# SAFETY DATA SHEET

## QuickGene DNA Tissue Kit L (DT-L)

| Name of substance | Classification acc. to GHS | Pictograms |
|---|---|---|
| Proteinase K EDT-01 | Skin Irrit. 1: H317<br>Resp. Sens. 1: H334 |  |
| Lysis Buffer LDT-01 | Acute Tox. 4: H302<br>Skin Irrit. 2: H315<br>Eye Irrit. 2: H319 |  |
| Tissue Lysis Buffer MDT-01 | Skin Irrit. 2: H315<br>Eye Irrit. 2: H319<br>STOT SE 2: H371<br>Aquatic Acute 2: H401 |  |
| Wash Buffer WDT-01 | | |
| Elution Buffer CDT-01 | | |


KURABO INDUSTRIES LTD.

Bio-Medical Department

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# Safety Data Sheet

## 1. Identification of the substance/mixture and of the company/undertaking

**Product identifier:**

**Product name:** Protease

**Product code:** EDT-01

**SDS NO:** EDT01_JPE_1.1

**Details of the supplier of the safety data sheet**

**Manufacturer/Supplier:** KURABO INDUSTRIES LTD.

**Address:** Advanced Technology Center, 14-30 Shimokida-cho, Neyagawa, Osaka, 572-0823 JAPAN

**Division:** Bio-Medical department

**Telephone number:** +81-72-820-3079

**FAX:** +81-72-820-3095

**Relevant identified uses of the substance or mixture and uses advised against**

Relevant identified uses of the product: Reagents for automated nucleic acid isolation system

Uses advised against: For research use only

## 2. Hazards identification

**GHS classification and label elements of the product**

Classification of the substance or mixture

**HEALTH HAZARDS** Respiratory sensitization: Category 1

Skin corrosion/irritation: Category 1

(Note) GHS classification without description: Not applicable/Out of classification/Not classifiable

**Label elements**

**Signal word:** Danger

**HAZARD STATEMENT**

H317 May cause an allergic skin reaction.

H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.

**PRECAUTIONARY STATEMENT**

**Prevention**

P280 Wear protective gloves.

P280 Wear eye protection/face protection.

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.

P272 Contaminated work clothing should not be allowed out of the workplace.

P284 Wear respiratory protection.

**Response**

P302 + P352 IF ON SKIN: Was P312 Call a POISON CENTER or doctor/physician if you feel unwell.

P304 + P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P333 + P313 If skin irritation or rash occurs: Get medical advice/attention.

P342 + P311 If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician.

P362 + P364 Take off contaminated clothing and wash it before reuse.

**Disposal**

P501 Dispose of contents/container in accordance with local/national regulation.

## 3. Composition/information on ingredients

**Mixture/Substance selection** Mixture

| Ingredient name | Content(%) | CAS No. |
|---|---|---|
| Proteinase K | >= 1 - < 10 | 39450-01-6 |

Note : The figures shown above are not the specifications of the product.

## 4. First-aid measures

**Descriptions of first-aid measures**

**IF INHALED**
Remove person to fresh air and keep comfortable for breathing.
If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician.

**IF ON SKIN(or hair)**
Wash with plenty of soap and water.
If skin irritation occurs: Get medical advice/attention.

**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 SWALLOWED**
Rinse mouth. Do not induce vomiting.
Do not give milk or alcoholic drinks.
If you are unconscious, never give anything by mouth.
Call a POISON CENTER or doctor/physician if you feel unwell.

**Most important symptoms and effects, both acute and delayed**

May cause allergy, asthma, or breathing difficulty if inhaled.

## 5. Fire-fighting measures

**Extinguishing media**

**Suitable extinguishing media**: Use appropriate extinguishing media suitable for surrounding facilities.

**Unsuitable extinguishing media**: water jet

**Hazardous combustion products**: Harmful combustion products are not known.

**Protection of firefighters**: Wear adequate personal protective equipment

## 6. Accidental release measures

**Personnel precautions, protective equipment and emergency procedures**

Ventilate area after material pick up is complete.
Wear an air-supplied respirator for a poor/non ventilated spill.
Refer to the protective measures described in items 7 and 8.

**Environmental precautions**

Keep away from drains, surface and ground water.
Stop leak and spill after checking safety.
If the outflow is remarkable and can not be recovered, it must be reported to the local government.

**Methods and materials for containment and cleaning up**

Absorb with an inert absorbent (eg, sand, silica gel, acidic binder, universal binder, sawdust).
Place in an appropriate container, discard it, and leave it closed.

## 7. Handling and storage

**Precautions for safe handling**

Preventive measures

(Exposure Control for handling personnel)

Avoid breathing dust/fume.

Safety Measures/Incompatibility

Use only outdoors or in a well-ventilated area.
Smoking, eating and drinking are prohibited in the work area.
Wear protective gloves.
Wear eye protection/face protection.

Conditions for safe storage, including any incompatibilities

Recommendation for storage

Store in a well-ventilated place. Keep container tightly closed.
Keep cool. Protect from sunlight.
Storage temperature upper limit: 28℃

Contact avoidance

Strong bases, strong oxidants, nitric acid, peroxides

## 8. Exposure controls/personal protection

**Control parameters**

| Ingredient name | CAS No. | Indicator (Exposure form) | Source |
|---|---|---|---|
| Proteinase K | 39450-01-6 | 0.00006 mg/m3 | Roche Industrial Hygiene Committee (RIHC) |

**Exposure controls**

Appropriate engineering controls

General ventilation.

Individual protection measures

Respiratory protection

In case of inadequate ventilation wear respiratory protection.

Hand protection

Wear protective gloves.

Chemical protection gloves are suitable, which are tested according to EN 374.

Check leak-tightness/impermeability prior to use.

In the case of wanting to use the gloves again, clean them before taking off and air them well.

For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

Eye protection

Wear safety glasses with side-shields or chemical safety goggle.

Skin and body protection

Wear protective clothing.

Safety and Health measures

Take off contaminated clothing and wash it before reuse.

Wash hands thoroughly after handling.

## 9. Physical and Chemical Properties

**Information on basic physical and chemical properties**

| | | |
|---|---|---|
| Physical properties | | |
| | Appearance: | liquid |
| | Color: | colourless, clear |
| | Odor: | odourless |
| | pH | 7.5 |
| density | | 1.126 g/cm3 |
| Solubility | | |
| | Solubility in water: | Completely soluble |

## 10. Stability and Reactivity

**Chemical stability** Stable under normal storage/handling conditions.

**Conditions to avoid** No data

**Incompatible materials** Strong base, Strong oxidizing agent, nitric acid, Peroxide

## 11. Toxicological Information

**Information on toxicological effects**

No Acute toxicity data available

Skin corrosion/irritation

Shall not be classified as corrosive/irritant to skin.

