JUNSEI

# Safety Data Sheet

## 1. Product and company identification

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|---|---|
| Product name | : Cerium(Ⅲ) sulfate octahydrate |
| Name of manufacturer | : Junsei Chemical Co., Ltd. |
| Adress | : 4-16, 4-Chome, Nihonbashi-Honcho, Chuo-ku Tokyo, 103-0023, JAPAN |
| Name of section | : Quality Assurance Department |
| Telephone number | : +81-48-986-6161 |
| Facsimile number | : +81-48-989-2787 |
| Mail address | : shiyaku-t@junsei.co.jp |

## 2. Summary of danger and Hazard

GHS classification

Physical and chemical hazard

| | |
|---|---|
| Flammable solids | : Out of category |
| Pyrophoric solids | : Out of category |
| Self-heating substances and mixtures | : Out of category |

Human health hazard

| | |
|---|---|
| Serious eye damage・Eye irritation | : Category 2A |

Pictogram or symbol

| | |
|---|---|
| Signal word | : Warning |
| Hazard statement | : Causes serious eye irritation |

Cautions

| | |
|---|---|
| Safety measurements | : Wear appropriate protective gloves, glasses, clothing, face shield, or mask. |
| First-aid measures | : If in eyes : Rinse cautiously with water for several minutes. Get medical treatment.<br>Wash hands thoroughly after handling. |

## 3. Composition/Information on ingredients

| | |
|---|---|
| Substance/Mixture | : Substance |
| Chemical name or commercial name | : Cerium(Ⅲ) sulfate octahydrate |
| Ingredients and composition | : Cerium(Ⅲ) sulfate octahydrate min. 95.0% |
| Chemical formula | : Ce2(SO4)3・8H2O |
| CAS No. | : 10450-59-6 |
| TSCA Inventory | : Not registered |

EINECS No. : -

4. First aid measures

Inhalation : Remove the victim to fresh air, and make him blow his nose and gargle.

Skin contact : Wash the affected areas under running water.

Eye contact : Wash the affected areas under running water for at least 15 minutes. If necessary, get medical treatment.

Ingestion : Give the victim water or salt water and induce vomiting. If necessary, get medical attention.

5. Fire fighting measures

Extinguishing media : Water, dry chemical powder, carbon dioxide, dry sand, foam

Prohibited extinguishing media

: None

Particular fire fighting : Move containers from fire area if it can be done without risk, if not possible, apply water from a safe distance to cool and protect surrounding area.

Protection for firefighters

: Firefighters should wear protective equipment.

6. Accidental release measures

Cautions for personnel : Wear proper equipment and avoid contact with skin and inhalation of dust. Keep away personnel except for authorized ones from spillage area by stretching ropes.

Cautions for environment : Attention should be given not to cause damage to the environment by flowing of spillage to rivers. In case of the dilution of copious water, do not cause damage to the environment by untreated wastewater.

Removal measure : Sweep up in a chemical waste container. Flush residual area with copious amounts of water.

7. Cautions of handling and storage

Handling

Engineering measures : If necessary, wear proper protective equipment not to contact with skin or inhale the dust.

Storage

Adequate storage condition

: Store in a dark, cool place and tightly closed.

Safety adequate container materials

: Glass, polyethylene, polypropylene

8. Exposure control/Personal protection

Engineering measures : Install a local ventilation system under dusty condition.

Control parameters

ACGIH(2009) : Not established

Protective equipment

Respiration protective equipment

: If necessary, wear dust mask

Hands protective equipment

: Impervious protective gloves

Eyes protective equipment

: Safety goggles

9. Physical and chemical properties

| | |
|---|---|
| Appearance | : Crystal |
| Color | : White |
| Odor | : Odorless |
| pH | : Acidity |
| Boiling point | : Decomposition |
| Melting point | : 630℃ |
| Specific gravity | : 2.886g/ml(17℃) |
| Solubility | |
| Solubility in solvents | : Water ; 20%(20℃) |
| | Organic solvents ; Soluble in ethanol |

10. Stability and reactivity

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|---|---|
| Stability | : Decomposes on heat. |
| Reactivity | : May react with oxidizing substances. |
| Incompatible conditions | : Light, heat |
| Incompatible materials | : Oxidizing substances |

Hazardous decomposition products

: Sulfur oxides

11. Toxicological information

| | |
|---|---|
| Acute toxicity | : Oral : Not possible to classify because of insufficient data. |
| | Dermal : Not possible to classify because of insufficient data. |
| | Inhalation(vapor) : Not possible to classify because of insufficient data. |
| | Inhalation(dust, mist) : Not possible to classify because of insufficient data. |
| Skin corrosiveness | : Not possible to classify because of insufficient data. |
| Irritation to skin, eyes | : Causes serious eye irritation(category 2A) |
| | -(Empty)- |

Respiratory sensitization or Skin sensitization

: Respiratory sensitization : Not possible to classify because of insufficient data.

Skin sensitization : Not possible to classify because of insufficient data.

| | |
|---|---|
| Mutagenicity | : Not possible to classify because of insufficient data. |
| Carcinogenic effects | : Not possible to classify because of insufficient data |

Effects on the reproductive system

: Not possible to classify because of insufficient data.

Specific target organ systemic toxicity single exposure

: Not possible to classify because of insufficient data.

-(Empty)-

Specific target organ systemic toxicity repeated exposure

: Not possible to classify because of insufficient data.

-(Empty)-

Aspiration hazard : Not possible to classify because of insufficient data.

## 12. Ecological information

Ecotoxicity

Fish toxicity : Acute aquatic toxicity : Not possible to classify because of insufficient data.

Chronic aquatic toxicity : Not possible to classify because of insufficient data.

Rediualbility and degradability

: Not available

Ecorediualbility : Not available

## 13. Disposal consideration

Residual disposal : Dissolve the chemical in a large amount of water and form cerium sulfide precipitation by addition of sodium sulfide solution. Filter the precipitation and bury in a landfill site approved for hazardous waste disposal.

Or consult approved disposal companies.

Containers : In case of disposal of empty bottles, dispose bottles after removing the content thoroughly.

## 14. Transport information

UN class : Not applicable

## 15. Regulatory information

Ensure this material in compliance with federal requirements and ensure conformity to local regulations.

## 16. Other information

References

Encyclopaedia Chemica, Kyoritsu Shuppan Co., Ltd. (1963)

Dangerous Properties of Industrial Materials, 6th ed. N. I. Sax Van Nostrand Reinhold Company (1984)

Handbook of 15710 Chemical Products, The Chemical Daily Co. (2010)

The information contained herein is based on several references and the present state of our knowledge. However the MSDS does not always cover all information about the product, handle the product carefully. The information is intended to ordinary usage, in case of particular handlings, conduct appropriate safety measurements. The information herein is only provision of information, and it does not represent a guarantee the properties of the product.