SAFETY DATA SHEET

According to JIS Z 7253:2012
Revision Date 05-Jul-2018
Version 3

Section 1: PRODUCT AND COMPANY IDENTIFICATION

Product name	LabAssay™ Creatinine
Product code	290-65901
CAS No	N/A

Manufacturer
FUJIFILM Wako Pure Chemical Corporation
1-2 Doshomachi 3-Chome
Chuo-ku, Osaka 540-8605, Japan
Phone: +81-6-6203-3741
Fax: +81-6-6203-5964

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 and restrictions on use
For research purposes

Announcement of company name change
Company name has changed since April 1, 2018. Former name was ”Wako Pure Chemical Industries, Ltd.”

Section 2: HAZARDS IDENTIFICATION

GHS classification
Classification of the substance or mixture

Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 1
Skin sensitization	Category 1
Specific target organ toxicity (single exposure)	Category 2

Category 2 respiratory system

Pictograms

Signal word Danger

Hazard statements
H315 - Causes skin irritation
H318 - Causes serious eye damage
H317 - May cause an allergic skin reaction
H371 - May cause damage to the following organs: respiratory system

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

Precautionary statements-(Response)

- IF exposed or if you feel unwell: 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.
- Immediately call a POISON CENTER or doctor/physician
- 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)

- Store locked up.

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 No.
Deproteinizing Reagent	-	N/A	N/A	N/A	N/A-29-6591
Picric Acid Reagent	-	N/A	N/A	N/A	N/A-29-6592
0.75mol/l Sodium Hydroxide	-	N/A	N/A	N/A	N/A-29-6593
Standard Solution	-	N/A	N/A	N/A	N/A-29-6594

Impurities and/or Additives： Not applicable

Hazardous Component Phosphoric Acid <1%, Sulfuric Acid 0.2%, Picric Acid 0.6%, Sodium Hydroxide 3%

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.

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

Special extinguishing method

No information available

Specific hazards arising from the chemical product

Thermal decomposition can lead to release of irritating and toxic gases and vapors.

Protection of 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

Absorb dry sand, earth, sawdust and the waste. Collect empty container that can be sealed.

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

Use personal protective equipment as required.

Storage

Safe storage conditions

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

Safe packaging material Polyethylene, Glass

Incompatible substances Strong 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 hand- and eye-wash facility. And display their position clearly.

Exposure limits

Chemical Name	JSOH (Japan)	ISHL (Japan)	ACGIH
Sodium tungstate(VI) dihydrate 10213-10-2	N/A	N/A	STEL: 3 mg/m³ W TWA: 1 mg/m³ W

Sodium Hydroxide 1310-73-2	2mg/m³	N/A	Ceiling: 2 mg/m³
Phosphoric Acid 7664-38-2	1mg/m³	N/A	STEL: 3 mg/m³ TWA: 1 mg/m³
Sulfuric Acid 7664-93-9	1mg/m³	N/A	TWA 0.2mg/m³
2,4,6-Trinitrophenol 88-89-1	N/A	N/A	TWA: 0.1 mg/m³

Personal protective equipment

Respiratory protection Protective mask
Hand protection Protection gloves
Eye protection protective eyeglasses or chemical safety goggles
Skin and body protection Long-sleeved work clothes

General hygiene considerations

Handle in accordance with good industrial hygiene and safety practice.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

Form

Appearance Kit (Set of mixtures)
Odor No data available
pH No data available
Melting point/freezing point No data available
Boiling point, initial boiling point and boiling range No data available
Flash point 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
Vapour pressure No data available
Vapour density No data available
Specific Gravity / Relative density No data available
Solubilities water : soluble .
n-Octanol/water partition coefficient:(log Pow) No data available
Auto-ignition temperature: No data available
Decomposition temperature: No data available
Viscosity (coefficient of viscosity) No data available
Dynamic viscosity No data available

