KKURABO

SAFETY DATA SHEET

QuickGene DNA Tissue Kit S (DT-S)

Name of substance	Classification acc. to GHS	Pictograms
Proteinase K EDT-01	Skin Irrit. 1: H317	
	Resp. Sens. 1: H334	
Lysis Buffer LDT-01	Acute Tox. 4: H302	
	Skin Irrit. 2: H315	
	Eye Irrit. 2: H319	\mathbf{v}
Tissue Lysis Buffer MDT-01	Skin Irrit. 2: H315	
	Eye Irrit. 2: H319	$\mathbf{\Lambda}\mathbf{A}$
	STOT SE 2: H371	
	Aquatic Acute 2: H401	• •
Wash Buffer WDT-01		
Elution Buffer CDT-01		

KURABO INDUSTRIES LTD.

Bio-Medical Department

Address	Advanced Technology Center 2F	
	14-30 Shimokida-Cho, Neyagawa, Osaka 572-0823, Japan	
Telephone Number	+81-72-820-3079	
FAX Number	+81-72-820-3095	

Date of issue: 6/19/2019

entification of the substance/mixture and	I OF GIO COMPANY/ UNO CANNE
Product identifier:	Durksers
Product name:	Protease
Product code: SDS NO:	EDT-01
	EDT01_JPE_1.1
Details of the supplier of the safety da	
Manufacturer/Supplier:	KURABO INDUSTRIES LTD.
Address: Division:	Advanced Technology Center, 14-30 Shimokida-cho, Neyagawa, Osaka, 572-0823 JAP
	Bio-Medical department +81-72-820-3079
Telephone number: FAX:	+81-72-820-3095
	tance or mixture and uses advised against
	uct: Reagents for automated nucleic acid isolation system
Uses advised against: For research ι	
azards identification	
GHS classification and label elements	•
Classification of the substance or mixtu	
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 aller	rgic skin reaction
	or asthma symptoms or breathing difficulties if inhaled.
PRECAUTIONARY STAT	
Prevention	
P280 Wear protective gl	
P280 Wear eye protective g	
• •	ust/fume/gas/mist/vapours/spray.
	k clothing should not be allowed out of the workplace.
	-
P284 Wear respiratory p	irotection.
Response	
	I: Was P312 Call a POISON CENTER or doctor/physician if you feel unwell.
	D: Remove person to fresh air and keep comfortable for breathing.
P304 + P340 IF INHALED	ation or rash occurs: Get medical advice/attention.
P304 + P340 IF INHALED P333 + P313 If skin irrita	
P304 + P340 IF INHALEE P333 + P313 If skin irrita P342 + P311 If experienc	ing respiratory symptoms: Call a POISON CENTER or doctor/physician.
P304 + P340 IF INHALEE P333 + P313 If skin irrita P342 + P311 If experienc P362 + P364 Take off co	
P304 + P340 IF INHALEE P333 + P313 If skin irrita P342 + P311 If experienc P362 + P364 Take off co Disposal	sing respiratory symptoms: Call a POISON CENTER or doctor/physician. Intaminated clothing and wash it before reuse.
P304 + P340 IF INHALEE P333 + P313 If skin irrita P342 + P311 If experienc P362 + P364 Take off co Disposal	ing respiratory symptoms: Call a POISON CENTER or doctor/physician.
P304 + P340 IF INHALEE P333 + P313 If skin irrita P342 + P311 If experienc P362 + P364 Take off co Disposal	sing respiratory symptoms: Call a POISON CENTER or doctor/physician. Intaminated clothing and wash it before reuse.

Safetv Data Sheet

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

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

Descriptions of first-aid measure	S
IF INHALED	Remove person to fresh air and keep comfortable for breathing.
	If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physiciar
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.

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

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 r	neasures
(Exposure (Control for handling personnel)
	Avoid breathing dust/fume.
Safety Meas	sures/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
Recommen	dation for storage
	Store in a well-ventilated place. Keep container tightly closed.
	Keep cool. Protect from sunlight.
	Storage temperature upper limit: 28°C
Contact avoi	dance
	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		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	
рН	7.5	
density	1.126 g/cm3	
Solubility	·	
Solubility in water:	Completely soluble	
	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

Inform

mation 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	
IATA	

Not regulated as dangerous goods. 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.
Industr	rial 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.
	Notifiable Substance:	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 Servi	ce 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 PR ⁻	ſR	
	Specific Class 1 Designated Substance:	Not regulated.
	Class 1 Designated Substance:	Not regulated.
	Class 2 Designated Substance:	Not regulated.
Ship Safet	y Law	Not regulated.
Civil Aero	nautics law	Not regulated.
Japan Mar	ine Pollution Prevention Law	
	Bulk transport	Hazardous liquid substances (Z class)
	Transport of goods	Not applicable to marine pollutants
High Press	sure Gas Safety law	Not regulated.
Gun Powd	er Control Law	Not regulated.