Serious eye damage/eye irritation

Shall not be classified as seriously damaging to the eye or eye irritant.

Steam can irritate the eyes, the respiratory system and the skin.

Respiratory or skin sensitisation

May cause irritation / dermatitis on the skin.

May cause an allergic skin reaction.

Respiratory sensitisation

May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Germ cell mutagenicity

Classification could not be established because:

Data are lacking, inconclusive, or conclusive but not sufficient for classification.

Carcinogenicity

Classification could not be established because:

Data are lacking, inconclusive, or conclusive but not sufficient for classification.

Reproductive toxicity

Classification could not be established because:

Data are lacking, inconclusive, or conclusive but not sufficient for classification.

Specific target organ toxicity – single exposure
Classification could not be established because:
Data are lacking, inconclusive, or conclusive but not sufficient for classification.
Specific target organ toxicity – repeated exposure
Classification could not be established because:
Data are lacking, inconclusive, or conclusive but not sufficient for classification.
Aspiration hazard
Classification could not be established because:
Data are lacking, inconclusive, or conclusive but not sufficient for classification.

## 12. Ecological Information

| | |
|---|---|
| **Ecotoxicity** | Data are not available. |
| **Residuality / degradability** | Data are not available. |
| **Bioaccumulation** | Data are not available. |
| **Mobilityinsoil** | It is not considered to adsorb to the soil |
| **Hazard to the ozone layer** | Not applicable |
| **Otherhazardous effects** | Data are not available. |

## 13. Disposal considerations

**Waste treatment methods**

**Residual waste**

Do not contaminate ponds, waterways, or grooves with chemicals or used containers.
We consign to an authorized waste disposal contractor.
If you obey local regulations, it can be disposed of as wastewater.

**Contaminated containers and packaging**

Empty the remaining containers
Dispose of in the same way as containers containing products.
Empty containers shall be consigned to a licensed waste disposer for recycling or disposal.
Do not reuse empty containers.

## 14. Transport Information

**Marine transportation is regulated by IMDGCode.Air transportation is regulated by IATADangerousGoodsRegulations.**

| | |
|---|---|
| **IMDG** | Not regulated as dangerous goods. |
| **IATA** | Not regulated as dangerous goods. |
| **UN No, UN CLASS** | not subject to transport regulations |

**Transport in bulk according to Annex II of MARPOL and the IBC Code**

The cargo is not intended to be carried in bulk.

## 15. Regulatory Information

**Law concerning the Examination and Regulation of Manufacture etc. of Chemical Substances**

| | |
|---|---|
| Class 1 Specified Chemical Substance: | Not regulated. |
| Class 2 Specified Chemical Substance: | Not regulated. |
| Type 1 Monitoring Chemical Substance: | Not regulated. |
| Type 2 Monitoring Chemical Substance: | Not regulated. |
| Type 3 Monitoring Chemical Substance: | Not regulated. |

**Industrial Safety and Health Law**

| | |
|---|---|
| Dangerous Substances Flammable: | Not regulated. |
| Dangerous Substances Flammable Gases: | Not regulated. |
| Dangerous Substances Oxidizing: | Not regulated. |
| Dangerous Substances Explosives: | Not regulated. |
| Dangerous Substances Ignitable: | Not regulated. |
| Harmful Substances Carcinogen: | Not regulated. |
| Class 1 Designated Chemical Substances: | Not regulated. |
| Class 2 Designated Chemical Substances: | Not regulated. |
| Class 3 Designated Chemical Substances: | Not regulated. |
| Class 1 Organic Solvents Preparations: | Not regulated. |
| Class 2 Organic Solvents Preparations: | Not regulated. |
| Class 3 Organic Solvents Preparations: | Not regulated. |
| Notifiable Substance: | Not regulated. |
| Labeling Requirements: | Not regulated. |

| | |
|---|---|
| Others: | Not regulated. |
| **Poisonous and Deleterious Substances Control Law** | |
| Specified Poisonous Substance – Main Law: | Not regulated. |
| Specified Poisonous Substance – Cabinet Order: | Not regulated. |
| Poisonous Substances – Main Law: | Not regulated. |
| Poisonous Substances – Cabinet Order: | Not regulated. |
| Deleterious Substances – Main Law: | Not regulated. |
| Deleterious Substances – Cabinet Order: | Not regulated. |
| Enforcement Order Article 32-2: | Not regulated. |
| Enforcement Order Article 32-3: | Not regulated. |
| Not Considered Poisonous: | Not regulated. |
| Not Considered Deleterious: | Not regulated. |
| Cabinet Order, Preparations: | Not regulated. |
| **Fire Service Law** | |
| Class 1 Oxidizing Solids: | Not regulated. |
| Class 2 Flammable Solids: | Not regulated. |
| Class 3 Spontaneous combustibility and | Not regulated. |
| Water-reactivity Substances: | Not regulated. |
| Class 4 Flammable Liquids: | Not regulated. |
| Class 5 Self-Reactive Substances: | Not regulated. |
| Class 6 Oxidizing Liquids: | Not regulated. |
| Designated Flammable Substances: | Not regulated. |
| Storage Reporting Substance: | Not regulated. |
| **Japan PRTR** | |
| Specific Class 1 Designated Substance: | Not regulated. |
| Class 1 Designated Substance: | Not regulated. |
| Class 2 Designated Substance: | Not regulated. |
| **Ship Safety Law** | Not regulated. |
| **Civil Aeronautics law** | Not regulated. |
| **Japan Marine Pollution Prevention Law** | |
| Bulk transport | Hazardous liquid substances (Z class) |
| Transport of goods | Not applicable to marine pollutants |
| **High Pressure Gas Safety law** | Not regulated. |
| **Gun Powder Control Law** | Not regulated. |

## 16. Other information

**GHS classification and labelling**

Skin Irrit. 1: H317 May cause an allergic skin reaction.

Resp. Sens. 1: H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled

**General Disclaimer**

This information contained in this data sheet represents the best information currently available to us. However, no warranty is made with respect to its completeness and we assume no liability resulting from its use. It are advised to make their own tests to determinate the safety and suitability of each such product or combination for their own purposes.

