



Prepared date: 01 October 2015  
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## Safety Data Sheet

### [1] PRODUCT AND COMPANY INFORMATION

Product name Egg(Ovalbumin) ELISA Kit  
 Casein ELISA Kit  
 Wheat/Gluten ELISA Kit  
 Peanut ELISA Kit

Manufacturer's name Morinaga Institute of Biological Science, Inc.  
 Address 2-1-16 Sachiura, Kanazawa-ku Yokohama 236-0003 Japan  
 Section Quality assurance department  
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 SDS No. GHS-SA-11

### [2] HAZARDS IDENTIFICATION

kit contains mixtures of hazardous and non-hazardous substances. Below are materials identified as potentially hazardous.

#### (1) Sodium lauryl sulfate, water

Human health hazard

Serious eye damage · Eye irritation : Category 2B

Specific target organ systemic toxicity (single exposure) : Category 3

Specific target organ systemic toxicity (repeated exposure) : Category 2

Environmental hazard

Hazardous to the aquatic environment (acute hazard) : Category 3

Pictogram or symbol



Signal word : danger

Hazard statement : Causes serious eyes irritation.  
 May cause respiratory irritation  
 May cause damage to organs(kidney) through prolonged or repeated exposure.  
 Harmful to an aquatic life.

Cautions

Safety measures : Wear appropriate protective gloves, glasses, clothing, face shield, or mask.  
 : Wash protective equipment thoroughly after use.

First-aid measures : If in eyes: Rinse cautiously with water for several minutes.  
 Get medical treatment  
 : If on skins: Remove contaminated clothing and the substance.  
 Rinse cautiously with water. Immediately get medical treatment.



#### (2) Sulfuric acid

Human health hazard

Skin corrosion · Irritation : Category 1A

Serious eye damage · Eye irritation : Category 1

Specific target organ systemic toxicity (single exposure) : Category 1

Specific target organ systemic toxicity (repeated exposure)	: Category 1
Pictogram or symbol	 
Signal word	: Danger
Hazard statement	: Causes severe skin burns and eye damage. : Causes serious eye damage. : Causes damage to organs (respiratory organs) : Cause damage to organs (respiratory organs) through prolonged or repeated exposure.
Cautions	
Safety measures	: Do not breathe dust, mist, and vapor. : Do not eat, drink, or smoke when using this product. : Wear appropriate protective gloves, glasses, clothing, face shield, or mask. : Wash protective equipment thoroughly after use.
First-aid measures	: 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. Immediately get medical treatment. If in eyes: Rinse cautiously with water for several minutes. Get medical treatment : If on skins: Remove contaminated clothing and the substance. Rinse cautiously with water. Immediately get medical treatment. : Wash hands thoroughly after use.

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### [3] COMPOSITION/INFORMATION ON INGREDIENTS

#### (1) Sodium lauryl sulfate, water

Substance/Mixture	: Substance
Chemical name or commercial name	: Sodium n-dodecyl sulfate
Synonyms	: Sodium lauryl sulfate
Ingredients and composition	: Sodium lauryl sulfate, water solution. The content is not disclosed
Formula	: CH <sub>3</sub> (CH <sub>2</sub> ) <sub>10</sub> CH <sub>2</sub> OSO <sub>3</sub> Na
CAS-No.	: 151-21-3
TSCA Inventory	: Registered
EINECS	: 2057881

#### (2) Sulfuric acid

Substance/Mixture	: Substance
Chemical name or commercial name	: Sulfuric acid
Ingredients and composition	: Water solution contains 0.5mol/L sulfuric acid.
Formula	: H <sub>2</sub> SO <sub>4</sub>
CAS-No.	: 7664-93-9
TSCA Inventory	: Registered
EINECS	: 2316395
Dangerous and hazardous ingredients	: sulfuric acid

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### [4] FIRST AID MEASURES

#### (1) Sodium lauryl sulfate, water

Inhalation	: Remove the victim to fresh air. Blow nose and gargle
Skin contact	: Wash the affected areas under running water.
Eye contact	: Wash the affected areas under running water. Give the victim one or two glasses of water or saline and
Ingestion	: induce vomiting. Get medical treatment.

- (2) Sulfuric acid
- Inhalation : Remove the victim to fresh air, and keep him warm.
  - Skin contact : Wash the affected areas under running water.
  - Eye contact : Wash the affected areas under running water.
  - Ingestion : Give the victim one or two glasses of water or milk with egg white. Do not induce vomiting. Get medical treatment.
  - Anticipated acute and delayed symptoms. : If inhaled sulfuric acid mist, cause throat ache, cough, and shortness of breath.
  - : If contacted skin, cause redness, ache, blister, and burn.

