



SAFETY DATA SHEET

According to JIS Z 7253:2019

Revision date 01-Mar-2024

Revision Number 1.04

Section 1: PRODUCT AND COMPANY IDENTIFICATION

| Product Name | a-Glucosidase Inhibitory Activity Assay Kit |
|--------------|---|
| Product Code | 297-78601 |

Supplier FUJIFILM Wako Pure Chemical Corporation

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Recommended uses For research use only

Restrictions on useSeek expert judgment when using for purposes other than those recommended.

Section 2: HAZARDS IDENTIFICATION

GHS classification
<u>Classification of the substance or mixture</u>
Skin corrosion/irritation
Serious eye damage/eye irritation
Specific target organ toxicity (single exposure)

Category 1 kidneys

Category 3 Respiratory irritation

Category 2 Category 2A

Category 1, Category 3

Pictograms



Signal word

Danger

Hazard statements

H315 - Causes skin irritation

H319 - Causes serious eye irritation

H335 - May cause respiratory irritation

H370 - Causes damage to the following organs: kidneys

Precautionary statements-(Prevention)

- · Wash face, hands and any exposed skin thoroughly after handling
- Wear protective gloves/protective clothing/eye protection/face protection
- Do not breathe dust/fume/gas/mist/vapors/spray
- Do not eat, drink or smoke when using this product
- · Use only outdoors or in a well-ventilated area

Precautionary statements-(Response)

- IF exposed: Call a POISON CENTER or doctor/physician
- 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 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
- IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
- Call a POISON CENTER or doctor/physician if you feel unwell

Precautionary statements-(Storage)

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

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 Kit (Set of mixtures)

| Chemical Name | Weight-% | Molecular weight | ENCS | ISHL No. | CAS RN |
|------------------|----------|------------------|------|----------|-------------|
| Enzyme | - | N/A | N/A | N/A | N/A-29-7861 |
| Buffer | - | N/A | N/A | N/A | N/A-29-7862 |
| Substrate 1 | - | N/A | N/A | N/A | N/A-29-7863 |
| Substrate 2 | - | N/A | N/A | N/A | N/A-29-7864 |
| Positive Control | - | N/A | N/A | N/A | N/A-29-7865 |

Note on ISHL No.: * in the table means announced chemical substances.

Hazardous Component Maleic Acid, Disodium Maleate

Substances Remarks: The composition considered to be hazardous are listed in the above. The remaining

ingredients are not hazardous substances, or exist at below reportable level.

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.

Eve 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.

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

Sweep up and gather scattered particles, and collect it in an empty airtight container.

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

Avoid contact with 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

Avoid contact with skin, eyes or clothing. Use personal protective equipment as required.

Storage |

Safe storage conditions

Storage conditions Store away from sunlight in cold (-20°C). Keep container tightly closed.

Safe packaging materialPolyethylene, GlassIncompatible substancesStrong 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 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 Dust mask (JIS T 8151)

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

Appearance

no data available Odor Melting point/freezing point no data available Boiling point, initial boiling point and boiling range no data available Flammability no data available **Evaporation rate:** no data available no data available Flammability (solid, gas): Upper/lower flammability or explosive limits no data available Upper: no data available Lower: Flash point no data available no data available **Auto-ignition temperature: Decomposition temperature:** no data available pН no data available Viscosity (coefficient of viscosity) no data available Dynamic viscosity no data available Solubilities No data available n-Octanol/water partition coefficient:(log Pow) no data available Vapour pressure no data available Specific Gravity / Relative density no data available no data available Vapour density **Particle characteristics** no data available

Section 10: STABILITY AND REACTIVITY

Kit (Set of mixtures)

Stability

Reactivity no data available

Chemical stability Stable under recommended storage conditions.