Date of issue 6/19/2019

# Safety Data Sheet

## 1. Identification of the substance/mixture and of the company/undertaking

**Product identifier:**

**Product name:** Lysis Buffer

**Product code:** LDT-01

**SDS NO:** LDT01_JPE_1.1

**Details of the supplier of the safety data sheet**

**Manufacturer/Supplier:** KURABO INDUSTRIES LTD.

**Address:** Advanced Technology Center, 14-30 Shimokida-cho, Neyagawa, Osaka, 572-0823 JAPAN

**Division:** Bio-Medical department

**Telephone number:** +81-72-820-3079

**FAX:** +81-72-820-3095

**Relevant identified uses of the substance or mixture and uses advised against**

Relevant identified uses of the product: Reagents for automated nucleic acid isolation system

Uses advised against: For research use only

## 2. Hazards identification

**GHS classification and label elements of the product**

Classification of the substance or mixture

**HEALTH HAZARDS** Acute toxicity Oral: Category 4
Skin corrosion/irritation: Category 2
Serious eye damage/eye irritation: Category 2

(Note) GHS classification without description: Not applicable/Out of classification/Not classifiable

**Label elements**

**Signal word:** Warning

**HAZARD STATEMENT**

H302 Harmful if swallowed

H315 Causes skin irritation

H319 Causes serious eye irritation

**PRECAUTIONARY STATEMENT**

**Prevention**

P264 Wash contaminated parts thoroughly after handling.

P280 Wear protective gloves.

P280 Wear eye protection/face protection.

P270 Do not eat, drink or smoke when using this product.

**Response**

P302 + P352 IF ON SKIN: Wash with plenty of soap and water.

P332 + P313 If skin irritation occurs: Get medical advice/attention.

P362 + P364 Take off contaminated clothing and wash it before reuse.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P337 + P313 If eye irritation persists: Get medical advice/attention.

P330 Rinse mouth.

P301 + P312 IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.

**Disposal**

P501 Dispose of contents/container in accordance with local/national regulation.

## 3. Composition/information on ingredients

**Mixture/Substance selection** Mixture

| Ingredient name | Content(%) | CAS No. |
|---|---|---|
| Guanidine hyrochloride | 40-60 | 50-01-1 |
| polyoxyethylene sorbitan fatty acid ester | 10-20 | - |
| hydrochloride salts of aminoalcohol | 1-5 | - |
| Water | Balance | 7732-18-5 |

Note : The figures shown above are not the specifications of the product.
Generally chemical substances greater than 1% of the total are listed.

## 4. First-aid measures

**Descriptions of first-aid measures** Rescuers should wear proper personal protective equipment suitable for situation.

**IF INHALED** Remove person to fresh air and keep comfortable for breathing.
Call a POISON CENTER or doctor/physician if you feel unwell.

**IF ON SKIN(or hair)** Remove contaminated clothing. Wash with plenty of soap and water.
If skin irritation occurs: Get medical advice/attention.

**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 SWALLOWED** Rinse mouth.
Call a POISON CENTER or doctor/physician if you feel unwell.

## 5. Fire-fighting measures

**Extinguishing media**

**Suitable extinguishing media** Carbon dioxide, dry chemical and protein based foam.

**Extinguishing media to avoid** None.

**Special fire fighting** Keep personnel removed from and upwind of fire. Water runoff can damage the environment.

**Procedures** Dike and collect water used to fight fire Evacuate area and fight fire from a safe distance.

**Protection of fire-fighters** Wear adequate personal protective equipment.

## 6. Accidental release measures

**Personnel precautions, protective equipment and emergency measures**

Wear adequate personal protective equipment, see Section 8 (Exposure Controls/Personal Protection)

**Environmental precautions**

Prevent from entering into soil, waterways and ground water.

**Clean-up methods and materials and containment measures**

Spills should be contained by, and covered with suitable absorbent material and removed for disposal.

## 7. Handling and storage

**Precautions for safe handling**

| | | |
|---|---|---|
| **Handling** | Technicalmeasures | Avoid contact with skin, eyes and clothing. Wash hands after handling. |
| | Local and general ventilation | Use only with adequate ventilation. |
| | Precautions | See Section 8 (Exposure Controls/Personal Protection). |
| | Safehandling advice | See Section 10 (Stability and reactivity). |
| **Storage** | Suitable storage conditions | Protect from sunlight. Keep container tightly closed. |
| | Safe packaging materials | Use plastic container that have enough toughness. |

## 8. Exposure controls/personal protection

**Engineering measures**

Evacuate and ventilate spill area. Provide easy access to water supply and eye wash facilities.

**Personal protective equipment**

| | |
|---|---|
| Respiratory protection | Wear suitable respiratory protection. |
| Hand protection | Wear suitable gloves. |
| Eye protection | Use eye protection. Use face shield in case of splash risk. |
| Skin and body protection | Wear suitable protective clothing. |

**Hygiene measures** When using, do not eat, drink or smoke. Avoid contact with eyes. Avoid contact with skin. Keep away from food and drink. Handle in accordance with good industrial hygiene and safety practice.

## 9. Physical and Chemical Properties

**Information on basic physical and chemical properties**

| | |
|---|---|
| Physical properties | |
| Appearance: | Liquid |
| Color: | Colourless to light yellow, Clear |
| Odor: | Practically odourless |
| pH: | 6 Approx. |
| Flash point: | Not flammable |
| Auto-ignition temperature | Not flammable |
| Solubility | |
| Solubility in water: | Completely soluble |

## 10. Stability and Reactivity

**Chemical stability** Stable under normal storage/handling conditions.

**Conditions to avoid** Freezing. Protect against direct sunlight.

**Hazardous decomposition products** CO, CO2 Nitrogen oxides (NOx).

## 11. Toxicological Information

**Acute toxicity** Harmful if swallowed.

TestResults Acute OralLD50Rat:> 500mg/kg

**Skin corrosion/irritation** strong

**Serious eyedamage/eye irritation** moderately irritant

**Carcinogenicity** Substances in group [1;2A;2B] by IARC(International Agencyfor Research onCancer):None

## 12. Ecological Information

**Bioaccumulation** Not established.

**Mobilityinsoil** Not established.

**Otherhazardous effects** Not established

## 13. Disposal considerations

When your own wastewater treatment plant is not available, collect entire waste and then charge to a licensed industrial waste management professional with manifests for industrial waste. Follow the laws and regulations in your country while disposing of this product or
waste.

## 14. Transport Information

**UN No, UN CLASS** Not applicable to UN NO.

Marine transportation is regulated by IMDG Code. Air transportation is regulated by IATA Dangerous Goods Regulations.

