

SAFETY DATA SHEET

According to JIS Z 7253:2019
Revision date 31-Jul-2024
 Revision Number 1

Section 1: PRODUCT AND COMPANY IDENTIFICATION

Product Name	LBIS™ Mouse Insulin ELISA Kit (RTU)
Product Code	298-89501

Supplier FUJIFILM Wako Pure Chemical Corporation
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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

Corrosive to metals	Category 1
Acute toxicity - Inhalation (Dusts/Mists)	Category 3
Skin corrosion/irritation	Category 1
Serious eye damage/eye irritation	Category 1
Skin sensitization	Category 1
Specific target organ toxicity (single exposure)	Category 1
Category 1 respiratory system	
Specific target organ toxicity (repeated exposure)	Category 1
Category 1 respiratory system	
Chronic aquatic toxicity	Category 2

Pictograms



Signal word Danger

Hazard statements

- H290 - May be corrosive to metals
- H314 - Causes severe skin burns and eye damage
- H318 - Causes serious eye damage
- H331 - Toxic if inhaled
- H317 - May cause an allergic skin reaction
- H411 - Toxic to aquatic life with long lasting effects
- H370 - Causes damage to the following organs: respiratory system
- H372 - Causes damage to the following organs through prolonged or repeated exposure: respiratory system

Precautionary statements-(Prevention)

- 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

- Wear protective gloves/protective clothing/eye protection/face protection
- Contaminated work clothing should not be allowed out of the workplace
- Do not eat, drink or smoke when using this product
- Avoid release to the environment
- Keep only in original container

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
- IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower
- Wash contaminated clothing before reuse
- If skin irritation or rash occurs: Get medical advice/attention
- IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
- IF SWALLOWED: Rinse mouth. Do NOT induce vomiting
- Collect spillage
- Absorb spillage to prevent material damage

Precautionary statements-(Storage)

- Store in a well-ventilated place. Keep container tightly closed
- Store locked up
- Store in corrosive resistant/ container with a resistant inner liner

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
Antibody-coated Plate	-	N/A	N/A	N/A	N/A-29-8951
Insulin Standard (12,000pg/mL)	-	N/A	N/A	N/A	N/A-29-8952
Insulin Standard (4,800pg/mL)	-	N/A	N/A	N/A	N/A-29-8953
Insulin Standard (2,000pg/mL)	-	N/A	N/A	N/A	N/A-29-8954
Insulin Standard (800pg/mL)	-	N/A	N/A	N/A	N/A-29-8955
Insulin Standard (300pg/mL)	-	N/A	N/A	N/A	N/A-29-8956
Insulin Standard (100pg/mL)	-	N/A	N/A	N/A	N/A-29-8957
Buffer	-	N/A	N/A	N/A	N/A-29-8958
Biotin-conjugated Antibody Solution	-	N/A	N/A	N/A	N/A-29-8959
Peroxidase-conjugated Streptavidin Solution	-	N/A	N/A	N/A	N/A-29-8961
TMB Solution	-	N/A	N/A	N/A	N/A-29-8962
Stop Solution	-	N/A	N/A	N/A	N/A-29-8963
Wash Solution(10x)	-	N/A	N/A	N/A	N/A-29-8964
Plate Seal	-	N/A	N/A	N/A	N/A-29-8965

Note on ISHL No.:

* in the table means announced chemical substances.

Substances Remarks:

This Product includes the following componets. Sulfuric Acid <7.0 %, Sodium Chloride <10 %, Polyoxyethylene(20) Sorbitan Monolaurate <0.60 %, EDTA, disodium salt, dihydrate <0.020 %, 2-Methyl-4-isothiazoline-3-one <0.50 %

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

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment

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

Avoid contact with alkaline substances. Avoid contact with metal. 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

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

Storage**Safe storage conditions****Storage conditions**

Store away from sunlight in a cool (2-10 °C) well-ventilated dry place.

