

Safety Data Sheet

1. Identification of the substance/mixture and of the company/undertaking

Product identifier:

Product name: Nickel(II) acetate tetrahydrate

Product code(SDS NO): 31240jis_E-2

Details of the supplier of the safety data sheet

Manufacturer/Supplier: JUNSEI CHEMICAL CO., LTD.

Address: 1-6, Ohmano-Cho, Koshigaya, Saitama 343-0844, Japan

Division: Quality Assurance Department

Telephone number: +81-48-986-6161

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2. Hazards identification

GHS classification and label elements of the product

Classification of the substance or mixture

HEALTH HAZARDS

Acute toxicity Dermal: Category 4

Respiratory sensitization: Category 1

Skin sensitization: Category 1

Carcinogenicity: Category 1A

Reproductive toxicity: Category 2

ENVIRONMENT HAZARDS

Hazardous to the aquatic environment – acute hazard: Category 1

Hazardous to the aquatic environment – long-term hazard: Category 1

(Note) GHS classification without description: Not applicable/Out of classification/Not classifiable

Label elements



Signal word: Danger

HAZARD STATEMENT

Harmful in contact with skin

May cause allergy or asthma symptoms or breathing difficulties if inhaled

May cause an allergic skin reaction

May cause cancer

Suspected of damaging fertility or the unborn child

Very toxic to aquatic life

Very toxic to aquatic life with long lasting effects

PRECAUTIONARY STATEMENT

Prevention

Do not handle until all safety precautions have been read and understood.

Avoid release to the environment.

Avoid breathing dust/fume/gas/mist/vapors/spray.

In case of inadequate ventilation wear respiratory protection. (as specified by the manufacturer/supplier or the competent authority.)

Wear protective gloves or protective clothing.

Wear protective gloves.

Contaminated work clothing should not be allowed out of the workplace.

Use personal protective equipment as required.

Response

Collect spillage.

IF exposed or concerned: Get medical advice/attention.

Call a POISON CENTER or doctor/physician if you feel unwell.

If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician.

IF INHALED: Remove person to fresh air and keep comfortable for breathing.

IF ON SKIN: Wash with plenty of soap and water.

If skin irritation or rash occurs: Get medical advice/attention.

Take off contaminated clothing and wash it before reuse.

Storage

Store locked up.

Disposal

Dispose of contents/container in accordance with local/national regulation.

3. Composition/information on ingredients

Mixture/Substance selection:

Substance

Ingredient name:Nickel (II) acetate tetrahydrate

Content(%):98.0 <

Chemical formula:C4H6NiO4·4H2O

Chemicals No, Japan:2-693

CAS No.:6018-89-9 [373-02-4(anh)]

MW:248.87

ECNO:206-761-7(anh)

4. First-aid measures

Descriptions of first-aid measures

General measures

IF exposed or concerned: Get medical attention/advice.

Call a POISON CENTER or doctor/physician if you feel unwell.

IF INHALED

Remove person to fresh air and keep comfortable for breathing.

If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician.

Call a POISON CENTER or doctor/physician if you feel unwell.

IF ON SKIN (or hair)

Take off immediately all contaminated clothing. Rinse skin with water/shower.

Wash with plenty of soap and water.

If skin irritation or rash occurs: Get medical advice/attention.

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 SWALLOWED

Rinse mouth.

Call a POISON CENTER or doctor/physician if you feel unwell.

5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media

Use appropriate extinguishing media suitable for surrounding facilities.

The product is non-flammable.

Specific hazards arising from the substance or mixture

Containers may explode when heated.

Fire may produce irritating, corrosive and/or toxic gases.

Runoff from fire control or dilution water may cause pollution.

Advice for firefighters

Specific fire-fighting measures

Evacuate non-essential personnel to safe area.

Special protective equipment and precautions for fire-fighters

Wear fire/ flame resistant/retardant clothing.

Wear protective gloves/protective clothing/eye protection/face protection.

Firefighters should wear self-contained breathing apparatus with full face piece operated positive pressure mode.

6. Accidental release measures

Personnel precautions, protective equipment and emergency procedures

Ventilate area after material pick up is complete.

Wear proper protective equipment.

Environmental precautions

Avoid release to the rivers, lakes, ocean and groundwater.

Methods and materials for containment and cleaning up

Sweep up, place in a bag and hold for waste disposal.

Preventive measures for secondary accident

Collect spillage.

7. Handling and storage

Precautions for safe handling

Preventive measures

(Exposure Control for handling personnel)

Avoid breathing dust/fume/gas/mist/vapors/spray.

(Protective measures against fire and explosion)

Keep away from heat/sparks/open flames/hot surfaces. – No smoking.

Exhaust/ventilator

Exhaust/ventilator should be available.

Safety treatments

Avoid contact with skin.

Avoid contact with eyes.

Avoid breathing dust, fume, gas, mist or vapor.

Safety Measures/Incompatibility

Do not handle until all safety precautions have been read and understood.

Wear protective gloves, protective clothing or face protection.

Wear protective gloves.

Use personal protective equipment as required.

When using do not eat, drink or smoke.

Conditions for safe storage, including any incompatibilities

Recommendation for storage

Store in a well-ventilated place. Keep container tightly closed.

Keep cool. Protect from sunlight.

Store locked up.

