

SAFETY DATA SHEET

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1. Product name and details of the supplier of the safety datasheet

Product name : Yttrium nitrate hexahydrate
Company : Chikamochi Pure Chemical Co., Ltd.
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2. Classification of the substance or mixture

【Oxidizing solids】 :Category 2
【Skin corrosion/irritation】 :Category 2
【Serious eye damage/eye irritation】 :Category 2A
【Pictograms】



【Signal word】 :Danger

【Hazard statements】

H272 May intensify fire; oxidizer.
H315 Causes skin irritation.
H319 Causes serious eye irritation.

【Precautionary statements-(Prevention)】

- Keep away from heat/sparks/open flames/hot surfaces. – No smoking
- Keep/Store away from clothing/combustible materials
- Wear protective gloves/protective clothing/eye protection/face protection
- Wash face, hands and any exposed skin thoroughly after handling
- Take any precaution to avoid mixing with combustibles

【Precautionary statements-(Response)】

- IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- If eye irritation persists: Get medical advice/attention.
- IF ON SKIN: Wash with plenty of soap and water.
- if skin irritation occurs: Get medical advice/sttention
- Take off contaminated clothing and wash before reuse

【Precautionary statements-(Storage)】

- Not applicable

【Precautionary statements-(Disposal)】

- Dispose of contents/container to an approved waste disposal plant

【Other hazards】

- Not available

3. Composition/information on ingredients**【Substances】**

Formula	:Y(NO ₃) ₃ · 6H ₂ O
Molecular weight	:383.01 g/mol
CAS No.	:13470-40-1
ENCS	:1-789

4. Description of first aid measures**【Inhalation】**

Remove to fresh air. If symptoms persist, call a physician.

【Skin contact】

Wash off immediately with soap and plenty of water. If symptoms persist, call a physician.

【Eye contact】

IF IN EYES: Rise cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediate medical attention is required.

【Ingestion】

Rinse mouth. Never give anything by mouth to an unconscious person. Call a physician or poison control center immediately. Do not induce vomiting without medical advice.

【Protection of first-aiders】

Use personal protective equipment as required.

5. Firefighting measures**【Suitable extinguishing media】**

Flood with water

【Unsuitable extinguishing media】

No information available

【Special hazards arising from the chemical product】

Thermal decomposition can lead to release of irritating and toxic gases and vapors.

【Special extinguishing method】

No information available

【Special protective actions for fire-fighters】

Use personal protective equipment as required. Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear.

6. Accidental release measures**【Personal precautions, protective equipment and emergency procedures】**

For indoor, provide adequate ventilation process until the end of working. Deny unnecessary entry other than the people involved by, for example, using a rope. While working, wear appropriate protective equipments to avoid adhering it on skin, or inhaling the gas. Work from windward, and retract the people downwind.

【Environmental precautions】

To be careful not discharged to the environment without being properly handled waste water contaminated.

【Methods and materials for containment and cleaning up】

Sweep up and gather scattered particles, and collect it in an empty airtight container.

【Recovery, neutralization】

No information available

【Secondary disaster prevention measures】

Clean contaminated objects and areas thoroughly observing environmental regulations.

7. Handling and storage**【Technical measures】**

Avoid contact with reducing agents and combustible materials. Avoid contact with organic substance, Use with local exhaust ventilation.

【Precautions】

Do not rough handling containers, such as upsetting, falling, giving a shock, and dragging. Prevent leakage, overflow, and scattering. Not to generate steam and dust in vain. Seal the container after use. After handling, wash hands and face, and then gargle. In places other than those specified, should not be smoking or eating and drinking. Should not be brought contaminated protective equipment and gloves to rest stops. Deny unnecessary entry of non-emergency personnel to the handling area.

【Safety handling precautions】

Avoid contact with skin, eyes or clothing. Use personal protective equipment as required.

【Storage conditions】

Store away from sunlight in well-ventilated place at room temperature (preferably cool). Keep container tightly closed.

【Safe packaging material】

Polyethylene

【Incompatible substances】

Organic substance, Combustible materials, Reducing agent

8. Exposure controls/personal protection**【Engineering controls】**

In case of indoor workplace, seal the source or use a local exhaust system. Provide the safety shower facility, and hand and eye-wash facility. And display their position clearly.

