



SAFETY DATA SHEET

According to JIS Z 7253:2019 Revision date 25-Mar-2024 Revision Number 1.02

Section 1: PRODUCT AND COMPANY IDENTIFICATION

| Product Name | Morantel Metabolite A Standard |
|---|---|
| Product Code | 131-19251 |
| 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 Recommended uses Restrictions on use | +81-6-6203-3741 / +81-3-3270-8571 For research use only Seek expert judgment when using for purposes other than those recommended. |

Section 2: HAZARDS IDENTIFICATION

GHS classification <u>Classification of the substance or mixture</u> Flammable liquids Acute toxicity - Oral Acute toxicity - Inhalation (Vapors) Skin corrosion/irritation Serious eye damage/eye irritation

Pictograms



Hazard statements

- H226 Flammable liquid and vapour
- H314 Causes severe skin burns and eye damage
- H318 Causes serious eye damage
- H302 Harmful if swallowed
- H332 Harmful if inhaled

Precautionary statements-(Prevention)

- · Do not eat, drink or smoke when using this product
- · Use only outdoors or in a well-ventilated area
- Do not breathe dust/fume/gas/mist/vapors/spray
- · Wash face, hands and any exposed skin thoroughly after handling
- · Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking
- Keep container tightly closed
- Ground/bond container and receiving equipment
- Use explosion-proof electrical/ ventilating / lighting / equipment
- Use only non-sparking tools
- Take precautionary measures against static discharge
- · Wear protective gloves/protective clothing/eye protection/face protection

Category 4 Category 4 Category 1 Category 1

Category 3

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
- · Wash contaminated clothing before reuse
- IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower
- Call a POISON CENTER or doctor/physician if you feel unwell
- IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
- IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell

Rinse mouth

- · Do NOT induce vomiting
- In case of fire: Use suitable extinguishing media for extinction

Precautionary statements-(Storage)

- Store locked up
- Store in a well-ventilated place. Keep cool

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

C4H12N2

| Chemical Name | Weight-% | Molecular weight | ENCS | ISHL No. | CAS RN |
|-------------------------|----------|------------------|----------|-----------|-----------|
| N-Methyl-1,3-propanedia | 98.0 | 88.15 | (9)-1389 | 2-(10)-99 | 6291-84-5 |
| mine | | | | | |

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

Water spray (fog), Carbon dioxide (CO2), 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. Vapors may form explosive mixtures

with air 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 contaminent and methods and materials for cleaning up

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

Recoverly, 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 | Container protected from light, and store tightly closed in freezer (-20°C). Packed with an |
| | inert gas. |
| 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 handand eye-wash facility. And display their position clearly.

Exposure limitsThis 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 Hand protection

gas mask for organic gas (JIS T 8152) chemical protective gloves (JIS T 8116)

Eye protection Skin and body protection

protective eyeglasses or chemical safety goggles (JIS T 8147) 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 - nearly colorless |
| Turbidity | clear |
| Appearance | liquid |
| Odor | no data available |
| Melting point/freezing point | no data available |
| Boiling point, initial boiling point and boiling range | no data available |
| Flammability | Flammable liquid and vapor |
| 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 | 36 °C |
| Auto-ignition temperature: | no data available |
| Decomposition temperature: | no data available |
| рН | no data available |
| Viscosity (coefficient of viscosity) | no data available |
| Dynamic viscosity | no data available |
| Solubilities | ethanol, acetone, water : soluble. |
| n-Octanol/water partition coefficient:(log Pow) | no data available |
| Vapour pressure | no data available |
| Specific Gravity / Relative density | no data available |
| Vapour density | no data available |
| Particle characteristics | no data available |
| | |

Section 10: STABILITY AND REACTIVITY

Stability

Reactivity Chemical stability Hazardous reactions

no data available May be altered by light.

None under normal processing

Conditions to avoid

Extremes of temperature and direct sunlight, Heat, flames and sparks, static electricity, spark, Moisture

Incompatible materials

Strong oxidizing agents

Hazardous decomposition products

Carbon monooxide (CO), Carbon dioxide (CO2), Nitrogen oxides (NOx)

Section 11: TOXICOLOGICAL INFORMATION

Acute toxicity

| Chemical Name | Oral LD50 | Dermal LD50 | Inhalation LC50 |
|-----------------------------|-----------------|-------------|----------------------------------|
| N-Methyl-1,3-propanediamine | 951 mg/kg (Rat) | N/A | > 189 mg/m ³ (Rat)6 h |

Skin irritation/corrosion Serious eye damage/ irritation Respiratory or skin sensitization Reproductive cell mutagenicity Carcinogenicity

Reproductive toxicity STOT-single exposure STOT-repeated exposure Aspiration hazard no data available no data available no data available no data available no data available

no data available no data available no data available no data available

Section 12: ECOLOGICAL INFORMATION

| Ecotoxicity | no data available |
|---|--|
| Other data | no data available |
| Persistence and degradability Bioaccumulative potential Mobility in soil Hazard to the ozone layer | No information available No information available No information available 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 Proper shipping name: UN classfication Subsidiary hazard class Packing group Marine pollutant | UN2734 Amines, liquid, corrosive, flammable, n.o.s. (N-Methyl-1,3-propanediamine) 8 3 II Not applicable |
|---|--|
| IMDG | |
| UN number | UN2734 |
| Proper shipping name: | Amines, liquid, corrosive, flammable, n.o.s. (N-Methyl-1,3-propanediamine) |
| UN classfication | 8 |
| Subsidiary hazard class | 3 |
| Packing group | II |
| Marine pollutant (Sea) | Not applicable |
| Transport in bulk according to | No information available |
| Annex II of MARPOL 73/78 and | |
| the IBC Code | |
| IATA | |
| UN number | UN2734 |
| Proper shipping name: | Amines, liquid, corrosive, flammable, n.o.s. (N-Methyl-1,3-propanediamine) |
| UN classfication | 8 |
| Subsidiary hazard class | 3 |
| Packing group | |
| Environmentally Hazardous Substance | Not applicable |

Section 15: REGULATORY INFORMATION

| Japanese regulations | |
|------------------------------------|--|
| Fire Service Act | Category IV, Class II petroleums, dangerous grade 3 water-soluble |
| Poisonous and Deleterious | Not applicable |
| Substances Control Law | |
| Industrial Safety and Health Act | Not applicable |
| Industrial Safety and Health Act (| [2024.4.1~] Chemical Substances Hazardous to Skin, etc.(Regulations Article 594-2 Paragraph 1) |
| <u>2024~)</u> | |
| Regulations for the carriage | Corrosive Substances (Ordinance Art.3, Ministry of Transportation Ordinance Regarding |
| and storage of dangerous | 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) |
| Pollutant Release and Transfer | Not applicable |
| Register Law | |
| (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 Oraganic 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