**IMDG** Not regulated as dangerous goods.

**IATA** Not regulated as dangerous goods.

## 15. Regulatory Information

**Law concerning the Examination and Regulation of Manufacture etc. of Chemical Substances**

| | |
|---|---|
| Class 1 Specified Chemical Substance: | Not regulated. |
| Class 2 Specified Chemical Substance: | Not regulated. |
| Type 1 Monitoring Chemical Substance: | Not regulated. |
| Type 2 Monitoring Chemical Substance: | Not regulated. |
| Type 3 Monitoring Chemical Substance: | Not regulated. |

**Industrial Safety and Health Law**

| | |
|---|---|
| Dangerous Substances Flammable: | Not regulated. |
| Dangerous Substances Flammable Gases: | Not regulated. |
| Dangerous Substances Oxidizing: | Not regulated. |
| Dangerous Substances Explosives: | Not regulated. |
| Dangerous Substances Ignitable: | Not regulated. |
| Harmful Substances Carcinogen: | Not regulated. |
| Class 1 Designated Chemical Substances: | Not regulated. |
| Class 2 Designated Chemical Substances: | Not regulated. |
| Class 3 Designated Chemical Substances: | Not regulated. |

| | |
|---|---|
| Class 1 Organic Solvents Preparations: | Not regulated. |
| Class 2 Organic Solvents Preparations: | Not regulated. |
| Class 3 Organic Solvents Preparations: | Not regulated. |
| Notifiable Substance: | Not regulated. |
| Labeling Requirements: | Not regulated. |
| Others: | Not regulated. |

**Poisonous and Deleterious Substances Control Law**

| | |
|---|---|
| Specified Poisonous Substance – Main Law: | Not regulated. |
| Specified Poisonous Substance – Cabinet Order: | Not regulated. |
| Poisonous Substances – Main Law: | Not regulated. |
| Poisonous Substances – Cabinet Order: | Not regulated. |
| Deleterious Substances – Main Law: | Not regulated. |
| Deleterious Substances – Cabinet Order: | Not regulated. |
| Enforcement Order Article 32-2: | Not regulated. |
| Enforcement Order Article 32-3: | Not regulated. |
| Not Considered Poisonous: | Not regulated. |
| Not Considered Deleterious: | Not regulated. |
| Cabinet Order, Preparations: | Not regulated. |

**Fire Service Law**

| | |
|---|---|
| Class 1 Oxidizing Solids: | Not regulated. |
| Class 2 Flammable Solids: | Not regulated. |
| Class 3 Spontaneous combustibility and | Not regulated. |
| Water-reactivity Substances: | Not regulated. |
| Class 4 Flammable Liquids: | Not regulated. |
| Class 5 Self-Reactive Substances: | Not regulated. |
| Class 6 Oxidizing Liquids: | Not regulated. |
| Designated Flammable Substances: | Not regulated. |
| Storage Reporting Substance: | Not regulated. |

**Japan PRTR**

| | |
|---|---|
| Specific Class 1 Designated Substance: | Not regulated. |
| Class 1 Designated Substance: | Not regulated. |
| Class 2 Designated Substance: | Not regulated. |

| | |
|---|---|
| **Ship Safety Law** | Not regulated. |
| **Civil Aeronautics law** | Not regulated. |
| **Japan Marine Pollution Prevention Law** | Not regulated. |
| **High Pressure Gas Safety law** | Not regulated. |
| **Gun Powder Control Law** | Not regulated. |

## 16. Other information

**GHS classification and labelling**

Acute Tox. 4: H302 Harmful if swallowed
Skin Irrit. 2: H315 Causes skin irritation
Eye Irrit. 2: H319 Causes serious eye irritation

**Reference Book**

Globally Harmonized System of classification and labelling of chemicals, (5th ed., 2013), UN
Recommendations on the TRANSPORT OF DANGEROUS GOODS 19th edit., 2015 UN
Classification, labelling and packaging of substances and mixtures (table3-1 ECNO6182012)
JIS Z 7252:2014, JIS Z 7253:2012
NITE CHRIP (http://www.safe.nite.go.jp/japan/sougou/view/SystemTop_jp.faces)

**General Disclaimer**

This information contained in this data sheet represents the best information currently available to us. However, no warranty is made with respect to its completeness and we assume no liability resulting from its use. It are advised to make their own tests to determinate the safety and suitability of each such product or combination for their own purposes.

Date of issue: 6/19/2019

# Safety Data Sheet

## 1. Identification of the substance/mixture and of the company/undertaking

**Product identifier:**

**Product name:** Tissue Lysis Buffer

**Product code:** MDT-01

**SDS NO:** MDT01_JPE_1.1

**Details of the supplier of the safety data sheet**

**Manufacturer/Supplier:** KURABO INDUSTRIES LTD.

**Address:** Advanced Technology Center, 14-30 Shimokida-cho, Neyagawa, Osaka, 572-0823 JAPAN

**Division:** Bio-Medical department

**Telephone number:** +81-72-820-3079

**FAX:** +81-72-820-3095

**Relevant identified uses of the substance or mixture and uses advised against**

Relevant identified uses of the product: Reagents for automated nucleic acid isolation system

Uses advised against: For research use only

## 2. Hazards identification

**GHS classification and label elements of the product**

Classification of the substance or mixture

**HEALTH HAZARDS**

Skin corrosion/irritation: Category 2

Serious eye damage/eye irritation: Category 2A

May cause damage to organs (central nervous system): Category 2

Toxic to aquatic life: Category 2

(Note) GHS classification without description: Not applicable/Out of classification/Not classifiable

**Label elements**

**Signal word:** Warning

**HAZARD STATEMENT**

H315 Causes skin irritation.

H319 Causes serious eye irritation

H371 May cause damage to organs (central nervous system).

H401 Toxic to aquatic life

**PRECAUTIONARY STATEMENT**

**Prevention**

P260 Do not breathe dust/fume/gas/mist/vapours/spray.

P264 Wash hands thoroughly after handling.

P270 Do not eat, drink or smoke when using this product.

P273 Avoid release to the environment.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

**Response**

P302 + P352 IF ON SKIN: Wa P312 Call a POISON CENTER or doctor/physician if you feel unwell.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P308 + P311 IF exposed or concerned: Call a POISON CENTER or doctor/physician

P332 + P313 If skin irritation occurs: Get medical advice/attention.

P337 + P313 If eye irritation persists: Get medical advice/attention.

P362 + P364 Take off contaminated clothing and wash it before reuse.

**Storage**

P405 Store locked up.

**Disposal**

P501 Dispose of contents/container in accordance with local/national regulation.

