

## SAFETY DATA SHEET

According to JIS Z 7253:2019  
Revision date 25-Jul-2024  
Revision Number 1

## Section 1: PRODUCT AND COMPANY IDENTIFICATION

|              |                                       |
|--------------|---------------------------------------|
| Product Name | LBIS™ Monkey KLH-IgM ELISA Kit (TDAR) |
| Product Code | 299-91501                             |

**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

Corrosive to metals

Category 1

Acute toxicity - Inhalation (Dusts/Mists)

Category 3

Skin corrosion/irritation

Category 1

Serious eye damage/eye irritation

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

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
- 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 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      |
|-----------------------------------------|----------|------------------|------|----------|-------------|
| Antigen-coated Plate                    | -        | N/A              | N/A  | N/A      | N/A-29-9151 |
| Anti-KLH Monkey IgM Standard            | -        | N/A              | N/A  | N/A      | N/A-29-9152 |
| Buffer                                  | -        | N/A              | N/A  | N/A      | N/A-29-9153 |
| Peroxidase-conjugated Antibody Solution | -        | N/A              | N/A  | N/A      | N/A-29-9154 |
| TMB Solution                            | -        | N/A              | N/A  | N/A      | N/A-29-9155 |
| Stop Solution                           | -        | N/A              | N/A  | N/A      | N/A-29-9156 |
| Wash Solution(10×)                      | -        | N/A              | N/A  | N/A      | N/A-29-9157 |

**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 %

### 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<br>7664-93-9 | Ceiling: 1 mg/m <sup>3</sup> | N/A | TWA 0.2mg/m <sup>3</sup> |
|----------------------------|------------------------------|-----|--------------------------|

**Personal protective equipment**

|                                 |                                                               |
|---------------------------------|---------------------------------------------------------------|
| <b>Respiratory protection</b>   | Gas mask for acidic gas ( JIS T 8152 )                        |
| <b>Hand protection</b>          | chemical protective gloves ( JIS T 8116 )                     |
| <b>Eye protection</b>           | protective eyeglasses or chemical safety goggles (JIS T 8147) |
| <b>Skin and body protection</b> | 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**

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

## Section 10: STABILITY AND REACTIVITY

**Stability**

|                                         |                                                                                           |
|-----------------------------------------|-------------------------------------------------------------------------------------------|
| <b>Reactivity</b>                       | no data available                                                                         |
| <b>Chemical stability</b>               | Stable under recommended storage conditions.                                              |
| <b>Hazardous reactions</b>              |                                                                                           |
|                                         | Corrodes metals to generate hydrogen gas.                                                 |
| <b>Conditions to avoid</b>              |                                                                                           |
|                                         | Extremes of temperature and direct sunlight                                               |
| <b>Incompatible materials</b>           |                                                                                           |
|                                         | alkaline substances, Metals                                                               |
| <b>Hazardous decomposition products</b> |                                                                                           |
|                                         | Carbon monoxide (CO), Carbon dioxide (CO <sub>2</sub> ), Sulfur oxides (SO <sub>x</sub> ) |

## Section 11: TOXICOLOGICAL INFORMATION

**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 )<br>36700 µL/kg ( Rat ) | N/A                      | > 5.1 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<br>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><br>5560 - 6080 mg/L 96 h<br>LC50 : <i>Lepomis macrochirus</i><br>12946 mg/L 96 h | EC50 : <i>Daphnia magna</i><br>1000 mg/L 48 h<br>EC50 : <i>Daphnia magna</i><br>340.7 - 469.2 mg/L 48 h |

|               |     |                                                                                                                                                                                                                                               |                                            |
|---------------|-----|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------|
|               |     | <i>LC50 : Pimephales promelas</i><br>6020 - 7070 mg/L 96 h<br><i>LC50 : Pimephales promelas</i><br>7050 mg/L 96 h<br><i>LC50 : Pimephales promelas</i><br>6420 - 6700 mg/L 96 h<br><i>LC50 : Oncorhynchus mykiss</i><br>4747 - 7824 mg/L 96 h |                                            |
| Sulfuric Acid | N/A | <i>LC50: Lepomis macrochirus</i><br>16 - 28 mg/L 96 h                                                                                                                                                                                         | <i>LC50: Daphnia magna</i><br>29 mg/L 24 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                                |

|                                      |                          |
|--------------------------------------|--------------------------|
| <b>Persistence and degradability</b> | No information available |
| <b>Bioaccumulative potential</b>     | No information available |
| <b>Mobility in soil</b>              | No information available |
| <b>Hazard to the ozone layer</b>     | 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

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