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

Date of issue 6/19/2019

Safety Data Sheet		
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 dat	ta sheet	
Manufacturer/Supplier:	KURABO INDUSTRIES LTD.	
Address:	Advanced Technology Center, 14–30 Shimokida-cho, Neyagawa, Osaka, 572–0823 JAPA	
Division:	Bio-Medical department	
Telephone number:	+81-72-820-3079	
FAX:	+81-72-820-3095	
	ince or mixture and uses advised against	
	ct: Reagents for automated nucleic acid isolation system	
Uses advised against: For research us	-	
Hazards identification		
GHS classification and label elements of	of the product	
Classification of the substance or mixtur	e	
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		
	\wedge	
	$\mathbf{\nabla}$	
Signal word:	Warning	
HAZARD STATEMENT		
H302 Harmful if swallowed		
H315 Causes skin irritatio	n	
H319 Causes serious eye		
PRECAUTIONARY STATE		
Prevention		
	parts thoroughly after handling.	
P280 Wear protective glov	ies.	
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 irritat	ion occurs: Get medical advice/attention.	
P362 + P364 Take off cor	taminated clothing and wash it before reuse.	
	EYES: Rinse cautiously with water for several minutes. Remove	
	and easy to do. Continue rinsing.	
	on persists: Get medical advice/attention.	
P330 Rinse mouth.		
	VED: Call a POISON CENTER or doctor/physician if you feel unwell.	
Disposal		
P501 Dispose of contents	/container in accordance with local/national regulation.	
	1 / 4 Page	
	. /	

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.
. 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.

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)

Dike and collect water used to fight fire Evacuate area and fight fire from a safe

Environmental precautions

Prevent from entering into soil, waterways and ground water.

distance.

Clean-up methods and materials and containment measures

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

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. Not flammable Flash point: Not flammable Auto-ignition temperature Solubility Completely soluble Solubility in 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 Harmful if swallowed. TestResults Acute OralLD50Rat:> 500mg/kg Skin corrosion/irritation strong Serious eyedamage/eye irritation moderately irritant Substances in group [1;2A;2B] by IARC(International Agencyfor Research onCancer):None Carcinogenicity 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. ΙΑΤΑ 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.

Not regulated.

Class 3 Designated Chemical Substances:

	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 a	nd 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 PRTF	2	
	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 Aerona	utics law	Not regulated.
Japan Marin	e Pollution Prevention Law	Not regulated.
High Pressu	re Gas Safety law	Not regulated.
Gun Powder	Control Law	Not regulated.

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

Date of issue: 6/19/2019

Product identifier:	
Product name:	Tissue Lysis Buffer
Product code:	MDT-01
SDS NO:	MDT01_JPE_1.1
Details of the supplier of the safety da	ta sheet
Manufacturer/Supplier:	KURABO INDUSTRIES LTD.
Address:	Advanced Technology Center, 14-30 Shimokida-cho, Neyagawa, Osaka, 572-0823 JAPA1
Division:	Bio-Medical department
Telephone number:	+81-72-820-3079
FAX:	+81-72-820-3095
Relevant identified uses of the substa	ance or mixture and uses advised against
Relevant identified uses of the produ	ct: Reagents for automated nucleic acid isolation system
Uses advised against: For research u	se only
zards identification	
GHS classification and label elements of	of the product
Classification of the substance or mixtu	re
HEALTH HAZARDS	Skin corrosion/irritation: Category 2
	Serious eye damage/eye irritation: Category 2A

Safety Data Sheet

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

Toxic to aquatic life: Category 2

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

Label elements

Signal word:



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.

 $\mathsf{P270}$ Do not eat, drink or smoke when using this product.

P273 Avoid release to the environment.

 ${\tt P280 Wear protective gloves/protective clothing/eye protection/face protection.}$

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

 $\mathsf{P332}$ + $\mathsf{P313}$ 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

 ${\tt P501 \ Dispose \ of \ contents/container \ in \ accordance \ with \ local/national \ regulation.}$

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

resh air and keep comfortable for breathing.
iratory symptoms: Call a POISON CENTER or doctor/physician
soap and water.
urs: Get medical advice/attention.
h water for several minutes. Remove contact lenses,
to do. Continue rinsing.
ists: Get medical advice/attention.
t induce vomiting.
alcoholic drinks.
ous, never give anything by mouth.
TER or doctor/physician if you feel unwell.