Hazardous reactions

None under normal processing

Conditions to avoid

Extremes of temperature and direct sunlight

Incompatible materials

Strong oxidizing agents

Hazardous decomposition products

Carbon monooxide (CO), Carbon dioxide (CO2)

Section 11: TOXICOLOGICAL INFORMATION

Acute toxicity

| Chemical Name | Oral LD50 | Dermal LD50 | Inhalation LC50 |
|---------------|-----------------|---------------------|-----------------------|
| Maleic acid | 708 mg/kg (Rat) | 1560 mg/kg (Rabbit) | > 0.18 mg/L (Rat) 4 h |

| Chemical Name | Acute toxicity -oral- source | Acute toxicity -dermal- source | Acute toxicity -inhalation gas- |
|---------------|------------------------------|--------------------------------|---------------------------------|
| | information | information | source information |
| Maleic acid | Based on the NITE GHS | Based on the NITE GHS | Based on the NITE GHS |
| | classification results. | classification results. | classification results. |

| Chemical Name | Acute toxicity -inhalation vapor- source information | Acute toxicity -inhalation dust- source information | Acute toxicity -inhalation mist- source information |
|---------------|--|--|--|
| Maleic acid | Based on the NITE GHS | Based on the NITE GHS | Based on the NITE GHS |
| | classification results. | classification results. | Classification results. |

Skin irritation/corrosion

| Chemical Name | Skin corrosion/irritation source information | |
|---------------|---|--|
| Maleic acid | Based on the NITE GHS classification results. | |

Serious eve damage/irritation

| Serious eye damage/ irritation | | |
|-----------------------------------|--|--|
| Chemical Name | Serious eye damage/irritation source information | |
| Maleic acid | Based on the NITE GHS classification results. | |
| Respiratory or skin sensitization | | |
| Chemical Name | Respiratory or Skin sensitization source information | |
| Maleic acid | Based on the NITE GHS classification results. | |
| Reproductive cell mutagenicity | · | |
| Chemical Name | germ cell mutagencity source information | |
| Maleic acid | Based on the NITE GHS classification results. | |
| Carcinogenicity | · | |
| Chemical Name | Carcinogenicity source information | |
| Maleic acid | Based on the NITE GHS classification results. | |
| | | |

| Reproductive toxicity | | | |
|------------------------|---|--|--|
| Chemical Name | Reproductive toxicity source information | | |
| Maleic acid | Based on the NITE GHS classification results. | | |
| STOT-single exposure | | | |
| Chemical Name | STOT -single exposure- source information | | |
| Maleic acid | Based on the NITE GHS classification results. | | |
| STOT-repeated exposure | | | |
| Chemical Name | STOT -repeated exposure- source information | | |
| Maleic acid | Based on the NITE GHS classification results. | | |
| Aspiration hazard | | | |
| Chemical Name | Aspiration Hazard source information | | |
| Maleic acid | Based on the NITE GHS classification results. | | |

Section 12: ECOLOGICAL INFORMATION

Ecotoxicity

| Chemical Name | Algae/aquatic plants | Fish | Crustacea |
|---------------|----------------------|----------------------------|----------------------|
| Maleic acid | N/A | LC50 : Lepomis macrochirus | EC50 : Daphnia magna |
| | | 75 mg/L 96 h | 250 - 400 mg/L 48 h |

Other data

| <u> </u> | | |
|---------------|--|--|
| Chemical Name | Short-term (acute) hazardous to the | Long-term (chronic) hazardous to the |
| | aquatic environment source information | aquatic environment source information |
| Maleic acid | Based on the NITE GHS classification | Based on the NITE GHS classification |
| | results. | results. |

No information available Persistence and degradability **Bioaccumulative potential** No information available No information available Mobility in soil No information available Hazard to the ozone layer

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 Not regulated

UN number

Proper shipping name: UN classfication Subsidiary hazard class

Packing group

Marine pollutant Not applicable

IMDG Not regulated

UN number -

Proper shipping name: UN classfication Subsidiary hazard class

Packing group

Marine pollutant (Sea) Not applicable

Transport in bulk according to No information available

Annex II of MARPOL 73/78 and

the IBC Code

IATA Not regulated

UN number -

Proper shipping name: UN classfication Subsidiary hazard class

Packing group

Environmentally Hazardous Not applicable

Substance

Section 15: REGULATORY INFORMATION

Japanese regulations

Fire Service Act
Poisonous and Deleterious
Not applicable
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)

2024~)

Regulations for the carriage Not applicable

and storage of dangerous

goods in ship

Civil Aeronautics Law Not applicable 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**