#### 【5】 FIRE-FIGHTING MEASURES

- Extinguishing media : This product is noncombustible.
- Prohibited extinguishing media : None
- Particular fire fighting : Move containers from fire area if it can be done without risk, if not possible, apply water from a safe distance to cool and protect surrounding area.
- Protection for firefighters : Firefighters should wear protective equipment.

#### 【6】 ACCIDENTAL RELEASE MEASURES

##### (1) Sodium lauryl sulfate, water

- Cautions for personnel : Wear proper equipment and avoid contact with skin and inhalation of vapor.
- Cautions for environmental : Attention should be given not to cause damage to the environment by flowing of spillage to rivers.
- Removal measures : In case of the dilution of copious water, do not cause damage to the environment by untreated wastewater.
- : Absorb spill with paper or cloth.
- : Wash thoroughly with water

##### (2) Sulfuric acid

- Cautions for personnel : Wear proper equipment and avoid contact with skin and inhalation of vapor.
- Cautions for environmental : Attention should be given not to cause damage to the environment by flowing of spillage to rivers.
- Removal measures : In case of the dilution of copious water, do not cause damage to the environment by untreated wastewater.
- : Absorb spill with paper or cloth.
- : Wash thoroughly with water
- Prevention of second accident : Do not contact with organic substances or combustible substances.

#### 【7】 HANDLING AND STORAGE

##### Handling

- Engineering measures : Wear proper protective equipment not to contact with skin or inhale the vapor.
- Cautions for safety handling : Handle not to generate aerosol or vapor.
- : Use with an enclosed system or a local exhaust ventilation

##### Storage

- Adequate storage condition : Store in a dark, cool place and tightly closed.
- Safety adequate container materials : Glass, polyethylene, polypropylene

#### 【8】 EXPOSURE CONTROL/PERSONAL PROTECTION

##### (1) Sodium lauryl sulfate, water

- Engineering measures : Use only with adequate ventilation and in closed systems.
- Control parameters
- ACGIH(2009) : Not applicable
- Protective equipment
- Respiration protective equipment : Not necessary
- Hands protective equipment : Impervious protective gloves
- Eyes protective equipment : Safety goggles

##### (2) Sulfuric acid

- Engineering measures : Use only with adequate ventilation and in closed systems.
- Control parameters

ACGIH(2009)	: 0.2mg/m <sup>3</sup> (TLV-TWA)
Protective equipment	
Respiration protective equipment	: If necessary, wear a chemical cartridge respirator with acidic gas.
Hands protective equipment	: Impervious protective gloves
Eyes protective equipment	: Safety goggles

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## 【9】 PHYSICAL AND CHEMICAL PROPERTIES

(1) Sodium lauryl sulfate, water	
Appearance	: Liquid
Colour	: Colourless
Odor	: Odorless
pH	: 7.0-9.0
Boiling point	: Not Available
Melting point	: Not Available
Flash point	: Noncombustible
Specific gravity	: Approx. 1.0 g/mL
Solubility	: Water: Freely soluble

(2) Sulfuric acid	
Appearance	: Liquid
Colour	: Colourless
Odor	: Odorless
pH	: Strong acidity
Boiling point	: Approx. 100°C
Melting point	: Approx. -2°C
Flash point	: Noncombustible
vapor density	: 3.4
Specific gravity	: 1.030g/ml (20°C)
Solubility	: Water: Freely soluble

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## 【10】 STABILITY AND REACTIVITY

(1) Sodium lauryl sulfate, water	
Stability	: Stable under normal usage
Reactivity	: May react with strong oxidizing substances.
Incompatible conditions	: Light, heat
Incompatible materials	: Oxidizing substances
Hazardous decomposition products	: Toxic fumes of sulfur oxides (SO <sub>x</sub> ), carbon monoxide
(2) Sulfuric acid	
Stability	: Stable under normal usage
Reactivity	: May react with alkaline substances.
Incompatible conditions	: Light, heat
Incompatible material	: Alkaline substances
Hazardous decomposition products	: Sulfur oxides

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## 【11】 TOXICOLOGICAL INFORMATION