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

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 equ	ipment 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.				
Environme	ntal precautions				
	Prevent from entering into soil, waterways and ground water.				
	Stop leak and spill after checking safety.				
Methods a	nd materials for containmer	it and cleaning up			
	Absorb with an inert abso	rbent (eg, sand, silica gel, acidic binder, universal binder, sawdust).			
	Place in an appropriate co	ontainer, discard it, and leave it closed.			
7. Handling and sto	orage				
Precaution	s for safe handling				
Handling	Technicalmeasures	Avoid contact with skin, eyes and clothing. Wash hands after handling.			
	Local and general Use only with adequate ventilation.				
	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	Wear suitable protective clothing. 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.	
nysical and Chemical Properties		
Information on basic physical and chemic	al properties	
Physical properties		
Appearance:	liquid	
Color:	colourless, clear	
Odor:	odourless	
pH	8.4 Approx.	
Solubility		
Solubility in water:	Completely soluble	
Nahility and Depativity		
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).	
	00, 002 Mill ogen oxides (NOX).	
oxicological Information		
oxicological Information	Acute Oral LD50 Rat: > 2000 mg/kg	
oxicological Information Acute toxicity		
oxicological Information Acute toxicity TestResults	Acute Oral LD50 Rat: > 2000 mg/kg	
oxicological Information Acute toxicity TestResults Skin corrosion/irritation	Acute Oral LD50 Rat: > 2000 mg/kg strong	
oxicological Information Acute toxicity TestResults Skin corrosion/irritation Serious eyedamage/eye irritation Carcinogenicity	Acute Oral LD50 Rat: > 2000 mg/kg strong weakly irritant	
oxicological Information Acute toxicity TestResults Skin corrosion/irritation Serious eyedamage/eye irritation Carcinogenicity cological Information	Acute Oral LD50 Rat: > 2000 mg/kg strong weakly irritant Substances in group [1;2A;2B] by IARC (International Agency for Research on Cancer):None	
oxicological Information Acute toxicity TestResults Skin corrosion/irritation Serious eyedamage/eye irritation Carcinogenicity	Acute Oral LD50 Rat: > 2000 mg/kg strong weakly irritant	

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.

UN No, UN CLASS	Not applicable t	to UN NO.
Marine transportation is regulated by I	MDG Code. Air transpo	ortation is regulated by IATA Dangerous Goods Regulations.
IMDG	Not regulated a	is dangerous goods.
ΙΑΤΑ	Not regulated as dangerous goods.	
egulatory Information		
Law concerning the Examination and	Regulation of Manufac	cture etc. of Chemical Substances
Class 1 Specified Chemic	al Substance:	Not regulated.
Class 2 Specified Chemic	al Substance:	Not regulated.
Type 1 Monitoring Chemical Substance:		Not regulated.
Type 2 Monitoring Chemical Substance:		Not regulated.
Type 3 Monitoring Chemi	cal Substance:	Not regulated.
Industrial Safety and Health Law		
Dangerous Substances F	lammable:	Not regulated.
Dangerous Substances F	lammable Gases:	Not regulated.
Dangerous Substances C	xidizing:	Not regulated.

Not regulated.

Not regulated.

Dangerous Substances Explosives:

Dangerous Substances Ignitable:

	Net we will be a
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.

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

 $\label{eq:NITE_CHRIP} NITE\ CHRIP\ (http://www.safe.nite.go.jp/japan/sougou/view/SystemTop_jp.faces)$