【Exposure limits】

JSOH(Japan)	: N/A
ISHL(Japan)	: N/A
ACGIH	: TWA: 1mg/m ³ (Y)

【Personal protective equipment】

Respiratory protection	: Dust mask
Hand protection	: Protection gloves
Eye protection	: protective eyeglasses or chemical safety goggles
Skin and body protection	: Long-sleeved work clothes

【General hygiene considerations】

Handle in accordance with good industrial hygiene and safety practice.

9. Physical and chemical properties

Appearance	Form: Crystals or mass
Odour	:No data available
Odour Threshold	:No data available
pH	:No data available
Melting point/freezing point	:Melting point/range: 57°C
Initial boiling point and boiling range	:No data available
Flash point	:No data available
Evaporation rate	:No data available
Flammability (solid, gas)	:The product is not flammable
Upper/lower flammability or explosive limits	: No data available
Vapour pressure	: No data available
Vapour density	: No data available
Relative density	: No data available

Water solubility	: soluble
Partition coefficient: n-octano/water	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity	: No data available
Explosive properties	: Not explosive
Oxidizing properties	: The substance or mixture is classified as oxidizing with the category 2.

1 0 . **Stability and reactivity**

【Reactivity】

No data available

【Chemical stability】

Stable under recommended storage conditions.

【Possibility of hazardous reactions】

No data available

【Conditions to avoid】

Extremes of temperature and direct sunlight

【Incompatible materials】

Organic substance, Combustible materials, Reducing agent

【Hazardous decomposition products】

Nitrogen oxides (NO_x), Yttrium oxides

1 1 . **Information on toxicological effects**

【Acute toxicity】

No data available

【Skin corrosion/irritation】

No data available

【Serious eye damage/eye irritation】

No data available

【Respiratory or skin sensitization】

No data available

【Reproductive cell mutagenicity】

No data available

【Carcinogenicity】

IARC

:Group 2A

【Reproductive toxicity】

No data available

【STOT-single exposure】

No data available

【STOT-repeated exposure】

No data available

【Aspiration hazard】

No data available

1 2 . Ecological information

【Ecotoxicity】

No information available

【Other data】

No data available

【Persistence and degradability】

No information available

【Bioaccumulative potential】

No information available

【Mobility in soil】

No information available

【Hazard to the ozone layer】

No information available

1 3 . Disposal considerations

【Waste from residues】

Disposal should be in accordance with applicable regional, national and local laws and regulations.

【Contaminated container and contaminated packaging】

Disposal should be in accordance with applicable regional, national and local laws and regulations.

1 4 . Transport information

【UN number】

ADR/RID:1477

IMDG:1477

IATA:1477

ADR/RID: NITRATES, INORGANIC, N.O.S. (Yttrium Nitrate hexahydrate)

IMDG: NITRATES, INORGANIC, N.O.S. (Yttrium Nitrate hexahydrate)

IATA: Nitrates, inorganic, n.o.s.

【Transport hazard class(es)】

ADR/RID: 5.1

IMDG: 5.1

IATA: 5.1

【Packaging group】

ADR/RID: II	IMDG: II	IATA: II
【Environmental hazards】		
ADR/RID: yes	IMDG Marine pollutant: yes	IATA: no
【Special precautions for user】		
No data available		

1 5 . Regulatory information

【International Inventories】

EINECS/ELINCS	: —
TSCA	: —

【Japanese regulations】

Fire Service Act	: Category I , nitrates, dangerous grade 3
Poisonous and Deleterious	: Not applicable
Industrial Safety and Health Act	: Harmful Substances Whose Names Are to be Indicated on the Label (Law Art.57, Para.1, Enforcement Order Art. 18) Notifiable Substances (Law Art.57-2, Enforcement Order Art. 18-2 Attached Table No.9) No.54 Dangerous Substances – Oxidizing Substance (Enforcement Order Attached Table 1 Item 3)
Regulations for the carriage and storage of dangerous goods in ship	: Oxidizing Agents – Oxidizing Agents (Ordinance Art.3, Ministry of Transportation Ordinance Regarding Transport by Ship and Storage, Attached Table 1)
Civil Aeronautics Law	: Oxidizing Agents – Oxidizing Agents (Ordinance Art.194, MITL Notification for Air Transportation of Explosives etc., Attached Table 1)
Pollutant Release and Transfer	: Not applicable
Water Pollution Control Act	: Harmful Substances (Law Art.2, Enforcement Order Art.2, Ordinance Designating Wastewater Standards Art.1)
Export Trade Control Order	: Not applicable

1 6 . Other information

【Further information】

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