

## Safety Data Sheet

---

### 1. Chemical product and company identification

Product name : Yttrium acetate tetrahydrate, 4N

#### Company information

Name of manufacturer : KANTO CHEMICAL CO., INC.  
Address : 2-1, Nihonbashi, Muromachi 2-Chome, Chuo-Ku, Tokyo, 103-0022, JP  
Name of section : Business Administration Department, Reagent Division  
Telephone number : +81-3-6214-1090  
Facsimile number : +81-3-3241-1047  
Mail address : BC32@kanto.co.jp  
Reference No : 47016  
Recommended use : For research use only  
Restrictions on use : Seek expert judgment when using the product for applications other than those recommended.

### 2. Hazards identification

#### GHS classification

Health hazards : Specific target organ toxicity Category 2 (lung)  
(single exposure)

Hazard  
pictograms



Signal word : Warning

Hazard statements : May cause damage to organs (lung)

#### Precautionary statements

Prevention : Do not breathe dust.  
Wash hands, forearms and face thoroughly after handling.  
Do not eat, drink or smoke when using this product.

Response : IF exposed or concerned: Call a POISON CENTER or doctor.

Storage : Store locked up.

Disposal : Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

### 3. Composition/information on ingredients

Distinction of substance or mixture : Substance



Chemical name	Concentration (%)	Formula	TSCA	EC-No.	CAS RN
Yttrium acetate tetrahydrate	≥ 99.99	$Y(CH_3COO)_3 \cdot 4H_2O$	Listed	245-612-0	23363-14-6

## 4. First aid measures

### First aid measures

- First-aid measures after inhalation : Remove the victim to fresh air, and make him blow his nose and gargle.
- First-aid measures after skin contact : Wash the affected areas under running water.
- First-aid measures after eye contact : Wash the affected areas under running water.
- First-aid measures after ingestion : Give the victim water or salt water and make him vomit. Get medical attention.
- Personal Protection in First Aid and Measures : Rescuers should wear proper protective equipment like rubber gloves, goggles.

## 5. Fire fighting measures

- Suitable extinguishing media : Water, dry chemical powder, carbon dioxide, dry sand, foam
- Unsuitable extinguishing media : None
- Firefighting instructions : 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.  
Fight fire from windward.  
Dry chemical powder, carbon dioxide or dry sand should be used for small fires. Foam extinguisher is effective for a large scale fire.
- Personal protection (Emergency response) : Wear breathing apparatus.

## 6. Accidental release measures

### Personal Precautions, Protective Equipment and Emergency Procedures

- General measures : Wear proper protective equipment and avoid contact with skin and inhalation of dust. Conduct operations from upwind and evacuate people downwind.

### Environmental precautions

- Environmental precautions : Attention should be given to avoid discharge of spilled product into rivers and resulting environmental damage. When diluting spill with large amounts of water, discharge of untreated wastewater into the environment must be avoided.

### Methods and Equipment for Containment and Cleaning up

- For containment : Sweep up in a chemical waste container. Flush contaminated area with copious amounts of water.

## 7. Handling and storage

### Handling

- Technical measures : Wear appropriate protective equipment to avoid contact with skin



or inhalation of dust.

Precautions for safe handling : Avoid formation of dust and aerosols.

**Storage**

Storage conditions : Store in a refrigerator and tightly closed (0-6°C).

Material used in packaging/containers : Glass, polyethylene, polypropylene.

**8. Exposure controls / Personal protection equipment**

ACGIH TWA	1 mg/m <sup>3</sup> (as Y)
-----------	----------------------------

Appropriate engineering controls : Install a local ventilation system in case of dusty condition.

**Protective equipment**

Respiratory protection : If necessary, wear dust mask

Hand protection : Impervious protective gloves

Eye protection : Safety goggles

Skin and body protection : Protective clothing, protective boots

**9. Physical and chemical properties**

Physical state	: Solid
Color	: White
Odor	: Odorless
pH	: No data available
Melting point	: No data available
Freezing point	: No data available
Boiling point	: No data available
Flash point	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability	: Flammable solid
Vapor pressure	: No data available
Relative density	: No data available
Density	: No data available
Relative gas density	: No data available
Solubility	: Water: Soluble.
Partition coefficient n-octanol/water (log Pow)	: No data available
Explosive limits (vol %)	: No data available
Viscosity, kinematic	: No data available
Particle characteristics	: No data available

**10. Stability and reactivity**

Reactivity : May react with oxidizing substances.

Chemical stability : Stable under normal conditions.

Possibility of hazardous : Stable under normal conditions of use.



reactions

Conditions to avoid : Light, heat.  
Incompatible materials : Oxidizing substances.  
Hazardous decomposition products : Carbon monoxide.

## 11. Toxicological information

Acute toxicity (oral) : Classification not possible  
Acute toxicity (dermal) : Classification not possible  
Acute toxicity (inhalation) : No classification (gas)  
No classification (vapor)  
Classification not possible (dust, mist)  
Skin corrosion/irritation : Classification not possible  
May cause skin irritation.  
Serious eye damage/irritation : Classification not possible  
May cause eye irritation.  
Respiratory sensitization : Classification not possible  
Skin sensitization : Classification not possible  
Germ cell mutagenicity : Classification not possible  
Carcinogenicity : Classification not possible  
Reproductive toxicity : Classification not possible  
STOT-single exposure : May cause damage to organs (lung)  
In an animal, inhalation exposure to rare earth metals of causing inflammation in lungs is clear. There is the description, inhalation exposure of yttrium is considered to cause inflammation by local irritation to lung, and it is classified into category 2 (lung).  
STOT-repeated exposure : Classification not possible  
Although there is a description that "chronic exposures of a rare earth metal probably causes pneumoconiosis to humans.", it cannot be classified because of insufficient data.  
Aspiration hazard : Classification not possible

## 12. Ecological information

### Ecotoxicity

Aquatic acute : Classification not possible  
Aquatic chronic : Classification not possible

### Persistence and degradability

No additional information available

### Bioaccumulative potential

No additional information available

### Mobility in soil

No additional information available

### Hazardous to the ozone layer

Ozone : Classification not possible

## 13. Disposal considerations

Ecological waste information : Mixed with flammable organic solvents and burn in a chemical



incinerator equipped with an afterburner and a scrubber. Or entrust approved waste disposal companies with the disposal.

Contaminated container and packaging : In case of disposal of empty bottles, dispose bottles after removing the content thoroughly.

## 14. Transport information

### International Regulations

#### Transport by sea(IMDG)

UN-No. (IMDG) : Not applicable  
 Proper Shipping Name (IMDG) : Not applicable  
 Packing group (IMDG) : Not applicable  
 Transport hazard class(es) (IMDG) : Not applicable

#### Air transport(IATA)

UN-No. (IATA) : Not applicable  
 Proper Shipping Name (IATA) : Not applicable  
 Packing group (IATA) : Not applicable  
 Transport hazard class(es) (IATA) : Not applicable

Marine pollutant : Not applicable

## 15. Regulatory information

Regulatory information with regard to this substance in your country or region should be examined by your own responsibility.

## 16. Other information

Data sources : Encyclopaedia Chimica, Kyoritsu Shuppan Co, Ltd. (1963) .  
 NITE Chemical Risk Information Platform (NITE-CHRIP), National Institute of Technology and Evaluation.

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.

