



## Safety Data Sheet

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

#### Product identifier:

Product name: Ethylenediaminetetraacetic acid disodium salt,2-hydrate  
SDS No. : 2913E-2

Relevant identified uses of the substance or mixture and uses advised against  
Research and Development

#### Details of the supplier of the safety data sheet

Manufacturer/Supplier: KISHIDA CHEMICAL CO., LTD.  
Address: 3-1, Honmachibashi, Chuo-ku, Osaka, JAPAN  
Division: Chemical Safety Management Department  
Telephone number: +81-6-6946-8061  
FAX: +81-6-6946-1607  
e-mail address: kagakuhinanzenkanri@kishida.co.jp

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### Section 2. Hazards identification

#### GHS classification and label elements of the product

#### Classification of the substance or mixture

##### HEALTH HAZARDS

Skin corrosion/irritation: Category 2  
Serious eye damage/eye irritation: Category 2A  
Skin sensitization: Category 1  
Specific target organ toxicity – single exposure: Category 3 (Respiratory tract irritation)

#### Label elements



Signal word: Warning

#### HAZARD STATEMENT

Causes skin irritation  
Causes serious eye irritation  
May cause an allergic skin reaction  
May cause respiratory irritation

#### PRECAUTIONARY STATEMENT

##### Prevention

Avoid breathing dust/fume/gas/mist/vapors/spray.  
Use only outdoors or in a well-ventilated area.  
Wash contaminated parts thoroughly after handling.  
Wear protective gloves.  
Contaminated work clothing should not be allowed out of the workplace.  
Wear eye protection/face protection.

##### Response

Call a POISON CENTER/doctor/physician if you feel unwell.  
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.  
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if



Ethylenediaminetetraacetic acid disodium salt,2-hydrate,2913E-2,2022/10/05

present and easy to do. Continue rinsing.

If eye irritation persists: Get medical advice/attention.

**Storage**

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

**Disposal**

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

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**Section 3. Composition/information on ingredients**

**Mixture/Substance selection:**

**Substance**

Ingredient name:Ethylenediaminetetraacetic acid disodium salt,2-hydrate

Content (%):99(min)

Chemical formula:C10H14N2Na2O8·2H2O

Chemicals No, Japan:2-1265

CAS No.:6381-92-6

MW:372.24

Note : The figures shown above are not the specifications of the product.

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**Section 4. First-aid measures**

**Descriptions of first-aid measures**

**General measures**

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

**IF INHALED**

Remove person to fresh air and keep comfortable for breathing.

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

**IF ON SKIN (or hair)**

Take off immediately all contaminated clothing. Rinse skin with water or 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/doctor/physician if you feel unwell.

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**Section 5. Fire-fighting measures**

**Extinguishing media**

**Suitable extinguishing media**

Use appropriate extinguishing media suitable for surrounding facilities.

**Unsuitable extinguishing media**

Unsuitable extinguishing media data is not available.

**Specific hazards arising from the substance or mixture**

Containers may explode when heated.

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

**Advice for firefighters**

**Specific fire-fighting measures**

Evacuate non-essential personnel to safe area.

**Special protective equipment and precautions for fire-fighters**

Wear fire resistant or flame retardant clothing.



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Wear protective gloves/protective clothing/eye protection/face protection.  
Firefighters should wear self-contained breathing apparatus with full face piece operated positive pressure mode.

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#### Section 6. Accidental release measures

Personnel precautions, protective equipment and emergency procedures

Ventilate area until material pick up is complete.

Wear proper protective equipment.

Environmental precautions

Prevent spills from entering sewers, watercourses or low areas.

Avoid raising dust.

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.

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#### Section 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, hot surfaces, sparks, open flames and other ignition sources. No smoking.

(Exhaust/ventilator)

Exhaust/ventilator should be available.

(Safety treatments)

Avoid contact with skin.

Avoid contact with eyes.

Safety Measures

Use only outdoors or in a well-ventilated area.

Wear protective gloves, protective clothing or face protection.

Wear eye protection/face protection.

When using do not eat, drink or smoke.

Any incompatibilities

See "10.Stability and Reactivity"

Advice on general occupational hygiene

Wash contaminated parts thoroughly after handling.

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

Take off contaminated clothing and wash it before reuse.

Storage

Conditions for safe storage

Keep container tightly closed.

Store in a cool, dry place. Do not store in direct sunlight.

Container and packaging materials for safe handling

Glass

Polyethylene

**Section 8. Exposure controls/personal protection**

## Control parameters

## 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.

## Eye protection

Wear eye/face protection.

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**Section 9. Physical and Chemical Properties**

## Information on basic physical and chemical properties

Physical state: Crystal or crystalline powder

Color: White

Odor data is not available.

Melting point/Freezing point data is not available.

Boiling point or initial boiling point data is not available.

Boiling range data is not available.

Flammability (gases, liquids and solids) data is not available.

Lower and upper explosion limit/flammability limit data is not available.

