

Revision Date 01.01.2025
Data of first issue 09.01.2017

## Material Safety Data Sheet

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

#### 1.1 Product identifiers

Product name Beryllium sulfate tetrahydrate

Product number A60864
Brand 3ASenrise
CAS number 7787-56-6

## 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, Anging, Anhui

Post code: 246003 Tel: 400-005-6266 Fax: 0556-555368

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

Skin irritation (Category 2), H315

Skin sensitization (Category 1), H317

Eye irritation (Category 2A), H319

Acute toxicity, Inhalation (Category 2), H330

Specific target organ toxicity - single exposure (Category 3), Respiratory system, H335

Carcinogenicity (Category 1B), H350

Specific target organ toxicity - repeated exposure (Category 1), H372

Short-term (acute) aquatic hazard (Category 2), H401 Long-term (chronic) aquatic hazard (Category 2), H411

## 2.2 GHS label elements, including precautionary statements

## **Pictogram**







Signal word: Danger

## Hazard statement(s)

- H315 Causes skin irritation.
- H319 Causes serious eye irritation.
- H317 May cause an allergic skin reaction.
- H335 May cause respiratory irritation.
- H411 Toxic to aquatic life with long lasting effects.
- H330 Fatal if inhaled.
- H350 May cause cancer.
- H372 Causes damage to organs through prolonged or repeated exposure.
- H301 Toxic if swallowed.

## **Precautionary statement(s)**

#### **Prevention**

- P280 Wear protective gloves/protective clothing/eye protection/face protection.
- P270 Do not eat, drink or smoke when using this product.
- P264 Wash hands thoroughly after handling.
- P272 Contaminated work clothing should not be allowed out of the workplace.
- P284 Wear respiratory protection.
- P271 Use only outdoors or in a well-ventilated area.
- P201 Obtain special instructions before use.
- P202 Do not handle until all safety precautions have been read and understood.

## Response

P304+P340 IF INHALED: Remove victim to fresh air and Keep at rest in a position comfortable for breathing.

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

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P330 Rinse mouth.

P310 Immediately call a POISON CENTER or doctor/physician.

P362+P364 Take off contaminated clothing and wash it before reuse.

## **Storage**

P405 Store locked up.

P403+P233 Store in a well-ventilated place. Keep container tightly closed.

#### Disposa

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

## 2.3 Physical and chemical hazards

No data available

#### 2.4 Health hazards

- H315 Causes skin irritation.
- H319 Causes serious eye irritation.
- H317 May cause an allergic skin reaction.
- H335 May cause respiratory irritation.
- H330 Fatal if inhaled.
- H350 May cause cancer.
- H372 Causes damage to organs through prolonged or repeated exposure.
- H301 Toxic if swallowed.

## 2.5 Environmental hazards Code

H411 Toxic to aquatic life with long lasting effects.

## 2.6 Other hazards

#### 3 COMPOSITION/INFORMATION ON INGREDIENTS

#### Substance / Mixture: Substance

#### 3.1 Substance

Name Beryllium sulfate tetrahydrate

Formula BeS04 • 4H20

Molecular Weight 177.14 CAS 7787-56-6

Concentration 99.99% (metals basis)

#### **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

No data available

## 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	No data available
c)	рН	No data available
d)	Melting point/freezing point	550 - 600 ° C / 1022 - 1112 ° F
e)	Initial boiling point and boiling range	No data available
f)	Upper/lower flammability or explosive	No data available
limits No data available		
g)	Flash point	No data available
h)	Evaporation rate	No data available
i)	Vapor pressure	No data available
j)	Vapor density	No data available
k)	Density	1.17 g/cm3
1)	Water solubility	No data available
m)	Partition coefficient: n-octanol/water	No data available
n)	Autoignition temperature	No data available
0)	Decomposition temperature	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

No data available

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

May cause sensitization by skin contact

## 11.5 Germ cell mutagenicity

No data available

## 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

No data available

## 12 ECOLOGICAL INFORMATION

#### 12.1 Toxicity

Toxicity to fish:

No data available

Toxicity to daphnia and other aquatic:

No data available

Toxicity to algae:

No data available

Toxicity to bacteria:

EC50 = 252.5 mg/L 5 min

## 12.2 Persistence and degradability

No data available

## 12.3 Bioaccumulative potential

No data available

## 12.4 Mobility in soil

No data available

#### 12.5 Other adverse effects

Do not empty into drains.

#### 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: 1566 IMDG: 1566 IATA: 1566

## 14.2 UN proper shipping name

ADR/RID: BERYLLIUM SULFATE TETRAHYDRATE IMDG: BERYLLIUM SULFATE TETRAHYDRATE IATA-DGR: Beryllium sulfate tetrahydrate

#### 14.3 Transport hazard class(es)

ADR/RID: 6.1 IMDG: 6.1 IATA: 6.1

#### 14.4 Packaging group

ADR/RID: II IMDG: II IATA: II

#### 14.5 Environmental hazards

ADR/RID: yes IMDG Marine pollutant: yes IATA: yes

#### 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