General Disclaimer

Date of issue 6/19/2019

	-			
ntification of the substance/mixture	e and of the company/und	lertaking		
Product identifier:				
Product name:	Wash Buffer			
Product code:	WDT-01			
SDS NO:	WDT01_JPE_1.1			
Details of the supplier of the safe	-			
Manufacturer/Supplier:	KURABO INDUS	STRIES LTD.		
Address:	Advanced Techr	nology Center, 14–30 Shin	nokida-cho, Neyagawa, C	saka, 572-0823 JA
Division:	Bio-Medical dep			
Telephone number				
FAX:	+81-72-820-309			
Relevant identified uses of the s			Para and an	
Relevant identified uses of the p	-	omated nucleic acid isola	tion system	
Uses advised against: For resea	rch use only			
zards identification				
GHS classification and label eleme	•			
Classification of the substance or i				
Not applicable to GHS	classification			
Label elements				
No hazard pictogram				
No Signal word				
5				
mposition/information on ingredient	s			
Mixture/Substance selection	Mixture			
In	gredient name	Content(%)	CAS No.]
In sodium chloride	gredient name	Content(%) 0.5 - 1.5	CAS No. 7647-14-5]
	gredient name]
sodium chloride Water	gredient name	0.5 - 1.5 Balance	7647-14-5]
sodium chloride Water Note : The figures s	-	0.5 - 1.5 Balance cifications of the product.	7647-14-5 7732-18-5]
sodium chloride Water Note : The figures s Generally ch	shown above are not the spe	0.5 - 1.5 Balance cifications of the product.	7647-14-5 7732-18-5]
sodium chloride Water Note : The figures s	shown above are not the spe nemical substances greater t	0.5 - 1.5 Balance cifications of the product.	7647-14-5 7732-18-5 d.	table for situation.
sodium chloride Water Note : The figures s Generally ch st-aid measures	shown above are not the spe nemical substances greater t Rescuers should	0.5 - 1.5 Balance cifications of the product. han 1% of the total are liste d wear proper personal p	7647-14-5 7732-18-5 d. rotective equipment su	table for situation.
sodium chloride Water Note : The figures s Generally ch st-aid measures Descriptions of first-aid measures	shown above are not the spe nemical substances greater the Rescuers should Remove person	0.5 - 1.5 Balance cifications of the product. han 1% of the total are liste d wear proper personal p to fresh air and keep co	d. rotective equipment sui	table for situation.
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sodium chloride Water Note : The figures s Generally ch st-aid measures Descriptions of first-aid measures	shown above are not the spe nemical substances greater the Rescuers should Remove person Call a POISON Remove contan	0.5 - 1.5 Balance cifications of the product. han 1% of the total are liste d wear proper personal p to fresh air and keep co CENTER or doctor/phys ninated clothing. Wash w	d. rotective equipment sui mfortable for breathing. ician if you feel unwell. ith plenty of soap and v	
sodium chloride Water Note : The figures s Generally ch st-aid measures Descriptions of first-aid measures IF INHALED IF ON SKIN(or hair)	shown above are not the spe nemical substances greater the Rescuers should Remove person Call a POISON Remove contan If skin irritation	0.5 - 1.5 Balance cifications of the product. han 1% of the total are liste d wear proper personal p to fresh air and keep co CENTER or doctor/phys ninated clothing. Wash w occurs: Get medical adv	d. rotective equipment sui mfortable for breathing. ician if you feel unwell. ith plenty of soap and v ice/attention.	vater.
sodium chloride Water Note : The figures s Generally ch st-aid measures Descriptions of first-aid measures IF INHALED	shown above are not the spe nemical substances greater the Rescuers should Remove person Call a POISON Remove contan If skin irritation Rinse cautiously	0.5 - 1.5 Balance cifications of the product. han 1% of the total are liste d wear proper personal p to fresh air and keep co CENTER or doctor/phys ninated clothing. Wash w occurs: Get medical adv y with water for several p	7647-14-5 7732-18-5 d. rotective equipment sui mfortable for breathing. ician if you feel unwell. ith plenty of soap and v ice/attention. ninutes. Remove contac	vater.
sodium chloride Water Note : The figures s Generally ch st-aid measures Descriptions of first-aid measures IF INHALED IF ON SKIN(or hair)	shown above are not the spe nemical substances greater the Rescuers should Remove person Call a POISON Remove contan If skin irritation Rinse cautiously if present and e	0.5 - 1.5 Balance cifications of the product. han 1% of the total are liste d wear proper personal p to fresh air and keep co CENTER or doctor/phys ninated clothing. Wash w occurs: Get medical adv y with water for several n easy to do. Continue rinsi	7647-14-5 7732-18-5 d. rotective equipment sui mfortable for breathing. ician if you feel unwell. ith plenty of soap and v ice/attention. minutes. Remove contac ng.	vater.
sodium chloride Water Note : The figures s Generally ch st-aid measures Descriptions of first-aid measures IF INHALED IF ON SKIN(or hair) IF IN EYES	shown above are not the spe nemical substances greater the Rescuers should Remove person Call a POISON Remove contant If skin irritation Rinse cautiously if present and e If eye irritation	0.5 - 1.5 Balance cifications of the product. han 1% of the total are liste d wear proper personal p to fresh air and keep co CENTER or doctor/phys ninated clothing. Wash w occurs: Get medical adv y with water for several p	7647-14-5 7732-18-5 d. rotective equipment sui mfortable for breathing. ician if you feel unwell. ith plenty of soap and v ice/attention. minutes. Remove contac ng.	vater.
sodium chloride Water Note : The figures s Generally ch st-aid measures Descriptions of first-aid measures IF INHALED IF ON SKIN(or hair)	shown above are not the spe nemical substances greater the Rescuers should Remove person Call a POISON Remove contant If skin irritation Rinse cautiously if present and e If eye irritation Rinse mouth.	0.5 - 1.5 Balance cifications of the product. han 1% of the total are liste d wear proper personal p to fresh air and keep co CENTER or doctor/phys ninated clothing. Wash w occurs: Get medical adv y with water for several n easy to do. Continue rinsi persists: Get medical adv	7647-14-5 7732-18-5 d. rotective equipment sui mfortable for breathing. ician if you feel unwell. ith plenty of soap and v ice/attention. ninutes. Remove contac ng. vice/attention.	vater.
sodium chloride Water Note : The figures s Generally ch st-aid measures Descriptions of first-aid measures IF INHALED IF ON SKIN(or hair) IF IN EYES	shown above are not the spe nemical substances greater the Rescuers should Remove person Call a POISON Remove contant If skin irritation Rinse cautiously if present and e If eye irritation Rinse mouth.	0.5 - 1.5 Balance cifications of the product. han 1% of the total are liste d wear proper personal p to fresh air and keep co CENTER or doctor/phys ninated clothing. Wash w occurs: Get medical adv y with water for several n easy to do. Continue rinsi	7647-14-5 7732-18-5 d. rotective equipment sui mfortable for breathing. ician if you feel unwell. ith plenty of soap and v ice/attention. ninutes. Remove contac ng. vice/attention.	vater.
