SDS: A6200-0100_E001

Date Prepared: 2015/11/18
Date Revised: 2023/09/21

Product Name: 2-HYDROXY ETHYL PIPERAZINE

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

Product name: 2-HYDOROXY ETHYL PIPERAZINE

Identification of the Nippon Nyukazai Co., Ltd.

supplier:

Address: No.4-1.Nihonbashi Kobuna-cho, Chuo-ku, Tokyo 103-0024, Japan

Charge section: Business Operation Department

(TEL:+81-3-5651-5640,FAX:+81-3-5651-5646)

Emergency telephone Business Operation Department

number: (TEL:+81-3-5651-5640,FAX:+81-3-5651-5646)

Recommend use: intermediate raw materials

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

2. Hazards identification

Hazard category

Skin corrosion/irritation Category 1
Serious eye damage/eye irritation Category 1

Label elements

Hazard pictograms:



Signal word: Danger

Hazard statements: H314 Causes severe skin burns and eye damage.

H318 Causes serious eye damage.

Precautionary statements:

Prevention P260 Do not breathe dust/fume/gas/mist/vapours/spray.

P264 Wash hands and face thoroughly after handling.

P280 Wear protective gloves/protective clothing/eye protection/face

protection.

Response P310 Immediately call a POISON CENTER/doctor/healthcare

professionals under the supervision of a doctor. P363 Wash contaminated clothing before reuse.

P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce

vomiting.

P303+P361+P353 IF ON SKIN (or hair): Take off immediately all

contaminated clothing. Rinse skin with water [or shower].

P304+P340 IF INHALED: Remove person to fresh air and keep

comfortable for breathing.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue

rinsing.

SDS: A6200-0100_E001

Date Prepared: 2015/11/18
Date Revised: 2023/09/21

Product Name: 2-HYDROXY ETHYL PIPERAZINE

Storage P405 Store locked up.

Disposal P501 Dispose of contents/container in accordance with local/regional/national/international regulation.

3. Composition/information on ingredients

3.1. Substances

Ingredients and Concentration

| Ingredient Name | Concentr ation wt.% | CAS RN® | Existing and New Chemical Substances (JAPAN) | Industrial Safety and Health Law Substances (JAPAN) | l Health Law | Pollutant Release Transfer Register Law (JAPAN) | Poisonous and Deleterious Substances Control Act (JAPAN) |
|----------------------------------|---------------------------|----------|--|---|--------------------------|--|---|
| | | | Gazette notice reference number | Gazette notice reference number | Notifiable Substances | Specified Substances | Poisonous and Deleterious Substances |
| 1-(2- Hydroxyethyl)piperazine | 99-100 | 103-76-4 | 5-3833, 5- 957 | | | Not applicable | Not applicable |

3.2. Mixtures Not Applicable

4. First aid measures

Eye contact:

Inhalation: Remove victim to fresh air and keep at rest in a position comfortable for

breathing.

If breathing is stopped, lie on your back and perform cardiopulmonary

respiration.

Get medical advice/attention.

Skin contact: Take off contaminated clothing and wash before reuse.

Wash with plenty of soap and water.

If skin irritation or a rash occurs: Get medical advice/attention. Immediately flush eye with plenty of clean water for at least 15

minutes. (If easy to do, remove contact lenses, if worn.) Get medical

attention immediately.

Ingestion: After having swallowed it, Drink a large quantity of water when

consciousness becomes clear and receive treatment for the doctor

immediately.

A mouth must not give a person without the consciousness a thing.

Protection for first aid person: The rescuer wears a tool for appropriate protection depending on the

situation.

SDS: A6200-0100_E001 Date Prepared: 2015/11/18 Date Revised: 2023/09/21

Product Name: 2-HYDROXY ETHYL PIPERAZINE

5. Firefighting measures

Suitable extinguishing media: Use water spray(fog), foam, dry chemical or CO2.

Extinguishing media to avoid: Straight stream water.

Specific hazards arising from the

chemical:
Fire fighting:

At the time of fire, hazardous gases (carbon monoxide, NOx and others)

can be generated. Keep upwind of fire.

Eliminate all ignition sources if safe to do so.

In case of fire in the surroundings, move the content/container to the safety place. If it is not possible to move, cool the content/container with

water spray.

Special protective equipment and precautions for fire fighters:

Gloves, protection glasses, wear fire,flame resistant,retardant clothing,

air respiratory organs wear a tool for appropriate protection.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures:

Promptly remove possible ignition sources from the vicinity.

Environmental precautions: Methods and materials for containment and cleaning up: Use personal protection recommended in Section 8. Isolate the hazard area and deny entry to unnecessary and unprotected personnel.

To environment (area of the sea, the soil) must not release it.

Absorb this product with inactive materials (example: dry sand, earth)

and recover it into a waste material container.

In the case of large amount, stop leakage with earth/sand to begin with,

and, then, recover it.

In the case of a small quantity, I adsorb it in the earth and sand, a waste and collect it in empty container which I can seal up after

having removed it.

7. Handling and storage

Handling

Technical measures: During handling, be sure to wear proper protective equipment (refer to

the section 8).

This product can be charged with static electricity. Take

countermeasures for static electricity removal (grounding, others). Wear antistatic clothes and antistatic shoes to prevent human body

electrification.

 $Use\ explosion\mbox{-}proof\ electrical/ventilating/lighting\ equipment.$

Ventilation requirements: Use the ventilation equipment described in Section 8.

SDS: A6200-0100_E001

Date Prepared: 2015/11/18
Date Revised: 2023/09/21

Product Name: 2-HYDROXY ETHYL PIPERAZINE

Precautions for safe

handling:

Not especially.