## 3. Composition/information on ingredients

**Mixture/Substance selection** Mixture

| Ingredient name | Content(%) | CAS No. |
|---|---|---|
| disodium ethylenediamine tetraacetate | 1 – 5 | 139-33-3 |
| sodium lauryl sulfate | 1 – 5 | 151-21-3 |
| Water | Balance | 7732-18-5 |

Note : The figures shown above are not the specifications of the product.

## 4. First-aid measures

**Descriptions of first-aid measures**

**IF INHALED** Remove person to fresh air and keep comfortable for breathing.
If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician.

**IF ON SKIN(or hair)** Wash with plenty of soap and water.
If skin irritation occurs: Get medical advice/attention.

**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 SWALLOWED** Rinse mouth. Do not induce vomiting.
Do not give milk or alcoholic drinks.
If you are unconscious, never give anything by mouth.
Call a POISON CENTER or doctor/physician if you feel unwell.

**Most important symptoms and effects, both acute and delayed**

May cause allergy, asthma, or breathing difficulty if inhaled.

## 5. Fire-fighting measures

**Extinguishing media**

**Suitable extinguishing media** Carbon dioxide, dry chemical and protein based foam.

**Extinguishing media to avoid** None.

**Special fire fighting** Keep personnel removed from and upwind of fire. Water runoff can damage the environment.

**Procedures** Dike and collect water used to fight fire Evacuate area and fight fire from a safe distance.

**Protection of fire-fighters** Wear adequate personal protective equipment.

## 6. Accidental release measures

**Personnel precautions, protective equipment and emergency procedures**

Ventilate area after material pick up is complete.
Wear an air-supplied respirator for a poor/non ventilated spill.
Refer to the protective measures described in items 7 and 8.

**Environmental precautions**

Prevent from entering into soil, waterways and ground water.
Stop leak and spill after checking safety.

**Methods and materials for containment and cleaning up**

Absorb with an inert absorbent (eg, sand, silica gel, acidic binder, universal binder, sawdust).
Place in an appropriate container, discard it, and leave it closed.

## 7. Handling and storage

**Precautions for safe handling**

| | | |
|---|---|---|
| **Handling** | Technicalmeasures | Avoid contact with skin, eyes and clothing. Wash hands after handling. |
| | Local and general ventilation | Use only with adequate ventilation. |
| | Precautions | See Section 8 (Exposure Controls/Personal Protection). |
| | Safehandling advice | See Section 10 (Stability and reactivity). |
| **Storage** | Suitable storage conditions | Protect from sunlight. Keep container tightly closed. |
| | Safe packaging materials | Use plastic container that have enough toughness. |

## 8. Exposure controls/personal protection

**Engineering measures**

Evacuate and ventilate spill area. Provide easy access to water supply and eye wash facilities.

**Personal protective equipment**

| | |
|---|---|
| Respiratory protection | Wear suitable respiratory protection. |
| Hand protection | Wear suitable gloves. |
| Eye protection | Use eye protection. Use face shield in case of splash risk. |
| Skin and body protection | Wear suitable protective clothing. |

**Hygiene measures** When using, do not eat, drink or smoke. Avoid contact with eyes. Avoid contact with skin. Keep away from food and drink. Handle in accordance with good industrial hygiene and safety practice.

## 9. Physical and Chemical Properties

**Information on basic physical and chemical properties**

| | |
|---|---|
| Physical properties | |
| Appearance: | liquid |
| Color: | colourless, clear |
| Odor: | odourless |
| pH | 8.4 Approx. |
| Solubility | |
| Solubility in water: | Completely soluble |

## 10. Stability and Reactivity

**Chemical stability** Stable under normal storage/handling conditions.

**Conditions to avoid** Freezing. Protect against direct sunlight.

**Incompatible materials** None

**Hazardous decomposition products** CO, CO2 Nitrogen oxides (NOx).

## 11. Toxicological Information

**Acute toxicity**

TestResults Acute Oral LD50 Rat: > 2000 mg/kg

**Skin corrosion/irritation** strong

**Serious eyedamage/eye irritation** weakly irritant

**Carcinogenicity** Substances in group [1;2A;2B] by IARC (International Agency for Research on Cancer):None

## 12. Ecological Information

**Bioaccumulation** Not established.

**Mobilityinsoil** Not established.

**Otherhazardous effects** Not established

## 13. Disposal considerations

When your own wastewater treatment plant is not available, collect entire waste and then charge to a licensed industrial waste management professional with manifests for industrial waste. Follow the laws and regulations in your country while disposing of this product or
waste.

## 14. Transport Information

**UN No, UN CLASS** Not applicable to UN NO.

Marine transportation is regulated by IMDG Code. Air transportation is regulated by IATA Dangerous Goods Regulations.

**IMDG** Not regulated as dangerous goods.

**IATA** Not regulated as dangerous goods.

## 15. Regulatory Information

**Law concerning the Examination and Regulation of Manufacture etc. of Chemical Substances**

| | |
|---|---|
| Class 1 Specified Chemical Substance: | Not regulated. |
| Class 2 Specified Chemical Substance: | Not regulated. |
| Type 1 Monitoring Chemical Substance: | Not regulated. |
| Type 2 Monitoring Chemical Substance: | Not regulated. |
| Type 3 Monitoring Chemical Substance: | Not regulated. |

**Industrial Safety and Health Law**

| | |
|---|---|
| Dangerous Substances Flammable: | Not regulated. |
| Dangerous Substances Flammable Gases: | Not regulated. |
| Dangerous Substances Oxidizing: | Not regulated. |
| Dangerous Substances Explosives: | Not regulated. |
| Dangerous Substances Ignitable: | Not regulated. |

| | |
|---|---|
| Harmful Substances Carcinogen: | Not regulated. |
| Class 1 Designated Chemical Substances: | Not regulated. |
| Class 2 Designated Chemical Substances: | Not regulated. |
| Class 3 Designated Chemical Substances: | Not regulated. |
| Class 1 Organic Solvents Preparations: | Not regulated. |
| Class 2 Organic Solvents Preparations: | Not regulated. |
| Class 3 Organic Solvents Preparations: | Not regulated. |
| Notifiable Substance: | Not regulated. |
| Labeling Requirements: | Not regulated. |
| Others: | Not regulated. |