Safe packaging material

No information available

Incompatible substances

alkaline substances, Metals

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

Chemical Name	JSOH (Japan)	ISHL (Japan)	ACGIH
Sulfuric Acid 7664-93-9	Ceiling: 1 mg/m ³	N/A	TWA 0.2mg/m ³

Personal protective equipment**Respiratory protection**

Gas mask for acidic gas (JIS T 8152)

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**

Kit (Set of mixtures)

Odor

no data available

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

Flammability (solid, gas):

no data available

Upper/lower flammability or explosive limits**Upper:**

no data available

Lower:

no data available

Flash point

no data available

Auto-ignition temperature:

no data available

Decomposition temperature:

no data available

pH

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

Vapour density

no data available

Particle characteristics

no data available

Section 10: STABILITY AND REACTIVITY

Stability

Reactivity no data available
Chemical stability Stable under recommended storage conditions.

Hazardous reactions

Corrodes metals to generate hydrogen gas.

Conditions to avoid

Extremes of temperature and direct sunlight

Incompatible materials

alkaline substances, Metals

Hazardous decomposition products

Carbon monoxide (CO), Carbon dioxide (CO₂), Nitrogen oxides (NO_x), Sulfur oxides (SO_x)

Section 11: TOXICOLOGICAL INFORMATION
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Acute toxicity

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Sodium Chloride	3 g/kg (Rat)	> 10000 mg/kg (Rabbit)	> 42 mg/L (Rat) 1 h
Sulfuric Acid	2140 mg/kg (Rat)	N/A	0.375 mg/L (Rat) 4 h
Poly(oxyethylene)sorbitan monolaurate	37000 mg/kg (Rat) 36700 µL/kg (Rat)	N/A	> 5.1 mg/L (Rat) 4 h
2-Methyl-2H-isothiazol-3-one	232 - 249 mg/kg (Rat) 120 mg/kg (Rat)	200 mg/kg (Rabbit)	0.11 mg/L (Rat) 4 h

Chemical Name	Acute toxicity -oral- source information	Acute toxicity -dermal- source information	Acute toxicity -inhalation gas- source information
Sulfuric Acid	Based on the NITE GHS classification results.	Based on the NITE GHS classification results.	Based on the NITE GHS classification results.

Chemical Name	Acute toxicity -inhalation vapor- source information	Acute toxicity -inhalation dust- source information	Acute toxicity -inhalation mist- source information
Sulfuric Acid	Based on the NITE GHS classification results.	Based on the NITE GHS classification results.	Based on the NITE GHS classification results.

Skin irritation/corrosion

Chemical Name	Skin corrosion/irritation source information
Sulfuric Acid	Based on the NITE GHS classification results.

Serious eye damage/ irritation

Chemical Name	Serious eye damage/irritation source information
Sulfuric Acid	Based on the NITE GHS classification results.

Respiratory or skin sensitization

Chemical Name	Respiratory or Skin sensitization source information
Sulfuric Acid	Based on the NITE GHS classification results.

Reproductive cell mutagenicity

Chemical Name	germ cell mutagenicity source information
Sulfuric Acid	Based on the NITE GHS classification results.

Carcinogenicity

Chemical Name	Carcinogenicity source information
Sulfuric Acid	Based on the NITE GHS classification results.

Chemical Name	NTP	IARC	ACGIH	JSOH
Sulfuric Acid 7664-93-9	-	Group 1	A2	-

Reproductive toxicity

Chemical Name	Reproductive toxicity source information
Sulfuric Acid	Based on the NITE GHS classification results.

STOT-single exposure

Chemical Name	STOT -single exposure- source information
Sulfuric Acid	Based on the NITE GHS classification results.

STOT-repeated exposure

Chemical Name	STOT -repeated exposure- source information
Sulfuric Acid	Based on the NITE GHS classification results.

