

## SAFETY DATA SHEET

According to JIS Z 7253:2019  
Revision date 25-Mar-2024  
Revision Number 4.03

## Section 1: PRODUCT AND COMPANY IDENTIFICATION

|              |                          |
|--------------|--------------------------|
| Product Name | 2-(2-Aminoethoxy)ethanol |
| Product Code | 019-10922,013-10925      |

**Supplier** FUJIFILM Wako Pure Chemical Corporation  
1-2 Doshomachi 3-Chome, Chuo-ku, Osaka 540-8605, Japan  
Phone: +81-6-6203-3741  
Fax: +81-6-6203-2029

**Emergency telephone number** +81-6-6203-3741 / +81-3-3270-8571

**Recommended uses** For research use only

**Restrictions on use** Seek expert judgment when using for purposes other than those recommended.

## Section 2: HAZARDS IDENTIFICATION

## GHS classification

Classification of the substance or mixture

Acute toxicity - Dermal

Category 4

Skin corrosion/irritation

Category 2

Serious eye damage/eye irritation

Category 1

## Pictograms



Signal word

Danger

## Hazard statements

H315 - Causes skin irritation

H318 - Causes serious eye damage

H312 - Harmful in contact with skin

## Precautionary statements-(Prevention)

- Wash face, hands and any exposed skin thoroughly after handling
- Wear protective gloves/protective clothing/eye protection/face protection

## Precautionary statements-(Response)

- IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
- Immediately call a POISON CENTER or doctor/physician
- Call a POISON CENTER or doctor/physician if you feel unwell
- IF ON SKIN: Wash with plenty of soap and water
- If skin irritation occurs: Get medical advice/attention
- 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

**Others****Other hazards** Not available**Section 3: COMPOSITION/INFORMATION ON INGREDIENTS****Single Substance or Mixture** Substance**Formula** H<sub>2</sub>NCH<sub>2</sub>CH<sub>2</sub>OCH<sub>2</sub>CH<sub>2</sub>OH

| Chemical Name            | Weight-% | Molecular weight | ENCS     | ISHL No.  | CAS RN   |
|--------------------------|----------|------------------|----------|-----------|----------|
| 2-(2-Aminoethoxy)ethanol | 95.0     | 105.14           | (2)-3202 | 2-(8)-528 | 929-06-6 |

**Note on ISHL No.:** \* in the table means announced chemical substances.**Section 4: 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: Rinse 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.

**Section 5: FIRE FIGHTING MEASURES****Suitable extinguishing media**Carbon dioxide (CO<sub>2</sub>), Foam, Extinguishing powder, Sand**Unsuitable extinguishing media**

No information available

**Specific 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.

**Section 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 contaminant and methods and materials for cleaning up**

Absorb dry sand, earth, sawdust and the waste. Collect empty container that can be sealed.

**Recovery, neutralization**

No information available

#### Secondary disaster prevention measures

Clean contaminated objects and areas thoroughly observing environmental regulations.

## Section 7: HANDLING AND STORAGE

### Handling

#### Technical measures

Highly flammable. Avoid contact with high temperature objects, spark, and strong oxidizing agents. 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

Take necessary action to avoid static electricity discharge (which might cause ignition of organic vapors). Use personal protective equipment as required. Avoid contact with skin, eyes or clothing.

### Storage

#### Safe storage conditions

##### Storage conditions

Keep container protect from light, store in well-ventilated place at room temperature (preferably cool). Keep container tightly closed.

##### Safe packaging material

Glass

#### Incompatible substances

Strong oxidizing agents

## Section 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

This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

### Personal protective equipment

#### Respiratory protection

Protective mask

#### Hand protection

chemical protective gloves ( JIS T 8116 )

#### Eye protection

protective eyeglasses or chemical safety goggles (JIS T 8147)

#### Skin and body protection

Long-sleeved work clothes

### General hygiene considerations

Handle in accordance with good industrial hygiene and safety practice.

If this product is classified as "Chemical Substances Hazardous to Skin, etc.", use appropriate protective equipment to them.

## Section 9: PHYSICAL AND CHEMICAL PROPERTIES

### Form

#### Color

Colorless - pale yellow

#### Turbidity

clear

#### Appearance

liquid

### Odor

characteristic odor

### Melting point/freezing point

-12.5 °C

### Boiling point, initial boiling point and boiling range

220 °C

### Flammability

no data available

|                                                 |                                             |
|-------------------------------------------------|---------------------------------------------|
| Evaporation rate:                               | no data available                           |
| Flammability (solid, gas):                      | no data available                           |
| Upper/lower flammability or explosive limits    |                                             |
| Upper:                                          | no data available                           |
| Lower:                                          | no data available                           |
| Flash point                                     | 125 °C                                      |
| Auto-ignition temperature:                      | no data available                           |
| Decomposition temperature:                      | no data available                           |
| pH                                              | basic (aq.)                                 |
| Viscosity (coefficient of viscosity)            | no data available                           |
| Dynamic viscosity                               | no data available                           |
| Solubilities                                    | water , Ethanol and acetone : Very soluble. |
| n-Octanol/water partition coefficient:(log Pow) | no data available                           |
| Vapour pressure                                 | no data available                           |
| Specific Gravity / Relative density             | 1.052 – 1.059 g/m L (20 °C)                 |
| Vapour density                                  | no data available                           |
| Particle characteristics                        | no data available                           |