**Poisonous and Deleterious Substances Control Law**

| | |
|---|---|
| Specified Poisonous Substance – Main Law: | Not regulated. |
| Specified Poisonous Substance – Cabinet Order: | Not regulated. |
| Poisonous Substances – Main Law: | Not regulated. |
| Poisonous Substances – Cabinet Order: | Not regulated. |
| Deleterious Substances – Main Law: | Not regulated. |
| Deleterious Substances – Cabinet Order: | Not regulated. |
| Enforcement Order Article 32-2: | Not regulated. |
| Enforcement Order Article 32-3: | Not regulated. |
| Not Considered Poisonous: | Not regulated. |
| Not Considered Deleterious: | Not regulated. |
| Cabinet Order, Preparations: | Not regulated. |

**Fire Service Law**

| | |
|---|---|
| Class 1 Oxidizing Solids: | Not regulated. |
| Class 2 Flammable Solids: | Not regulated. |
| Class 3 Spontaneous combustibility and | Not regulated. |
| Water-reactivity Substances: | Not regulated. |
| Class 4 Flammable Liquids: | Not regulated. |
| Class 5 Self-Reactive Substances: | Not regulated. |
| Class 6 Oxidizing Liquids: | Not regulated. |
| Designated Flammable Substances: | Not regulated. |
| Storage Reporting Substance: | Not regulated. |

**Japan PRTR**

| | |
|---|---|
| Specific Class 1 Designated Substance: | Not regulated. |
| Class 1 Designated Substance: | Not regulated. |
| Class 2 Designated Substance: | Not regulated. |

| | |
|---|---|
| **Ship Safety Law** | Not regulated. |
| **Civil Aeronautics law** | Not regulated. |

**Japan Marine Pollution Prevention Law**

| | |
|---|---|
| Bulk transport | Hazardous liquid substances (Z class) |
| Transport of goods | Not applicable to marine pollutants |

| | |
|---|---|
| **High Pressure Gas Safety law** | Not regulated. |
| **Gun Powder Control Law** | Not regulated. |

## 16. Other information

**GHS classification and labelling**

Skin Irrit. 2: H315 Causes skin irritation.
Eye Irrit. 2: H319 Causes serious eye irritation
STOT SE 2: H371 May cause damage to organs (central nervous system).
Aquatic Acute 2: H401 Toxic to aquatic life

**Reference Book**

Globally Harmonized System of classification and labelling of chemicals, (5th ed., 2013), UN
Recommendations on the TRANSPORT OF DANGEROUS GOODS 19th edit., 2015 UN
Classification, labelling and packaging of substances and mixtures (table3-1 ECNO6182012)
JIS Z 7252:2014, JIS Z 7253:2012
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Date of issue 6/19/2019

# Safety Data Sheet

## 1. Identification of the substance/mixture and of the company/undertaking

**Product identifier:**

**Product name:** Wash Buffer

**Product code:** WDT-01

**SDS NO:** WDT01_JPE_1.1

**Details of the supplier of the safety data sheet**

**Manufacturer/Supplier:** KURABO INDUSTRIES LTD.

**Address:** Advanced Technology Center, 14-30 Shimokida-cho, Neyagawa, Osaka, 572-0823 JAPAN

**Division:** Bio-Medical department

**Telephone number:** +81-72-820-3079

**FAX:** +81-72-820-3095

**Relevant identified uses of the substance or mixture and uses advised against**

Relevant identified uses of the product: Reagents for automated nucleic acid isolation system

Uses advised against: For research use only

## 2. Hazards identification

**GHS classification and label elements of the product**

Classification of the substance or mixture

Not applicable to GHS classification

**Label elements**

No hazard pictogram

No Signal word

## 3. Composition/information on ingredients

**Mixture/Substance selection** Mixture

| Ingredient name | Content(%) | CAS No. |
|---|---|---|
| sodium chloride | 0.5 - 1.5 | 7647-14-5 |
| Water | Balance | 7732-18-5 |

Note : The figures shown above are not the specifications of the product.

Generally chemical substances greater than 1% of the total are listed.

## 4. First-aid measures

**Descriptions of first-aid measures** Rescuers should wear proper personal protective equipment suitable for situation.

**IF INHALED** Remove person to fresh air and keep comfortable for breathing.
Call a POISON CENTER or doctor/physician if you feel unwell.

**IF ON SKIN(or hair)** Remove contaminated clothing. Wash with plenty of soap and water.
If skin irritation occurs: Get medical advice/attention.

**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 SWALLOWED** Rinse mouth.
Call a POISON CENTER or doctor/physician if you feel unwell.

## 5. Fire-fighting measures

**Extinguishing media**

**Suitable extinguishing media** Carbon dioxide, dry chemical and protein based foam.

**Extinguishing media to avoid** None.

**Special fire fighting** Keep personnel removed from and upwind of fire. Water runoff can damage the environment.

**Procedures** Dike and collect water used to fight fire Evacuate area and fight fire from a safe distance.

**Protection of fire-fighters** Wear adequate personal protective equipment.

## 6. Accidental release measures

**Personnel precautions, protective equipment and emergency measures**

Wear adequate personal protective equipment, see Section 8 (Exposure Controls/Personal Protection)

**Environmental precautions**

Prevent from entering into soil, waterways and ground water.

**Clean-up methods and materials and containment measures**

Spills should be contained by, and covered with suitable absorbent material and removed for disposal.

## 7. Handling and storage

**Precautions for safe handling**

| | | |
|---|---|---|
| **Handling** | Technicalmeasures | Avoid contact with skin, eyes and clothing. Wash hands after handling. |
| | Local and general ventilation | Use only with adequate ventilation. |
| | Precautions | See Section 8 (Exposure Controls/Personal Protection). |
| | Safehandling advice | See Section 10 (Stability and reactivity). |
| **Storage** | Suitable storage conditions | Protect from sunlight. Keep container tightly closed. |
| | Safepackagingmaterials | Use plastic container that have enough toughness. |

## 8. Exposure controls/personal protection

**Engineering measures**

Evacuate and ventilate spill area. Provide easy access to water supply and eye wash facilities.