Flash point data is not available.

Auto-ignition temperature data is not available.

Decomposition temperature data is not available.

pH: 4.2~4.8(50g/L, 25°C)

Kinematic viscosity data is not available.

## Solubility:

Solubility in water: Soluble

n-Octanol/water partition coefficient data is not available.

Vapor pressure data is not available.

Density and/or relative density: 0.95

Relative vapor density (Air=1) data is not available.

Particle characteristics data is not available.

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**Section 10. Stability and Reactivity**

## Reactivity

Not available.

## Chemical stability

Stable under normal storage/handling conditions.

## Possibility of hazardous reactions

(As Tetrasodium ethylenediaminetetraacetate)

Dust explosion possible if in powder or granular form, mixed with air.

Decomposes on heating. This produces toxic fumes including nitrogen oxides. Reacts with strong bases and strong oxidants. (ICSC 1688)

## Conditions to avoid

Contact with incompatible materials.

Contact with fire source.



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Incompatible materials

Strong bases, Strong oxidizing agents

Hazardous decomposition products

Nitrogen oxides

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Section 11. Toxicological Information

Information on toxicological effects

Acute toxicity

Acute toxicity (Oral)

[Data for components of the product]

[Company proprietary data]

(Ethylenediaminetetraacetic acid disodium salt,2-hydrate)

rat LD50=2000 mg/kg

mouse LD50=2050 mg/kg

Irritant properties

Skin corrosion/irritation

[Data for components of the product]

[Company proprietary data]

(Ethylenediaminetetraacetic acid disodium salt,2-hydrate)

Category 2

Serious eye damage/irritation

[Data for components of the product]

[Company proprietary data]

(Ethylenediaminetetraacetic acid disodium salt,2-hydrate)

Category 2A

Sensitization

Skin sensitization

[Data for components of the product]

[Company proprietary data]

(Ethylenediaminetetraacetic acid disodium salt,2-hydrate)

Category 1

Mutagenic effects data is not available.

Carcinogenic effects data is not available.

Reproductive toxicity data is not available.

Specific target organ toxicity (STOT)

STOT-single exposure

[Data for components of the product]

[cat.3 (resp. irrit.)]

[Company proprietary data]

(Ethylenediaminetetraacetic acid disodium salt,2-hydrate)

Respiratory tract irritation

STOT-repeated exposure data is not available.

Aspiration hazard data is not available.

Information on other hazards

May cause lung disorders by massive inhalation of powdered substance.

-e.g. fibrosis of lung tissue, cough, sputum, breath shortness, dyspnea, decline of lung function, interstitial lung disease, pneumothorax

**Section 12. Ecological Information**

## Toxicity

## Aquatic toxicity

[Data for components of the product]

Hazardous to the aquatic environment (Acute)

[Company proprietary data]

(Ethylenediaminetetraacetic acid disodium salt,2-hydrate)

Golden ides LC50 = &gt;500mg/L/96hr

## Persistence and degradability

Persistence and degradability data is not available.

## Bioaccumulative potential

Bioaccumulative potential data is not available.

## Mobility in soil

Mobility in soil data is not available.

## Other adverse effects

Ozone depleting chemical data is not available.

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**Section 13. Disposal considerations**

Description of waste residues and information on their safe handling and methods of disposal, including the disposal of any contaminated packaging

## Waste treatment methods

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

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**Section 14. Transport Information**

UN No. or ID No.: Not applicable

Not applicable to IMDG Code

Not applicable to IATA Dangerous Goods Regulations

## Environmental hazards

MARPOL Annex III – Prevention of pollution by harmful substances

Marine pollutants (yes/no) : no

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**Section 15. Regulatory Information**

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

U.S. Toxic Substances Control Act (TSCA) Inventory

Chemicals listed in TSCA Inventory

Ethylenediaminetetraacetic acid disodium salt,2-hydrate

## Other regulatory information

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

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**Section 16. Other information**

## GHS classification and labelling

Skin corrosion/irritation, Category 2: H315 Causes skin irritation

Serious eye damage/eye irritation, Category 2A: H319 Causes serious eye irritation

Skin sensitization, Category 1: H317 May cause an allergic skin reaction

STOT – single exposure, Category 3, Respiratory tract irritation: H335 May cause respiratory irritation.

## References and sources for data

Globally Harmonized System of classification and labelling of chemicals, UN



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Recommendations on the TRANSPORT OF DANGEROUS GOODS 21th edit., 2019 UN  
IMDG Code, 2018 Edition (Incorporating Amendment 39-18)

IATA Dangerous Goods Regulations (62nd Edition) 2021

2020 EMERGENCY RESPONSE GUIDEBOOK (US DOT)

2022 TLVs and BEIs. (ACGIH)

Supplier's data/information

#### General Disclaimer

This data sheet was created based on the information we currently have and may be revised according to new information. In addition, the precautions apply only to normal handling, and in the case of special handling, please make adequate countermeasure to maintain your safety.

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 2021).