Section 10: STABILITY AND REACTIVITY

Stability

Stability Stable under recommended storage conditions.
Reactivity No data available

Hazardous reactions

None under normal processing

Conditions to avoid

Extremes of temperature and direct sunlight

Incompatible materials

Strong oxidizing agents

Hazardous decomposition products

No information available

Section 11: TOXICOLOGICAL INFORMATION

Acute toxicity

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Sodium Hydroxide	325 mg/kg (Rabbit)	N/A	N/A
2,4,6-Trinitrophenol	200 mg/kg (rat)	N/A	N/A

Chemical Name	Acute toxicity -oral- source information	Acute toxicity -dermal- source information	Acute toxicity -inhalation gas- source information
Sodium Hydroxide	Based on the NITE GHS classification results.	Based on the NITE GHS classification results.	Based on the NITE GHS classification results.
Phosphoric Acid	LD50 (orl,rat)：1530mg/kg(RTECS, 2006、IUCLID, 2000、HSDB, 2006)、LD50 (orl,rat)：1250mg/kg(RTECS, 2006)	LD50(skn,rabbit):2740mg/kg(RTECS, 2006、IUCLID, 2000、HSDB, 2006)	Based on the NITE GHS classification results.
Sulfuric Acid	LD50 (orl,rat)：2140mg/kg(SIDS, 2001).	Based on the NITE GHS classification results.	Based on the NITE GHS classification results.
2,4,6-Trinitrophenol	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 Hydroxide	Based on the NITE GHS classification results.	Based on the NITE GHS classification results.	Based on the NITE GHS classification results.
Phosphoric Acid	Based on the NITE GHS classification results.	Based on the NITE GHS classification results.	Based on the NITE GHS classification results.
Sulfuric Acid	Based on the NITE GHS classification results.	LC50(ihl,rat): 0.375mg/L/4h, LC50(ihl,rat): 347ppm/h(:0.347mg/L/4h)(SIDS, 2001).	LC50(ihl,rat): 0.375mg/L/4h)：347ppm/h (4 hours equivalent：0.347mg/L) (SIDS, 2001).
2,4,6-Trinitrophenol	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 Hydroxide	Based on the NITE GHS classification results.
Phosphoric Acid	Based on the NITE GHS classification results.
Sulfuric Acid	Based on the NITE GHS classification results.
2,4,6-Trinitrophenol	Based on the NITE GHS classification results.

Serious eye damage/ irritation

Chemical Name	Serious eye damage source information
Sodium Hydroxide	Based on the NITE GHS classification results.
Phosphoric Acid	Based on the NITE GHS classification results.
Sulfuric Acid	Based on the NITE GHS classification results.
2,4,6-Trinitrophenol	Based on the NITE GHS classification results.

Respiratory or skin sensitization

Chemical Name	Respiratory, Skin sensitization source information
Sodium Hydroxide	Based on the NITE GHS classification results.
Phosphoric Acid	Based on the NITE GHS classification results.
Sulfuric Acid	Based on the NITE GHS classification results.
2,4,6-Trinitrophenol	Based on the NITE GHS classification results.

Reproductive cell mutagenicity

Chemical Name	Mutagenic source information
Sodium Hydroxide	Based on the NITE GHS classification results.
Phosphoric Acid	Based on the NITE GHS classification results.
Sulfuric Acid	Based on the NITE GHS classification results.
2,4,6-Trinitrophenol	Based on the NITE GHS classification results.

Carcinogenicity

Chemical Name	Carcinogenicity source information
Sodium Hydroxide	Based on the NITE GHS classification results.
Phosphoric Acid	Based on the NITE GHS classification results.
Sulfuric Acid	Based on the NITE GHS classification results.
2,4,6-Trinitrophenol	Based on the NITE GHS classification results.