**Personal protective equipment**

| | |
|---|---|
| Respiratory protection | Wear suitable respiratory protection. |
| Hand protection | Wear suitable gloves. |
| Eye protection | Use eye protection. Use face shield in case of splash risk. |
| Skin and body protection | Wear suitable protective clothing. |

**Hygiene measures** Handle in accordance with good industrial hygiene and safety practice.

## 9. Physical and Chemical Properties

**Information on basic physical and chemical properties**

| | |
|---|---|
| Physical properties | |
| Appearance: | Liquid |
| Color: | Colourless, Clear |
| Odor: | Odourless |
| pH: | 7.5 |
| Flash point: | Not flammable |
| Auto-ignition temperature | Not flammable |
| Solubility | |
| Solubility in water: | Completely soluble |
| Viscosity | Like water |

## 10. Stability and Reactivity

**Chemical stability** Stable under normal storage/handling conditions.

**Conditions to avoid** Freezing. Protect against direct sunlight.

**Hazardous decomposition products** CO, CO2 Nitrogen oxides (NOx).

## 11. Toxicological Information

**Acute toxicity**

TestResults Acute Oral LD50 Rat: > 2000 mg/kg

**Skin corrosion/irritation** No irritation

**Serious eyedamage/eye irritation** non irritant

**Carcinogenicity** Substances in group [1;2A;2B] by IARC (International Agency for Research on Cancer):None

## 12. Ecological Information

**Bioaccumulation** Not established.

**Mobilityinsoil** Not established.

**Otherhazardous effects** Not established

## 13. Disposal considerations

When your own wastewater treatment plant is not available, collect entire waste and then charge to a licensed industrial waste management professional with manifests for industrial waste. Follow the laws and regulations in your country while disposing of this product or
waste.

## 14. Transport Information

**UN No, UN CLASS** Not applicable to UN NO.

Marine transportation is regulated by IMDG Code. Air transportation is regulated by IATA Dangerous Goods Regulations.

**IMDG** Not regulated as dangerous goods.

**IATA** Not regulated as dangerous goods.

## 15. Regulatory Information

**Law concerning the Examination and Regulation of Manufacture etc. of Chemical Substances**

| | |
|---|---|
| Class 1 Specified Chemical Substance: | Not regulated. |
| Class 2 Specified Chemical Substance: | Not regulated. |
| Type 1 Monitoring Chemical Substance: | Not regulated. |
| Type 2 Monitoring Chemical Substance: | Not regulated. |
| Type 3 Monitoring Chemical Substance: | Not regulated. |

**Industrial Safety and Health Law**

| | |
|---|---|
| Dangerous Substances Flammable: | Not regulated. |
| Dangerous Substances Flammable Gases: | Not regulated. |
| Dangerous Substances Oxidizing: | Not regulated. |
| Dangerous Substances Explosives: | Not regulated. |
| Dangerous Substances Ignitable: | Not regulated. |
| Harmful Substances Carcinogen: | Not regulated. |
| Class 1 Designated Chemical Substances: | Not regulated. |
| Class 2 Designated Chemical Substances: | Not regulated. |
| Class 3 Designated Chemical Substances: | Not regulated. |
| Class 1 Organic Solvents Preparations: | Not regulated. |
| Class 2 Organic Solvents Preparations: | Not regulated. |
| Class 3 Organic Solvents Preparations: | Not regulated. |
| Notifiable Substance: | Not regulated. |
| Labeling Requirements: | Not regulated. |
| Others: | Not regulated. |

**Poisonous and Deleterious Substances Control Law**

| | |
|---|---|
| Specified Poisonous Substance – Main Law: | Not regulated. |
| Specified Poisonous Substance – Cabinet Order: | Not regulated. |
| Poisonous Substances – Main Law: | Not regulated. |
| Poisonous Substances – Cabinet Order: | Not regulated. |
| Deleterious Substances – Main Law: | Not regulated. |
| Deleterious Substances – Cabinet Order: | Not regulated. |
| Enforcement Order Article 32-2: | Not regulated. |
| Enforcement Order Article 32-3: | Not regulated. |
| Not Considered Poisonous: | Not regulated. |
| Not Considered Deleterious: | Not regulated. |
| Cabinet Order, Preparations: | Not regulated. |

**Fire Service Law**

| | |
|---|---|
| Class 1 Oxidizing Solids: | Not regulated. |
| Class 2 Flammable Solids: | Not regulated. |
| Class 3 Spontaneous combustibility and | Not regulated. |
| Water-reactivity Substances: | Not regulated. |
| Class 4 Flammable Liquids: | Not regulated. |
| Class 5 Self-Reactive Substances: | Not regulated. |
| Class 6 Oxidizing Liquids: | Not regulated. |
| Designated Flammable Substances: | Not regulated. |
| Storage Reporting Substance: | Not regulated. |

**Japan PRTR**

| | |
|---|---|
| Specific Class 1 Designated Substance: | Not regulated. |
| Class 1 Designated Substance: | Not regulated. |
| Class 2 Designated Substance: | Not regulated. |

| | |
|---|---|
| **Ship Safety Law** | Not regulated. |
| **Civil Aeronautics law** | Not regulated. |
| **Japan Marine Pollution Prevention Law** | Not regulated. |
| **High Pressure Gas Safety law** | Not regulated. |
| **Gun Powder Control Law** | Not regulated. |

## 16. Other information

**Reference Book**

Globally Harmonized System of classification and labelling of chemicals, (5th ed., 2013), UN
Recommendations on the TRANSPORT OF DANGEROUS GOODS 19th edit., 2015 UN
Classification, labelling and packaging of substances and mixtures (table3-1 ECNO6182012)
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NITE CHRIP (http://www.safe.nite.go.jp/japan/sougou/view/SystemTop_jp.faces)

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Date of issue 6/19/2019

# Safety Data Sheet

## 1. Identification of the substance/mixture and of the company/undertaking

**Product identifier:**

**Product name:** Elution Buffer

**Product code:** CDT-01

**SDS NO:** CDT01_JPE_1.1

**Details of the supplier of the safety data sheet**

**Manufacturer/Supplier:** KURABO INDUSTRIES LTD.

**Address:** Advanced Technology Center, 14-30 Shimokida-cho, Neyagawa, Osaka, 572-0823 JAPAN

**Division:** Bio-Medical department

**Telephone number:** +81-72-820-3079

**FAX:** +81-72-820-3095

**Relevant identified uses of the substance or mixture and uses advised against**

Relevant identified uses of the product: Reagents for automated nucleic acid isolation system

Uses advised against: For research use only

## 2. Hazards identification

**GHS classification and label elements of the product**

Classification of the substance or mixture

Not applicable to GHS classification

**Label elements**

No hazard pictogram

No Signal word

## 3. Composition/information on ingredients

**Mixture/Substance selection** Mixture

| Ingredient name | Content(%) | CAS No. |
|---|---|---|
| Water | 80-100 | 7732-18-5 |

Note : The figures shown above are not the specifications of the product.

Generally chemical substances greater than 1% of the total are listed.

## 4. First-aid measures

**Descriptions of first-aid measures** Rescuers should wear proper personal protective equipment suitable for situation.

**IF INHALED** Remove person to fresh air and keep comfortable for breathing.
Call a POISON CENTER or doctor/physician if you feel unwell.