(1) Sodium lauryl sulfate, water	
Acute toxicity, Oral	Out of category
Acute toxicity, Dermal	Out of category
Inhalation (gas)	: Not possible to classify because of insufficient data
Inhalation (dust, mist)	: Not possible to classify because of insufficient data
	: If swallowed, may cause nausea, vomiting, abdominal pain.
	Rat oral LD <sub>50</sub> =1290mg/kg (as sodium lauryl sulfate)
	Rat intraperitoneal LD <sub>50</sub> =210mg/kg (as sodium lauryl sulfate)
Skin corrosiveness	: Out of category
Irritation to skin, eyes	: Causes serious eyes irritation.(Category 2B)
	Since cause moderate irritation to the eyes of rabbit, it was classified into category 2B.
Respiratory sensitization or skin sensitization	
Respiratory sensitization	: Not possible to classify because of insufficient data
Skin sensitization	: Not possible to classify because of insufficient data

- Mutagenecity : Out of category  
 Carcinogenic effects : Not possible to classify because of insufficient data  
 Effects on the reproductive system : Not possible to classify because of insufficient data  
 Specific target organ systemic toxicity(Single exposure) : Causes stimulation to respiratory organs.(Category 3)  
 Based on descriptions that respiratory tract irritation is seen by aerosol exposure in a mouse, a rabbit, and a guinea pig and that respiratory tract irritation is seen by short term exposure, it was classified into category 3.  
 Specific target organ systemic toxicity(repeated exposure) : May cause damage to organs(kidney) through prolonged or repeated exposure(category 2)  
 It is written that there was vacuolar degeneration of kidney tubular epithelial cells, and atrophy of kidney glomerulus. Since these symptoms were found within the scope of the guidance value of Category 2, it was classified into category 2(kidney).  
 Aspiration hazard : Not possible to classify because of insufficient data

## (2) Sulfuric acid

- Acute toxicity, Oral : Out of category  
 Acute toxicity, Dermal : Not possible to classify because of insufficient data  
 Inhalation (vapor) : Not possible to classify because of insufficient data  
 Inhalation (dust, mist) : Out of category  
 Rat oral LD50=44580mg/kg (as calculated value)  
 Rat inhalation LC50=7230ppm/l/4H (as calculated value)  
 Skin corrosiveness : Causes severe skin burns. (Category 1A)  
 Irritation to skin, eyes : Causes serious eye damage. (Category 1)  
 In case of human accident of sulfuric acid, severe eye  
 Respiratory sensitization or skin sensitization  
 Respiratory sensitization : Not possible to classify because of insufficient data  
 Skin sensitization : Out of category  
 Sulfuric acid has no human skin sensitization.  
 Mutagenecity : Not possible to classify because of insufficient data  
 Carcinogenic effects : Not possible to classify because of insufficient data  
 Effects on the reproductive system : Out of category  
 Specific target organ systemic toxicity(Single exposure) : Cause damage to organs (respiratory organs) (category 1)  
 Specific target organ systemic toxicity(repeated exposure) : Cause damage to organs (respiratory organs) through prolonged or repeated exposure. (category 1)  
 Aspiration hazard : Not possible to classify because of insufficient data

**【12】 ECOLOGICAL INFORMATION**

## (1) Sodium lauryl sulfate, water

- Ecotoxicity  
 Fish toxicity  
 Acute aquatic toxicity : Category 3 American Lobster LC50=0.72mg/L/96H  
 Chronic aquatic toxicity : Not possible to classify because of insufficient data

## (2) Sulfuric acid

- Ecotoxicity  
 Fish toxicity  
 Acute aquatic toxicity : Not possible to classify because of insufficient data  
 Chronic aquatic toxicity : Not possible to classify because of insufficient data

**【13】 DISPOSAL CONSIDERATIONS**

## (1) Sodium lauryl sulfate, water

- Residual disposal : Dilute with copious water and adjust the pH of the solution, after flush in drains.

Containers : Or entrust approved waste disposal companies with the disposal  
 : In case of disposal of empty bottles, dispose bottles after removing the content thoroughly.

(2) Sulfuric acid

Residual disposal : Add the chemical gradually in alkaline water solution like  
 : calcium hydroxide, sodium carbonate to neutralized and  
 Containers : Or entrust approved waste disposal companies with the disposal  
 : In case of disposal of empty bottles, dispose bottles after removing the content thoroughly.

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**【14】 TRANSPORT INFORMATION**

UN class : Not applicable  
 UN-Number: : Not applicable

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**【15】 REGULATORY INFORMATION**

Ensure this material in compliance with federal requirements and ensure conformity to local regulations.

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**【16】 OTHER INFORMATION**

References : Encyclopaedia Chemica, Kyoritsu Shuppan Co., Ltd.

The information contained herein is based on several references and the present state of our knowledge. However, the SDS does not always cover all information about the product, handle the product carefully. The information is intended to ordinary usage, in case of particular handlings, conduct appropriate safety measurements. The information herein is only provision of information , and it does not represent a guarantee the properties of the product