sodium chloride Water Note : The figures s Generally ch st-aid measures Descriptions of first-aid measures IF INHALED IF ON SKIN(or hair) IF IN EYES	shown above are not the spe nemical substances greater the Rescuers should Remove person Call a POISON Remove contant If skin irritation Rinse cautiously if present and e If eye irritation Rinse mouth.	0.5 - 1.5 Balance cifications of the product. han 1% of the total are liste d wear proper personal p to fresh air and keep co CENTER or doctor/phys ninated clothing. Wash w occurs: Get medical adv y with water for several n easy to do. Continue rinsi persists: Get medical adv	7647-14-5 7732-18-5 d. rotective equipment sui mfortable for breathing. ician if you feel unwell. ith plenty of soap and v ice/attention. ninutes. Remove contac ng. vice/attention.	vater.
sodium chloride Water Note : The figures s Generally ch st-aid measures Descriptions of first-aid measures IF INHALED IF ON SKIN(or hair) IF IN EYES IF SWALLOWED	shown above are not the spe nemical substances greater the Rescuers should Remove person Call a POISON Remove contant If skin irritation Rinse cautiously if present and e If eye irritation Rinse mouth.	0.5 - 1.5 Balance cifications of the product. han 1% of the total are liste d wear proper personal p to fresh air and keep co CENTER or doctor/phys ninated clothing. Wash w occurs: Get medical adv y with water for several n easy to do. Continue rinsi persists: Get medical adv	7647-14-5 7732-18-5 d. rotective equipment sui mfortable for breathing. ician if you feel unwell. ith plenty of soap and v ice/attention. ninutes. Remove contac ng. vice/attention.	vater.
sodium chloride Water Note : The figures s Generally ch st-aid measures Descriptions of first-aid measures IF INHALED IF ON SKIN(or hair) IF IN EYES IF SWALLOWED	shown above are not the spe nemical substances greater the Remove person Call a POISON Remove contant If skin irritation Rinse cautiously if present and et If eye irritation Rinse mouth. Call a POISON	0.5 - 1.5 Balance cifications of the product. han 1% of the total are liste d wear proper personal p to fresh air and keep co CENTER or doctor/phys ninated clothing. Wash w occurs: Get medical adv y with water for several n easy to do. Continue rinsi persists: Get medical adv	7647-14-5 7732-18-5 d. rotective equipment sui mfortable for breathing. ician if you feel unwell. ith plenty of soap and v ice/attention. ninutes. Remove contacting. vice/attention. ician if you feel unwell.	vater.
sodium chloride Water Note : The figures s Generally ch st-aid measures Descriptions of first-aid measures IF INHALED IF ON SKIN(or hair) IF IN EYES IF SWALLOWED s-fighting measures Extinguishing media	shown above are not the spe nemical substances greater the Remove person Call a POISON Remove contant If skin irritation Rinse cautiously if present and et If eye irritation Rinse mouth. Call a POISON	0.5 - 1.5 Balance cifications of the product. han 1% of the total are liste d wear proper personal p to fresh air and keep co CENTER or doctor/phys ninated clothing. Wash w occurs: Get medical adv y with water for several n easy to do. Continue rinsi persists: Get medical adv	7647-14-5 7732-18-5 d. rotective equipment sui mfortable for breathing. ician if you feel unwell. ith plenty of soap and v ice/attention. ninutes. Remove contacting. vice/attention. ician if you feel unwell.	vater.
sodium chloride Water Note : The figures s Generally ch st-aid measures Descriptions of first-aid measures IF INHALED IF ON SKIN(or hair) IF IN EYES IF SWALLOWED e-fighting measures Extinguishing media Suitable extinguishing media	shown above are not the spe nemical substances greater the Remove person Call a POISON Remove contan If skin irritation Rinse cautiously if present and e If eye irritation Rinse mouth. Call a POISON Carbon dioxide, None.	0.5 - 1.5 Balance cifications of the product. han 1% of the total are liste d wear proper personal p to fresh air and keep co CENTER or doctor/phys ninated clothing. Wash w occurs: Get medical adv y with water for several n easy to do. Continue rinsi persists: Get medical adv	7647-14-5 7732-18-5 d. rotective equipment sui mfortable for breathing. ician if you feel unwell. ith plenty of soap and v ice/attention. minutes. Remove contacting. vice/attention. ician if you feel unwell. ician if you feel unwell. ician if you feel unwell.	vater. St lenses,
sodium chloride Water Note : The figures s Generally ch st-aid measures Descriptions of first-aid measures IF INHALED IF ON SKIN(or hair) IF IN EYES IF SWALLOWED e-fighting measures Extinguishing media Suitable extinguishing media Extinguishing media to avoid	shown above are not the spe nemical substances greater the Remove person Call a POISON Remove contan If skin irritation Rinse cautiously if present and e If eye irritation Rinse mouth. Call a POISON Carbon dioxide, None.	0.5 - 1.5 Balance cifications of the product. han 1% of the total are liste d wear proper personal p to fresh air and keep co CENTER or doctor/phys ninated clothing. Wash w occurs: Get medical adv y with water for several n easy to do. Continue rinsi persists: Get medical adv CENTER or doctor/phys dry chemical and protein removed from and upwin	7647-14-5 7732-18-5 d. rotective equipment sui mfortable for breathing. ician if you feel unwell. ith plenty of soap and v ice/attention. minutes. Remove contacting. vice/attention. ician if you feel unwell. ician if you feel unwell. ician if you feel unwell.	vater. St lenses,
sodium chloride Water Note : The figures s Generally ch st-aid measures Descriptions of first-aid measures IF INHALED IF ON SKIN(or hair) IF IN EYES IF SWALLOWED e-fighting measures Extinguishing media Suitable extinguishing media Extinguishing media to avoid	shown above are not the spe nemical substances greater the Remove person Call a POISON Remove contant If skin irritation Rinse cautiously if present and e If eye irritation Rinse mouth. Call a POISON Carbon dioxide, None. Keep personnel the environment	0.5 - 1.5 Balance cifications of the product. han 1% of the total are liste d wear proper personal p to fresh air and keep co CENTER or doctor/phys ninated clothing. Wash w occurs: Get medical adv y with water for several n easy to do. Continue rinsi persists: Get medical adv CENTER or doctor/phys dry chemical and protein removed from and upwin	7647-14-5 7732-18-5 d. rotective equipment sui mfortable for breathing. ician if you feel unwell. ith plenty of soap and v ice/attention. minutes. Remove contacting. vice/attention. ician if you feel unwell. n based foam. nd of fire. Water runoff of	vater. st lenses,
sodium chloride Water Note : The figures s Generally ch st-aid measures Descriptions of first-aid measures IF INHALED IF ON SKIN(or hair) IF IN EYES IF SWALLOWED e-fighting measures Extinguishing media Suitable extinguishing media Extinguishing media to avoid Special fire fighting	shown above are not the spe nemical substances greater the Remove person Call a POISON Remove contant If skin irritation Rinse cautiously if present and e If eye irritation Rinse mouth. Call a POISON Carbon dioxide, None. Keep personnel the environment	0.5 - 1.5 Balance cifications of the product. han 1% of the total are liste d wear proper personal p to fresh air and keep co CENTER or doctor/phys ninated clothing. Wash w occurs: Get medical adv y with water for several n easy to do. Continue rinsi persists: Get medical adv CENTER or doctor/phys dry chemical and protein removed from and upwir t.	7647-14-5 7732-18-5 d. rotective equipment sui mfortable for breathing. ician if you feel unwell. ith plenty of soap and v ice/attention. minutes. Remove contacting. vice/attention. ician if you feel unwell. n based foam. nd of fire. Water runoff of	vater. st lenses,