8. Exposure controls/personal protection

Control parameters

Control value

Japan control value (2009) $\leq 0.1\text{mg-powder Ni/m}^3$

Adopted value

JSOH(2011) $0.01\text{mg(Soluble compounds)-Ni/m}^3$

ACGIH(1996) TWA: $0.1\text{mg-Ni/m}^3\text{(I)}$ (Lung dam; nasal cancer)

Exposure controls

Appropriate engineering controls

Do not use in areas without adequate ventilation.

Eye wash station should be available.

Washing facilities should be available.

Individual protection measures

Respiratory protection

Wear respiratory protection.

Hand protection

Wear protective gloves.

Consult with your glove and/or personnel equipment manufacturer for selection of appropriate compatible materials.

Eye protection

Wear safety glasses with side-shields.

Wear eye/face protection.

Safety and Health measures

Contaminated work clothing should not be allowed out of the workplace.

Take off contaminated clothing and wash it before reuse.

9. Physical and Chemical Properties

Information on basic physical and chemical properties

Physical properties

Appearance: Solid(Crystals or crystalline powder)

Color: Green

Odor: Slight acetic acid odor

pH data N.A.

Phase change temperature

Initial Boiling Point/Boiling point data N.A.

Melting point/Freezing point: 250°C

Decomposition temperature: 250°C

Flash point data N.A.

Auto-ignition temperature data N.A.

Explosive properties data N.A.

Vapor pressure data N.A.

Vapor density data N.A.

Specific gravity/Density: 1.74g/cm^3

Solubility

Solubility in water: $177\text{g/liter}(20^{\circ}\text{C})$

n-Octanol /water partition coefficient data N.A.

10. Stability and Reactivity

Chemical stability

Stable under normal storage/handling conditions.

Conditions to avoid

Contact with incompatible materials.

Heat.

Incompatible materials

Strong oxidizing agents

Hazardous decomposition products

Carbon oxides, Nickel oxides

11. Toxicological Information

Information on toxicological effects

Acute toxicity

Acute toxicity (Oral), Product

rat LD50=350mg/kg (RTECS; Supplier's data/information)

No Irritant properties data available

Sensitization

Respiratory sensitization

JSH-Gr.2: Probably induce allergic reactions in humans(Nickel and its compounds)

Skin sensitization

JSH-Gr.1: Induce allergic reactions in humans(Nickel and its compounds)

No Mutagenic effects data available

Carcinogenicity

IARC-Gr.1 : Carcinogenic to humans

JSH-2B: Insufficient Evidence of Carcinogenicity for Humans

EU-Category 1A; Substances known to have carcinogenic potential for humans

No Teratogenic effects data available

No reproductive toxicity data available

No STOT-single/repeated exposure data available

No Aspiration hazard data available

12. Ecological Information

Ecotoxicity

Aquatic toxicity

Very toxic to aquatic life

Very toxic to aquatic life with long lasting effects

Aquatic acute toxicity component(s) data

Limit fatal dose for fish(as Ni)=1mg/l(Supplier's data/information)

No Persistence and degradability data available

No Bioaccumulative potential data available

13. Disposal considerations

Waste treatment methods

Avoid release to the environment (– if this is not the intended use).

Dispose of contents/container in accordance with local/national regulation.

14. Transport Information

UN No, UN CLASS

Not applicable to UN NO.

15. Regulatory Information

Safety, health and environmental regulations/legislation specific for the substance or mixture

US major regulations

TSCA

Nickel (II) acetate (anh)

Other regulatory information

We are not able to check up the regulatory information in regard to the substances in your country or region, therefore, we request this matter would be filled by your responsibility.

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

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

16. Other information

GHS classification and labelling

Acute Tox. 4: H312 Harmful in contact with skin

Resp. Sens. 1: H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled

Skin Sens. 1: H317 May cause an allergic skin reaction

Carc. 1A: H350 May cause cancer

Repr. 2: H361 Suspected of damaging fertility or the unborn child

Aquatic Acute 1: H400 Very toxic to aquatic life

Aquatic Chronic 1: H410 Very toxic to aquatic life with long lasting effects

Reference Book

Globally Harmonized System of classification and labelling of chemicals, (5th ed., 2013), UN

Recommendations on the TRANSPORT OF DANGEROUS GOODS 19th edit., 2015 UN

Classification, labelling and packaging of substances and mixtures (table3-1 ECNO6182012)

2016 EMERGENCY RESPONSE GUIDEBOOK (US DOT)

2017 TLVs and BEIs. (ACGIH)

<http://monographs.iarc.fr/ENG/Classification/index.php>

Supplier's data/information

NITE Chemical Risk Information Platform (NITE-CHRIIP) <http://www.safe.nite.go.jp/japan/db.html>

GHS Classification Guidance for Enterprises 2013 Revised Edition (August, 2013, METI)

General Disclaimer

This information contained in this data sheet represents the best information currently available to us. However, no warranty is made with respect to its completeness and we assume no liability resulting from its use. It are advised to make their own tests to determinate the safety and suitability of each such product or combination for their own purposes.

The data given here is based on current knowledge and experience. The purpose of this Safety Data Sheet is to describe the products in terms of their safety requirements. The data does not signify any warranty with regard to the products' properties.

The GHS classification data given here is based on current Japan official data (NITE published in 2016).