## Section 10: STABILITY AND REACTIVITY

### Stability

|                                  |                                                                                                 |
|----------------------------------|-------------------------------------------------------------------------------------------------|
| Reactivity                       | no data available                                                                               |
| Chemical stability               | May be altered by light.                                                                        |
| Hazardous reactions              | None under normal processing                                                                    |
| Conditions to avoid              | Extremes of temperature and direct sunlight, Heat, flames and sparks, static electricity, spark |
| Incompatible materials           | Strong oxidizing agents                                                                         |
| Hazardous decomposition products | Nitrogen oxides (NOx), Carbon monoxide (CO), Carbon dioxide (CO <sub>2</sub> )                  |

## Section 11: TOXICOLOGICAL INFORMATION

### Acute toxicity

| Chemical Name            | Oral LD50      | Dermal LD50           | Inhalation LC50                     |
|--------------------------|----------------|-----------------------|-------------------------------------|
| 2-(2-Aminoethoxy)ethanol | 3 g/kg ( Rat ) | 1190 µL/kg ( Rabbit ) | > 8.7 mg/m <sup>3</sup> ( Rat ) 8 h |

|                                   |                   |
|-----------------------------------|-------------------|
| Skin irritation/corrosion         | no data available |
| Serious eye damage/ irritation    | no data available |
| Respiratory or skin sensitization | no data available |
| Reproductive cell mutagenicity    | no data available |
| Carcinogenicity                   | no data available |
| Reproductive toxicity             | no data available |
| STOT-single exposure              | no data available |
| STOT-repeated exposure            | no data available |
| Aspiration hazard                 | no data available |

## Section 12: ECOLOGICAL INFORMATION

### Ecotoxicity

| Chemical Name | Algae/aquatic plants | Fish | Crustacea |
|---------------|----------------------|------|-----------|
|---------------|----------------------|------|-----------|

|                          |                                                       |                                               |                                              |
|--------------------------|-------------------------------------------------------|-----------------------------------------------|----------------------------------------------|
| 2-(2-Aminoethoxy)ethanol | EC50 : <i>Desmodemus subspicatus</i><br>160 mg/L 72 h | LC50 : <i>Leuciscus idus</i><br>460 mg/L 96 h | EC50 : <i>Daphnia magna</i><br>190 mg/L 48 h |
|--------------------------|-------------------------------------------------------|-----------------------------------------------|----------------------------------------------|

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

### Section 13: 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.

### Section 14: TRANSPORT INFORMATION

#### ADR/RID

UN number UN3055  
 Proper shipping name: 2-(2-Aminoethoxy)ethanol  
 UN classification 8  
 Subsidiary hazard class  
 Packing group III  
 Marine pollutant Not applicable

#### IMDG

UN number UN3055  
 Proper shipping name: 2-(2-Aminoethoxy)ethanol  
 UN classification 8  
 Subsidiary hazard class  
 Packing group III  
 Marine pollutant (Sea) Not applicable  
 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code No information available

#### IATA

UN number UN3055  
 Proper shipping name: 2-(2-Aminoethoxy)ethanol  
 UN classification 8  
 Subsidiary hazard class  
 Packing group III  
 Environmentally Hazardous Substance Not applicable

### Section 15: REGULATORY INFORMATION

#### Japanese regulations

Fire Service Act Category IV, Class III petroleum, dangerous grade 3 water-soluble  
 Poisonous and Deleterious Substances Control Law Not applicable  
 Industrial Safety and Health Act Not applicable  
 Industrial Safety and Health Act (2024~) 【2024.4.1~】 Chemical Substances Hazardous to Skin, etc. (Regulations Article 594-2 Paragraph 1)  
 Regulations for the carriage and storage of dangerous Corrosive Substances (Ordinance Art.3, Ministry of Transportation Ordinance Regarding Transport by Ship and Storage, Attached Table 1)

**goods in ship****Civil Aeronautics Law**

Corrosive Substances (Ordinance Art.194, MITL Nortification for Air Transportation of Explosives etc., Attached Table 1)

**Marine Pollution Prevention Law**

Enforcement ordinance Appendix No. 1 Noxious liquid substance Category Z

**Pollutant Release and Transfer Register Law**

Not applicable

**(2023.4.1-)****Export Trade Control Order**

Not applicable

**Section 16: OTHER INFORMATION****Key literature references and sources for data etc.**

NITE: National Institute of Technology and Evaluation (JAPAN)

<http://www.safe.nite.go.jp/japan/db.html>

IATA dangerous Goods Regulations

RTECS:Registry of Toxic Effects of Chemical Substances

Japan Industrial Safety and Health Association GHS Model SDS

Dictionary of Synthetic Organic Chemistry, SSOCJ, Koudansha Scientific Co.Ltd.

Chemical Dictionary, Kyouritsu Publishing Co., Ltd.

etc

**Record of SDS revisions**

The following contents were revised. Regulatory information.

**Disclaimer**

This SDS is according to JIS Z 7253: 2019. The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

GHS Classification is according to JIS Z 7252:2019. \*JIS: Japanese Industrial Standards

**End of Safety Data Sheet**