

## Safety Data Sheet

### 1. Product and company identification

Product name : Samarium(III) oxide, 3N5  
 Name of manufacturer : KANTO CHEMICAL CO., INC.  
 Address : 2-1, Nihonbashi, Muromachi 2-Chome, Chuo-Ku, Tokyo, 103-0022, Japan  
 Name of section : Reagent division, catalog and products information section  
 Telephone number : +81-3-6214-1090  
 Facsimile number : +81-3-3241-1047  
 Mail address : BC32@gms.kanto.co.jp  
 SDS No. : 37014

### 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  
 Oxidizing solids : Out of category

##### Human health hazard

Acute toxicity(oral) : Out of category  
 Skin corrosion · Irritation : Out of category

### 3. Composition/Information on ingredients

Substance/Mixture : Substance  
 Chemical name or commercial name : Samarium(III) oxide

Ingredients and composition : Samarium(III) oxide min. 99.95%

Chemical formula : Sm203  
 CAS No. : 12060-58-1  
 TSCA Inventory : Registered  
 EINECS No. : 2350436

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

### 5. Fire fighting measures

Extinguishing media : This product is noncombustible.

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.

## 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 : Use only with adequate ventilation and in closed systems.

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 : Powder

Color : Yellowish white

Odor : Odorless

Boiling point : Not available

Melting point : 2325°C

Specific gravity : 7.43g/ml (20°C)

Solubility

Solubility in solvents : Water ; Insoluble

## 10. Stability and reactivity

Stability : Stable under normal usage.  
 Reactivity : Nothing particular

#### 11. Toxicological information

Acute toxicity : Oral : Out of category  
 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.  
 rat oral LD50>5g/kg

Skin corrosiveness : Out of category  
 Since the substance has low irritation of skin, the classification is out of category.

Irritation to skin, eyes : Not possible to classify because of insufficient data.

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.  
 Inhalation of dust may cause irritation of nose, throat, or trachea, but it is not possible to classify because of insufficient data.

Specific target organ systemic toxicity repeated exposure : Not possible to classify because of insufficient data.

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 : Non biodegradability

Ecorediualbility : Not available

#### 13. Disposal consideration

Residual disposal : Bury in a landfill site approved for the disposal of chemical and hazardous wastes. Or entrust approved waste disposal companies with the disposal.

#### 14. Transport information

UN class : It is not regulated under UN regulations.

15. Regulatory information

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

16. Other information

References

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)

ICSC Card (2009)

The information contained herein is based on several references and the present state of our knowledge. However the SDS 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. The Safety Data Sheet (SDS) is prepared based on JIS Z7253, and it has the same required elements on the Material Safety Data Sheet (MSDS) which is prepared based on JIS Z7250:2010.