Date of issue : 20 November,2003
Date of revision : 3 March,2016

Safety Data Sheet

1. Product and company identification

Product name	:	Samarium(Ⅲ) chloride hexahydrate,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.	:	37988

2. Summary of danger and Hazard

GHS classification

Physical and chemical hazard

Flammable solids	:	Out of category
Pyrophoric solids	:	Out of category

Human health hazard

Acute toxicity(oral)	:	Out of category
Acute toxicity(dermal)	:	Out of category
Skin corrosion・Irritation	:	Category 2
Serious eye damage・Eye irritation	:	Category 2B

Pictogram or symbol

Signal word	:	Warning
Hazard statement	:	Causes skin irritation Causes eye irritation

Cautions

Safety measurements	:	Wear appropriate protective gloves, glasses, clothing, face shield, or mask. Wash protective equipment thoroughly after use.
First-aid measures	:	If in eyes : Rinse cautiously with water for several minutes. Get medical treatment. If on skin : Remove contaminated clothing and the substance. If skin irritation occurs, get medical treatment. Wash hands thoroughly after handling.

3. Composition/Information on ingredients

Substance/Mixture	:	Substance

Chemical name or commercial name

: Samarium(Ⅲ) chloride hexahydrate

Ingredients and composition

: Samarium(Ⅲ) chloride hexahydrate min. 99.95%

Chemical formula : $SmCl_3 \cdot 6H_2O$

CAS No. : 13465-55-9

TSCA Inventory : Not registered

EINECS No. : 2337970

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. Get medical treatment.

Ingestion : Give the victim water or salt water and make him vomit. Get medical attention.

5. Fire fighting measures

Extinguishing media : This product is noncombustible.

Prohibited extinguishing media

: None

Particular fire fighting : Firefighters should wear proper protective equipment because toxic chlorine gas will emit upon combustion.

The product is noncombustible. In case of surrounding fire, move containers from fire areas if it can be done without risk. If it cannot be done, 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.

Cautions for safety handling

: Handle the chemical not to generate aerosol or dust.

Storage

Adequate storage condition
: As the chemical has hygroscopic property, keep the bottle tightly closed and store at a refrigerator. (0-6℃)

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 a chemical cartridge respirator.

Hands protective equipment
: Impervious protective gloves

Eyes protective equipment
: Safety goggles

9. Physical and chemical properties

Appearance	: Crystal or powder
Color	: Green
Odor	: Odorless
Boiling point	: Decomposition
Melting point	: 142℃
Flash point	: Noncombustible
Specific gravity	: 2.383g/mL(20℃)
Solubility	
Solubility in solvents	: Water ; Readily soluble
Other data	: Soluble in hydrochloric acid

10. Stability and reactivity

Stability	: Stable under normal usage.
Reactivity	: May react with oxidizing substances.
Incompatible conditions	: Light, heat
Incompatible materials	: Oxidizing substances

Hazardous decomposition products
: Chlorine, hydrogen chloride

11. Toxicological information

Acute toxicity : Oral : Out of category

Dermal : Out of category

Inhalation(vapor) : Not possible to classify because of insufficient data.

Inhalation(dust, mist) : Not possible to classify because of insufficient data.

rat oral LD50=3073mg/kg

Rat skin LDLO=2000mg/kg

Skin corrosiveness : Causes skin irritation(category 2)

Since causes moderate irritation to the skin of rabbit, it was classified into category 2.

Irritation to skin, eyes : Causes eye irritation(category 2B)

Since causes mild irritation to the eyes of rabbit, it was classified into category 2B.

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.

If inhaled the dust, may cause irritation to the nose, throat, repiratory tract. However, 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

: Not available

Ecorediualbility : Not available

13. Disposal consideration

Residual disposal

Precipitation method : Dissolve in water and add calcium hydroxide or sodium carbonate solution to precipitate. Filter the precipitation and bury in a landfill site approved for hazardous waste disposal. Or entrust approved waste disposal companies with the disposal.

<Note> : The pH should be more than 8.5, the precipitation does not form completely below pH 8.5.

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

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

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 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.