Aspiration hazard

Chemical Name	Aspiration Hazard source information
Sulfuric Acid	Based on the NITE GHS classification results.

Section 12: ECOLOGICAL INFORMATION

Ecotoxicity

Chemical Name	Algae/aquatic plants	Fish	Crustacea
Sodium Chloride	N/A	LC50 : <i>Lepomis macrochirus</i> 5560 - 6080 mg/L 96 h LC50 : <i>Lepomis macrochirus</i> 12946 mg/L 96 h LC50 : <i>Pimephales promelas</i> 6020 - 7070 mg/L 96 h LC50 : <i>Pimephales promelas</i> 7050 mg/L 96 h LC50 : <i>Pimephales promelas</i> 6420 - 6700 mg/L 96 h LC50 : <i>Oncorhynchus mykiss</i> 4747 - 7824 mg/L 96 h	EC50 : <i>Daphnia magna</i> 1000 mg/L 48 h EC50 : <i>Daphnia magna</i> 340.7 - 469.2 mg/L 48 h
Sulfuric Acid	N/A	LC50: <i>Lepomis macrochirus</i> 16 - 28 mg/L 96 h	LC50: <i>Daphnia magna</i> 29 mg/L 24 h
2-Methyl-2H-isothiazol-3-one	N/A	LC50 : <i>Oncorhynchus mykiss</i> 0.07 mg/L 96 h	EC50 : <i>Daphnia magna</i> 0.18 mg/L 48 h

Other data

Chemical Name	Short-term (acute) hazardous to the aquatic environment source information	Long-term (chronic) hazardous to the aquatic environment source information
Sulfuric Acid	Based on the NITE GHS classification results	Based on the NITE GHS classification results

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	UN2796
Proper shipping name:	Sulphuric acid
UN classification	8
Subsidiary hazard class	

Packing group II
Marine pollutant Yes

IMDG

UN number UN2796
Proper shipping name: Sulphuric acid
UN classification 8
Subsidiary hazard class
Packing group II
Marine pollutant (Sea) Yes
Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code No information available

IATA

UN number UN2796
Proper shipping name: Sulphuric acid
UN classification 8
Subsidiary hazard class
Packing group II
Environmentally Hazardous Substance Yes

Section 15: REGULATORY INFORMATION

Japanese regulations

Fire Service Act Not applicable
Poisonous and Deleterious Substances Control Law Not applicable
Industrial Safety and Health Act Harmful Substances Whose Names Are to be Indicated on the Label (Law Art.57)
Notifiable Substances (Law Art.57-2)
Group 3 Specified Chemical Substance, (Ordinance on Prevention of Hazards Due to Specified Chemical Substances Art.2 Para.1, Item 6)
Chemical Substances Hazardous to Skin, etc.(Regulations Article 594-2 Paragraph 1)
Priority Assessment Chemical Substances (Law Article 2, Para.5)
Act on the Evaluation of Chemical Substances and Regulation of Their Manufacture, etc
Regulations for the carriage and storage of dangerous goods in ship Corrosive Substances (Ordinance Art.3, Ministry of Transportation Ordinance Regarding Transport by Ship and Storage, Attached Table 1)
Civil Aeronautics Law Corrosive Substances (Ordinance Art.194, MITL Notification for Air Transportation of Explosives etc., Attached Table 1)
Pollutant Release and Transfer Register Law (2023.4.1-) Not applicable
Water Pollution Control Act Specified substances(Law Art.2 Para.4, Enforcement Order Art.3-3)
Air Pollution Control Law Specified Substances

Industrial Safety and Health Law

Law Name	Chemical Name in Regulation	Weight %	
Notifiable Substances (Law Art.57-2)	Sulfuric acid	<7.0	Existing Law

Section 16: OTHER INFORMATION

Key literature references and sources for data etc.

NITE: National Institute of Technology and Evaluation (JAPAN)
://www.chem-info.nite.go.jp/chem/chrip/chrip_search/systemTop
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

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