory or skin sensitization

Patch test: – In vitro study Result: negative Prolonged or repeated exposure may cause allergic reactions in certain sensitive individuals.

### 11.5 Germ cell mutagenicity

Test Type: In vitro mammalian cell gene mutation test Test system: mouse lymphoma cells

Metabolic activation: without metabolic activation Result: negative

### 11.6 Carcinogenicity

No data available

### 11.7 Reproductive toxicity

Exposure to excessive amounts of iodine during pregnancy is capable of producing fetal hypothyroidism. Iodine-containing drugs have been associated with fetal goiter.

### 11.8 Specific target organ toxicity - single exposure

No data available

## 11.9 Specific target organ toxicity - repeated exposure

Ingestion – Causes damage to organs through prolonged or repeated exposure. – Thyroid

## 11.10 Aspiration hazard

No data available.

## 11.11 Additional Information

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated. Prolonged exposure to iodides may produce iodism in sensitive individuals. Symptoms of exposure include: skin rash, running nose, headache and irritation of the mucous membrane. For severe cases the skin may show pimples, boils, hives, blisters and black and blue spots. Iodides are readily diffused across the placenta. Neonatal deaths from respiratory distress secondary to goiter have been reported. Iodides have been known to cause drug-induced fevers, which are usually of short duration. To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated. After absorption of toxic quantities: drop in blood pressure paralysis symptoms agitation Vomiting The following applies to iodides in general: Sensitisation possible in predisposed persons. Other dangerous properties can not be excluded. Handle in accordance with good industrial hygiene and safety practice. Liver – Irregularities – Based on Human Evidence

## 12 ECOLOGICAL INFORMATION

### 12.1 Toxicity

Toxicity to fish:

static test LC50 – *Oncorhynchus mykiss* (rainbow trout) – 3.780 mg/l – 96 h

Toxicity to daphnia and other aquatic:

static test EC50 – *Daphnia magna* (Water flea) – 7,5 mg/l – 48 h

Toxicity to algae:

No data available

Toxicity to bacteria:

No data available

### 12.2 Persistence and degradability

The methods for determining the biological degradability are to inorganic substances.

### 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: – IMDG: – IATA: –

## **14.2 UN proper shipping name**

ADR/RID: Not dangerous goods

IMDG: Not dangerous goods

IATA-DGR: Not dangerous goods

## **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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