**IF ON SKIN(or hair)** Remove contaminated clothing. Wash with plenty of soap and water.
If skin irritation occurs: Get medical advice/attention.

**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 SWALLOWED** Rinse mouth.
Call a POISON CENTER or doctor/physician if you feel unwell.

## 5. Fire-fighting measures

**Extinguishing media**

**Suitable extinguishing media** Carbon dioxide, dry chemical and protein based foam.

**Extinguishing media to avoid** None.

**Special fire fighting** Keep personnel removed from and upwind of fire. Water runoff can damage the environment.

**Procedures** Dike and collect water used to fight fire Evacuate area and fight fire from a safe distance.

**Protection of fire-fighters** Wear adequate personal protective equipment.

## 6. Accidental release measures

**Personnel precautions, protective equipment and emergency measures**

Wear adequate personal protective equipment, see Section 8 (Exposure Controls/Personal Protection)

**Environmental precautions**

Prevent from entering into soil, waterways and ground water.

**Clean-up methods and materials and containment measures**

Spills should be contained by, and covered with suitable absorbent material and removed for disposal.

## 7. Handling and storage

**Precautions for safe handling**

| | | |
|---|---|---|
| **Handling** | Technicalmeasures | Avoid contact with skin, eyes and clothing. Wash hands after handling. |
| | Local and general ventilation | Use only with adequate ventilation. |
| | Precautions | See Section 8 (Exposure Controls/Personal Protection). |
| | Safehandling advice | See Section 10 (Stability and reactivity). |
| **Storage** | Suitable storage conditions | Protect from sunlight. Keep container tightly closed. |
| | Safepackagingmaterials | Use plastic container that have enough toughness. |

## 8. Exposure controls/personal protection

**Engineering measures**

Evacuate and ventilate spill area. Provide easy access to water supply and eye wash facilities.

**Personal protective equipment**

| | |
|---|---|
| Respiratory protection | Wear suitable respiratory protection. |
| Hand protection | Wear suitable gloves. |
| Eye protection | Use eye protection. Use face shield in case of splash risk. |
| Skin and body protection | Wear suitable protective clothing. |

**Hygiene measures** Handle in accordance with good industrial hygiene and safety practice.

## 9. Physical and Chemical Properties

**Information on basic physical and chemical properties**

| | |
|---|---|
| Physical properties | |
| Appearance: | Liquid |
| Color: | Colourless, Clear |
| Odor: | Odourless |
| pH: | 9 |
| Flash point: | Not flammable |
| Auto-ignition temperature | Not flammable |
| Solubility | |
| Solubility in water: | Completely soluble |
| Viscosity | Like water |

## 10. Stability and Reactivity

**Chemical stability** Stable under normal storage/handling conditions.

**Conditions to avoid** Freezing. Protect against direct sunlight.

**Hazardous decomposition products** CO, CO2 Nitrogen oxides (NOx).

## 11. Toxicological Information

**Acute toxicity**

TestResults Acute Oral LD50 Rat: > 2000 mg/kg

**Skin corrosion/irritation** No irritation

**Serious eyedamage/eye irritation** non irritant

**Carcinogenicity** Substances in group [1;2A;2B] by IARC (International Agency for Research on Cancer):None

## 12. Ecological Information

**Bioaccumulation** Not established.

**Mobilityinsoil** Not established.

**Otherhazardous effects** Not established

## 13. Disposal considerations

When your own wastewater treatment plant is not available, collect entire waste and then charge to a licensed industrial waste management professional with manifests for industrial waste. Follow the laws and regulations in your country while disposing of this product or
waste.

## 14. Transport Information

**UN No, UN CLASS** Not applicable to UN NO.

Marine transportation is regulated by IMDG Code. Air transportation is regulated by IATA Dangerous Goods Regulations.

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| | |
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| Type 2 Monitoring Chemical Substance: | Not regulated. |
| Type 3 Monitoring Chemical Substance: | Not regulated. |

**Industrial Safety and Health Law**

| | |
|---|---|
| Dangerous Substances Flammable: | Not regulated. |
| Dangerous Substances Flammable Gases: | Not regulated. |
| Dangerous Substances Oxidizing: | Not regulated. |
| Dangerous Substances Explosives: | Not regulated. |
| Dangerous Substances Ignitable: | Not regulated. |
| Harmful Substances Carcinogen: | Not regulated. |
| Class 1 Designated Chemical Substances: | Not regulated. |
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| Class 2 Organic Solvents Preparations: | Not regulated. |
| Class 3 Organic Solvents Preparations: | Not regulated. |
| Notifiable Substance: | Not regulated. |
| Labeling Requirements: | Not regulated. |
| Others: | Not regulated. |

**Poisonous and Deleterious Substances Control Law**

| | |
|---|---|
| Specified Poisonous Substance – Main Law: | Not regulated. |
| Specified Poisonous Substance – Cabinet Order: | Not regulated. |
| Poisonous Substances – Main Law: | Not regulated. |
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| Deleterious Substances – Main Law: | Not regulated. |
| Deleterious Substances – Cabinet Order: | Not regulated. |
| Enforcement Order Article 32-2: | Not regulated. |
| Enforcement Order Article 32-3: | Not regulated. |
| Not Considered Poisonous: | Not regulated. |
| Not Considered Deleterious: | Not regulated. |
| Cabinet Order, Preparations: | Not regulated. |

**Fire Service Law**

| | |
|---|---|
| Class 1 Oxidizing Solids: | Not regulated. |
| Class 2 Flammable Solids: | Not regulated. |
| Class 3 Spontaneous combustibility and | Not regulated. |
| Water-reactivity Substances: | Not regulated. |
| Class 4 Flammable Liquids: | Not regulated. |
| Class 5 Self-Reactive Substances: | Not regulated. |
| Class 6 Oxidizing Liquids: | Not regulated. |
| Designated Flammable Substances: | Not regulated. |
| Storage Reporting Substance: | Not regulated. |

**Japan PRTR**

| | |
|---|---|
| Specific Class 1 Designated Substance: | Not regulated. |
| Class 1 Designated Substance: | Not regulated. |
| Class 2 Designated Substance: | Not regulated. |

| | |
|---|---|
| **Ship Safety Law** | Not regulated. |
| **Civil Aeronautics law** | Not regulated. |
| **Japan Marine Pollution Prevention Law** | Not regulated. |
| **High Pressure Gas Safety law** | Not regulated. |
| **Gun Powder Control Law** | Not regulated. |

## 16. Other information

**Reference Book**

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