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

Reproductive toxicity

Chemical Name	Reproductive toxicity source information
Sodium Hydroxide	Based on the NITE GHS classification results.
Phosphoric Acid	Based on the NITE GHS classification results.
Sulfuric Acid	Based on the NITE GHS classification results.
2,4,6-Trinitrophenol	Based on the NITE GHS classification results.

STOT-single exposure

Chemical Name	STOT -single exposure- source information
Sodium Hydroxide	Based on the NITE GHS classification results.
Phosphoric Acid	Based on the NITE GHS classification results.
Sulfuric Acid	Based on the NITE GHS classification results.
2,4,6-Trinitrophenol	Based on the NITE GHS classification results.

STOT-repeated exposure

Chemical Name	STOT -repeated exposure- source information
Sodium Hydroxide	Based on the NITE GHS classification results.
Phosphoric Acid	Based on the NITE GHS classification results.
Sulfuric Acid	Based on the NITE GHS classification results.
2,4,6-Trinitrophenol	Based on the NITE GHS classification results.

Aspiration hazard

Chemical Name	Aspiration Hazard source information
Sodium Hydroxide	Based on the NITE GHS classification results.
Phosphoric Acid	Based on the NITE GHS classification results.
Sulfuric Acid	Based on the NITE GHS classification results.
2,4,6-Trinitrophenol	Based on the NITE GHS classification results.

Section 12: ECOLOGICAL INFORMATION

Ecotoxicity

Chemical Name	Algae/aquatic plants	Fish	Crustacea
Sodium Hydroxide	*N/A*	*N/A*	*LC50: Ceriodaphnia quadrangula 40 mg/L 48 h*
2,4,6-Trinitrophenol	*N/A*	*N/A*	*LC50:Daphnia magna 85 mg/L 48h*

Other data

Chemical Name	Aquatic toxicity -Acute- source information	Aquatic toxicity -Chronic- source information
Sodium Hydroxide	Based on the NITE GHS Classification results.	Based on the NITE GHS classification results.
Phosphoric Acid	Based on the NITE GHS classification results.	Based on the NITE GHS classification results.
Sulfuric Acid	LC50(Lepomis macrochirus):16-28mg/L/96h(SIDS、2003).	Based on the NITE GHS classification results.
2,4,6-Trinitrophenol	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	UN1760
Proper shipping name:	Corrosive liquid, n.o.s. (Diluted Sodium hydroxide Solution and Diluted Sulfuric acid Solution)
UN classfication	8
Subsidiary hazard class	
Packing group	III
Marine pollutant	Not applicable

IMDG

UN number	UN1760
Proper shipping name:	Corrosive liquid, n.o.s. (Diluted Sodium hydroxide Solution and Diluted Sulfuric acid Solution)
UN classfication	8
Subsidiary hazard class	
Packing group	III
Marine pollutant (Sea)	Not applicable
Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	No information available

IATA

UN number	UN1760
Proper shipping name:	Corrosive liquid, n.o.s. (Diluted Sodium hydroxide Solution and Diluted Sulfuric acid Solution)
UN classfication	8
Subsidiary hazard class	
Packing group	III
Environmentally Hazardous Substance	Not applicable

Section 15: REGULATORY INFORMATION

International Inventories

EINECS/ELINCS	Listed
TSCA	Listed

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, Para.1,

	Enforcement Order Art.18) Notifiable Substances (Law Art.57-2, Enforcement Oder Art.18-2 Attached Table No.9)No.319,450
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 Nortification for Air Transportation of Explosives etc., Attached Table 1)
Marine Pollution Prevention Law	Enforcement ordinance Appendix No. 1 Noxious liquid substance Category Y
Pollutant Release and Transfer Register Law	Not applicable
Water Pollution Control Act	Specified substances(Law Art.2 Para.4, Enforcement Order Art.3-3)
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

Disclaimer

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 acoording to JIS Z7252(2014). *JIS: Japanese Industrial Standards

Product information	You might get a product which indicates a former company name, during the period of transition.

End of Safety Data Sheet