

## SAFETY DATA SHEET

According to JIS Z 7253:2019  
Issue Date 10-Feb-2025  
Revision Number 1

## Section 1: PRODUCT AND COMPANY IDENTIFICATION

Product Name	LabAssay™ ALT (GPT)
Product Code	293-97501

**Supplier** FUJIFILM Wako Pure Chemical Corporation  
1-2 Doshomachi 3-Chome, Chuo-ku, Osaka 540-8605, Japan  
Phone: +81-6-6203-3741  
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**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

Skin corrosion/irritation

Category 2

Serious eye damage/eye irritation

Category 2A

Skin sensitization

Category 1

Specific target organ toxicity (repeated exposure)

Category 1

Category 1 thyroid gland

Acute aquatic toxicity

Category 3

Chronic aquatic toxicity

Category 3

## Pictograms



Signal word

Danger

## Hazard statements

H315 - Causes skin irritation

H319 - Causes serious eye irritation

H317 - May cause an allergic skin reaction

H402 - Harmful to aquatic life

H412 - Harmful to aquatic life with long lasting effects

H372 - Causes damage to the following organs through prolonged or repeated exposure: thyroid gland

## Precautionary statements-(Prevention)

- 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 breathe dust/fume/gas/mist/vapors/spray
- Do not eat, drink or smoke when using this product
- Avoid release to the environment

## Precautionary statements-(Response)

- Get medical advice/attention if you feel unwell

- 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
- Take off contaminated clothing and wash before reuse
- If skin irritation or rash occurs: Get medical advice/attention

**Precautionary statements-(Storage)**

- Not applicable

**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
Substrate-Enzyme Solution	-	N/A	N/A	N/A	N/A-29-9751
α-KG Solution	-	N/A	N/A	N/A	N/A-29-9752
ALT Standard	-	N/A	N/A	N/A	N/A-29-9753
Buffer	-	N/A	N/A	N/A	N/A-29-9754
Stop Solution	-	N/A	N/A	N/A	N/A-29-9755

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

**Substances Remarks:**

This Product includes the following componets. Potassium Chloride 20 - 30 %, Sodium thiocyanate 20 - 30 %, Tris(hydroxymethyl)aminomethane 10 - 20 %, 2-Methyl-2H-isothiazol-3-one <1.0 %

### 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 (CO<sub>2</sub>), 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 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**

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**

No information available

**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**

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**

Protective mask

**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	
None under normal processing	
Conditions to avoid	
Extremes of temperature and direct sunlight	
Incompatible materials	
No information available	
Hazardous decomposition products	
Carbon monoxide (CO), Carbon dioxide (CO <sub>2</sub> ), Nitrogen oxides (NO <sub>x</sub> ), Sulfur oxides (SO <sub>x</sub> )	

## Section 11: TOXICOLOGICAL INFORMATION

\*NITE: National Institute of Technology and Evaluation (JAPAN)  
[https://www.chem-info.nite.go.jp/en/chem/chrip/chrip\\_search/srhInput](https://www.chem-info.nite.go.jp/en/chem/chrip/chrip_search/srhInput)

### Acute toxicity

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Potassium Chloride	2600 mg/kg ( Rat )	N/A	N/A
Sodium thiocyanate	764 mg/kg ( Rat )	N/A	N/A
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
Sodium thiocyanate	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
Sodium thiocyanate	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
Sodium thiocyanate	Based on the NITE GHS classification results.

**Serious eye damage/ irritation**

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

**Respiratory or skin sensitization**

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

**Reproductive cell mutagenicity**

Chemical Name	germ cell mutagenicity source information
Sodium thiocyanate	Based on the NITE GHS classification results.

**Carcinogenicity**

Chemical Name	Carcinogenicity source information
Sodium thiocyanate	Based on the NITE GHS classification results.

**Reproductive toxicity**

Chemical Name	Reproductive toxicity source information
Sodium thiocyanate	Based on the NITE GHS classification results.

**STOT-single exposure**

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

**STOT-repeated exposure**

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

**Aspiration hazard**

Chemical Name	Aspiration Hazard source information
Sodium thiocyanate	Based on the NITE GHS classification results.

## Section 12: ECOLOGICAL INFORMATION

\*NITE: National Institute of Technology and Evaluation (JAPAN)  
[https://www.chem-info.nite.go.jp/en/chem/chrip/chrip\\_search/srhInput](https://www.chem-info.nite.go.jp/en/chem/chrip/chrip_search/srhInput)

**Ecotoxicity**

Chemical Name	Algae/aquatic plants	Fish	Crustacea
Potassium Chloride	EC50 : <i>Desmodesmus subspicatus</i> 2500 mg/L 72 h	LC50 : <i>Lepomis macrochirus</i> 1060 mg/L 96 h LC50 : <i>Pimephales promelas</i> 750 - 1020mg/L 96 h	EC50 : <i>Daphnia magna</i> 825 mg/L 48 h EC50 : <i>Daphnia magna</i> 83 mg/L 48 h
Sodium thiocyanate	N/A	LC50 : <i>Oncorhynchus mykiss</i> 83 mg/L 96 h	N/A
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
Sodium thiocyanate	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	Not regulated
UN number	-
Proper shipping name:	
UN classification	
Subsidiary hazard class	
Packing group	
Marine pollutant	Not applicable
IMDG	Not regulated
UN number	-
Proper shipping name:	
UN classification	
Subsidiary hazard class	
Packing group	
Marine pollutant (Sea)	Not applicable
Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	No information available
IATA	Not regulated
UN number	-
Proper shipping name:	
UN classification	
Subsidiary hazard class	
Packing group	
Environmentally Hazardous Substance	Not applicable

### Section 15: REGULATORY INFORMATION

#### Japanese regulations

Fire Service Act	Not applicable
Poisonous and Deleterious Substances Control Law	Not applicable
Industrial Safety and Health Act	Chemical Substances Hazardous to Skin, etc.(Regulations Article 594-2 Paragraph 1)
Industrial Safety and Health Act (2025-)	【2025.4.1~】 Harmful Substances Whose Names Are to be Indicated on the Label (Law Art.57)
	【2025.4.1~】 Notifiable Substances (Law Art.57-2)
Regulations for the carriage and storage of dangerous goods in ship	Not applicable
Civil Aeronautics Law	Not applicable
Pollutant Release and Transfer Register Law (2023.4.1-)	Not applicable

#### Industrial Safety and Health Law

Law Name	Chemical Name in Regulation	Weight %	
Notifiable Substances (Law Art.57-2)	Sodium thiocyanate	20 - 30	2025/4/1

**Section 16: OTHER INFORMATION****Key literature references and sources for data etc.**

NITE: National Institute of Technology and Evaluation (JAPAN)  
[https://www.chem-info.nite.go.jp/en/chem/chrip/chrip\\_search/srhInput](https://www.chem-info.nite.go.jp/en/chem/chrip/chrip_search/srhInput)  
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**