Storage

Storage conditions: Store the containers avoiding direct sunlight. Store in less than 40°C in

a well-ventilated room.

Safety adequate

container materials:

Use the container specified by the Fire Service ACT and the United

Nations Transport Regulations.

8. Exposure controls/personal protection

Appropriate engineering controls: Use local ventilation equipment.

Install eye and body washing facilities near the handling place.

Display the position of equipment clearly.

Control parameters

| Ingredient Name | Industrial Safety and Health Law (JAPAN) | Japan Society for Occupation al Health | ACGIH-TLV | |
|------------------------------|---|---|-----------|--------------------|
| | | Occupation al Exposure Limits | | STEL |
| 1-(2-Hydroxyethyl)piperazine | Not established | | | Not established |

Personal protective equipment

Respiratory protection: Use a gas mask for organic gases, air-supplied respirator, self-

contained compressed air breathing apparatus on the situation.

Hand protection: Organic solvent impermeable protective gloves (Antistatic ones are

desirable.)

Eye/face protection: Protective glasses, goggle, protective face shield.

Skin/body protection: Wear long-sleeved working clothes and protective shoes. (Antistatic

ones are desirable.)

Use an oiliness apron-resistant, boots depending on the situation.

Hygiene measures: Wash with soap and water after handling.

SDS: A6200-0100_E001

Date Prepared: 2015/11/18
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9. Physical and chemical properties

Product

Form: Liquid $(20^{\circ}C)$

Color: Colorless~Light yellow

Odor: Ammonia odor Melting point/freezing $-39 \sim -38$ (°C)

point:

Initial boiling point and $250(^{\circ}\text{C})$

boiling range:

Flammability (solid, gas): No data Upper/lower flammability No data

or explosive limits:

Flash point: 123.9(°C) Auto-ignition No data

temperature:

Decomposition No data

temperature:

pH: 11.6(10%aq.) Kinematic viscosity: No data

Solubility: water : Soluble.

Partition coefficient: n-

octanol/water:

No data

Vapour pressure: No data
Specific Gravity: 1.063(20°C)
Vapour density: No data
Particle characteristics: No data

10. Stability and reactivity

Chemical stability: Stable under normal temperatures and pressures.

Possibility of hazardous

It may react with the oxidizing agent and generate heat.

reactions:

Conditions to avoid: Avoid heat, flames, sparks and ignition sources.

Incompatible materials: Acid, Oxidizing agents. Hazardous decomposition No data available

products:

SDS: A6200-0100_E001

Date Prepared: 2015/11/18 Date Revised: 2023/09/21

Product Name: 2-HYDROXY ETHYL PIPERAZINE

11. Toxicological information

Product

Acute toxicity (oral): Classification not possible Acute toxicity (dermal): Classification not possible

Acute toxicity (inhalation): Classification not possible (Gas)

Classification not possible (Vapour) Classification not possible (Dust/Mist)

Category 1

Skin corrosion/irritation: Category 1
Serious eye damage/irritation: Category 1

Respiratory sensitization: Classification not possible Skin sensitization: Classification not possible Mutagenicity: Classification not possible Carcinogenicity: Classification not possible Reproductive toxicity: Classification not possible Target organ effect/Single exposure: Classification not possible Target organ effect/Multi exposure: Classification not possible Respiratory toxic: Classification not possible

Ingredient

No Data

12. Ecological information

Product

Ecotoxicity

Acute toxicity: Classification not possible Chronic toxicity: Classification not possible

Persistence and degradability: No information.
Bioaccumulative potential: No information.
Mobility in soil: No information.

Hazardous to the ozone layer: Classification not possible

Other impact: No information.

Ingredient

No Data

SDS: A6200-0100_E001 Date Prepared: 2015/11/18

Date Revised: 2023/09/21

2-HYDROXY ETHYL PIPERAZINE Product Name:

13. Disposal considerations

Disposal When waste materials and waste water are to be treated, collect them into specified containers and methods: entrust the disposal to a disposal contractor having an industrial waste disposal contractor permit.

> Do not use the used containers for other purposes like filling other substances. Be sure to dispose of them after treating the content according to the above description. In case of recycling the container, return the container as it is after fitting a stopper without filling anything into it.

14. Transport information

Internation UN 8 classification:

regulations UN number: 1760

Proper shipping CORROSIVE LIQUID, N.O.S.

name:

 \mathbf{III} Packing

group:

Domestic restriction: Transport the material in accordance with the regulations in your country or

Specific security precaution

and condition of

Load the containers in such a way as not to wet with water, fall down, tumble, or

being damaged. Cover the loaded cargo to prevent direct sunlight.

transportation:

Emergency Response Guide 153

(ERG) Numbers:

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

Reference Information obtained in NITE (National Institute of Technology and Evaluation)

and other literature surveys.

SDS: A6200-0100_E001
Date Prepared: 2015/11/18

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Product Name: 2-HYDROXY ETHYL PIPERAZINE

Disclaimer

About the description: This SDS was created in accordance with JIS Z 7253 based on the materials and data available at the time of creation.

Detailed information such as composition and ingredients corresponding to overseas legal regulation registration confirmation etc. may not be described, so please contact our sales staff separately if necessary.

Precautions are for normal handling. In case of special handling, it is the responsibility of the user to take safety measures suitable for the intended use and usage.

We have paid close attention to the contents, but we do not guarantee the contents.

This product can only be used for industrial purposes. If you want to use it for other purposes, please contact us in advance.