Safety Data Sheet

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.

Precaution	s 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
Mobilityinsoil
Otherhazardous effects

Not established. Not established. Not established

	own wastewater treatment plant is not availa	able, collect entire waste and then charge to a licensed industrial waste vaste. Follow the laws and regulations in your country while disposing of this
Transport Info	rmation	
	UN No, UN CLASS Not applic	cable to UN NO.
Marine tran	sportation is regulated by IMDG Code. Air tr	ransportation is regulated by IATA Dangerous Goods Regulations.
	IMDG Not regula	ated as dangerous goods.
	IATA Not regula	ated as dangerous goods.
D Inf.		
Regulatory Info	rning the Examination and Regulation of Ma	anufacture 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.
		-
Inducated of C	Type 3 Monitoring Chemical Substance:	Not regulated.
industrial S	Safety and Health Law	Nativarilated
	Dangerous Substances Flammable:	Not regulated.
	Dangerous Substances Flammable Gases:	
	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 La	aw: 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 Peleterious:	Not regulated.
	Cabinet Order, Preparations:	Not regulated.
Fire Servic		Not regulated.
Fire Servic		Net regulated
	Class 1 Oxidizing Solids:	Not regulated. Not regulated.
	Class 2 Flammable Solids:	
	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 PRT	R	
	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.

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

Date of issue 6/19/2019

Product na	tifier:				
1 1 0 0 0 0 0 1 10		Elution Buffer			
	Product code:	CDT-01			
	SDS NO:	CDT01 JPE 1.1			
Details of the	e supplier of the safety da				
	rer/Supplier:	KURABO INDUSTRIE	S LTD.		
	Address:	Advanced Technology	/ Center, 14–30 Shim	okida-cho, Neyagawa, O	saka, 572–0823 JA
	Division:	Bio-Medical departme			
	Telephone number:	+81-72-820-3079			
	FAX:	+81-72-820-3095			
Relevant ide	ntified uses of the substa	ance or mixture and uses	advised against		
Relevant id	entified uses of the produ	ct: Reagents for automate	ed nucleic acid isolat	tion system	
Uses advise	ed against: For research u	se only			
ards identifica	tion				
GHS classific	ation and label elements o	of the product			
Classification	of the substance or mixtu	re			
	Not applicable to GHS class	ification			
Label elemen	ıts				
	No hazard pictogram				
	No Signal word				
nposition/infor	mation on ingredients				
Mixture/Sub	stance selection	Mixture			
l	Ingredie	nt name	Content(%)	CAS No.	1
	Water		80-100	7732-18-5	
	Note : The figures shown	above are not the specifica	tions of the product.		_
	Generally chemica	I substances greater than 1	% of the total are listed	ł.	
t-aid measure	e				
	of first-aid measures	Rescuers should we	ar proper personal pr	otective equipment sui	table for situation
Descriptions	or mot all measures			nfortable for breathing.	
IF INHALED				-	
IF INHALED					at ar
	(or hair)	Call a POISON CEN		Remove contaminated clothing. Wash with plenty of soap and water.	
IF INHALED	(or hair)	Remove contaminate	ed clothing. Wash wi		ater.
IF ON SKIN	(or hair)	Remove contaminate If skin irritation occu	ed clothing. Wash wi Irs: Get medical advie	ce/attention.	
	(or hair)	Remove contaminate If skin irritation occu Rinse cautiously with	ed clothing. Wash wi Irs: Get medical advio n water for several m	ce/attention. ninutes. Remove contac	
IF ON SKIN	(or hair)	Remove contaminate If skin irritation occu Rinse cautiously with if present and easy t	ed clothing. Wash wi Irs: Get medical advid n water for several m to do. Continue rinsir	ce/attention. ninutes. Remove contac ng.	
if on skin(If in eyes		Remove contaminate If skin irritation occu Rinse cautiously with if present and easy t If eye irritation persi	ed clothing. Wash wi Irs: Get medical advid n water for several m to do. Continue rinsir	ce/attention. ninutes. Remove contac ng.	
IF ON SKIN		Remove contaminate If skin irritation occu Rinse cautiously with if present and easy t If eye irritation persi Rinse mouth.	ed clothing. Wash wi Irs: Get medical advid In water for several m Io do. Continue rinsir Ists: Get medical adv	ce/attention. ninutes. Remove contac ng. ice/attention.	
if on skin(If in eyes		Remove contaminate If skin irritation occu Rinse cautiously with if present and easy t If eye irritation persi Rinse mouth.	ed clothing. Wash wi Irs: Get medical advid In water for several m Io do. Continue rinsir Ists: Get medical adv	ce/attention. ninutes. Remove contac ng.	
IF ON SKIN IF IN EYES IF SWALLOV	NED	Remove contaminate If skin irritation occu Rinse cautiously with if present and easy t If eye irritation persi Rinse mouth.	ed clothing. Wash wi Irs: Get medical advid In water for several m Io do. Continue rinsir Ists: Get medical adv	ce/attention. ninutes. Remove contac ng. ice/attention.	
IF ON SKIN IF IN EYES IF SWALLOV -fighting meas Extinguishing	NED sures ; media	Remove contaminate If skin irritation occu Rinse cautiously with if present and easy t If eye irritation persi Rinse mouth. Call a POISON CEN	ed clothing. Wash wi Irs: Get medical advid In water for several m to do. Continue rinsir sts: Get medical adv TER or doctor/physi	ce/attention. ninutes. Remove contac ng. ice/attention. cian if you feel unwell.	
IF ON SKIN IF IN EYES IF SWALLOV -fighting meas Extinguishing Suitable ext	WED sures ; media inguishing media	Remove contaminate If skin irritation occu Rinse cautiously with if present and easy t If eye irritation persi Rinse mouth.	ed clothing. Wash wi Irs: Get medical advid In water for several m to do. Continue rinsir sts: Get medical adv TER or doctor/physi	ce/attention. ninutes. Remove contac ng. ice/attention. cian if you feel unwell.	
IF ON SKIN IF IN EYES IF SWALLOV -fighting meas Extinguishing Suitable ext	NED sures ; media	Remove contaminate If skin irritation occu Rinse cautiously with if present and easy t If eye irritation persi Rinse mouth. Call a POISON CEN	ed clothing. Wash wi Irs: Get medical advid In water for several m to do. Continue rinsir sts: Get medical adv TER or doctor/physi	ce/attention. ninutes. Remove contac ng. ice/attention. cian if you feel unwell.	
IF ON SKIN IF IN EYES IF SWALLOV -fighting meas Extinguishing Suitable ext	WED sures ; media inguishing media ; media to avoid	Remove contaminate If skin irritation occu Rinse cautiously with if present and easy t If eye irritation persi Rinse mouth. Call a POISON CEN [*] Carbon dioxide, dry o None. Keep personnel remo	ed clothing. Wash wi irs: Get medical advin n water for several m to do. Continue rinsir sts: Get medical adv TER or doctor/physi chemical and protein	ce/attention. ninutes. Remove contac ng. ice/attention. cian if you feel unwell.	et lenses,
IF ON SKIN IF IN EYES IF SWALLOV -fighting meas Extinguishing Suitable exti Extinguishing Special fire fi	WED sures ; media inguishing media ; media to avoid	Remove contaminate If skin irritation occu Rinse cautiously with if present and easy t If eye irritation persi Rinse mouth. Call a POISON CEN ^T Carbon dioxide, dry o None. Keep personnel remo the environment.	ed clothing. Wash wi irs: Get medical advid n water for several m to do. Continue rinsir sts: Get medical adv TER or doctor/physi chemical and protein oved from and upwin	ce/attention. ninutes. Remove contac ng. ice/attention. cian if you feel unwell. based foam. d of fire. Water runoff c	et lenses,
IF ON SKIN IF IN EYES IF SWALLOV -fighting meas Extinguishing Suitable ext Extinguishing	WED sures ; media inguishing media ; media to avoid	Remove contaminate If skin irritation occu Rinse cautiously with if present and easy t If eye irritation persi Rinse mouth. Call a POISON CEN ^T Carbon dioxide, dry o None. Keep personnel remo the environment.	ed clothing. Wash wi irs: Get medical advid n water for several m to do. Continue rinsir sts: Get medical adv TER or doctor/physi chemical and protein oved from and upwin	ce/attention. ninutes. Remove contac ng. ice/attention. cian if you feel unwell. based foam.	et lenses,
IF ON SKIN	(or hair)	Remove contaminate If skin irritation occu Rinse cautiously with if present and easy t	ed clothing. Wash wi Irs: Get medical advid n water for several m to do. Continue rinsir	ce/attention. ninutes. Remove contac ng.	

Safety Data Sheet

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.

Precaution	s 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 chemi	cal properties
Physical pro	perties	
	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	
Mobilityinsoil	
Otherhazardous effects	

Not established. Not established. Not established

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.					
ransport Information					
UN No, UN CLAS	S Not applicable to l	JN NO.			
Marine transportation is regulate	ed by IMDG Code. Air transporta	tion is regulated by IATA Dangerous Goods Regulations.			
IMDG	IMDG Not regulated as dangerous goods.				
ATA	Not regulated as d	langerous goods.			
Regulatory Information					
Law concerning the Examinatio	n and Regulation of Manufactur	re 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 La	w				
Dangerous Substances Flammable:		Not regulated.			
Dangerous Substances Flammable Gases:		Not regulated.			
Dangerous Substa	nces Oxidizing:	Not regulated.			
Dangerous Substa	nces Explosives:	Not regulated.			
Dangerous Substa	nces Ignitable:	Not regulated.			
Harmful Substances Carcinogen:		Not regulated.			
Class 1 Designate	d Chemical Substances:	Not regulated.			
Class 2 Designate	d Chemical Substances:	Not regulated.			
Class 3 Designate	d Chemical Substances:	Not regulated.			
Class 1 Organic S	olvents Preparations:	Not regulated.			
Class 2 Organic S	olvents Preparations:	Not regulated.			
Class 3 Organic S	olvents Preparations:	Not regulated.			
Notifiable Substan		Not regulated.			
Labeling Requirem	ents:	Not regulated.			
Others:		Not regulated.			
Poisonous and Deleterious Sub	stances Control Law				
Specified Poisono	us Substance – Main Law:	Not regulated.			
•	us Substance – Cabinet Order:	Not regulated.			
Poisonous Substa		Not regulated.			
	nces – Cabinet Order:	Not regulated.			
Deleterious Subst		Not regulated.			
	ances – Cabinet Order:	Not regulated.			
Enforcement Orde		Not regulated.			
Enforcement Orde		Not regulated.			
Not Considered Po		Not regulated.			
Not Considered Pa		Not regulated.			
Cabinet Order, Pre		Not regulated.			
Fire Service Law					
Class 1 Oxidizing S	Solids:	Not regulated.			
Class 1 Oxidizing Class 2 Flammable		Not regulated. Not regulated.			
		Not regulated. Not regulated.			
	ous combustibility and	-			
Water-reactivity		Not regulated.			
Class 4 Flammable	•	Not regulated.			
Class 5 Self-Reac		Not regulated.			
Class 6 Oxidizing I		Not regulated.			
Designated Flamm		Not regulated.			
Storage Reporting	Substance:	Not regulated.			
Japan PRTR	animated Subat-	Net we wilet a			
	esignated Substance:	Not regulated.			
Class 1 Designate		Not regulated.			
Class 2 Designate	d 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	inforn	nation

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