KKURABO

SAFETY DATA SHEET

QuickGene RNA tissue kit SII (RT-S2)

Name of substance	Classification acc. to GHS	Pictograms
Lysis Buffer LRT-01	Acute Tox. 4: H302	
	Skin Irrit. 2: H315	
	Eye Irrit. 2: H319	\mathbf{v}
Solubilization Buffer	Eye Irrit. 2B: H320	
SRT-01		
Wash Buffer WRT-02		
Elution Buffer CRT-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

	Safety Data Sheet
dentification of the substance/mixture and of t	he company/undertaking
Product identifier:	
Product name:	Lysis Buffer
Product code:	LRT-01
SDS NO:	LRT01_JPE_1.1
Details of the supplier of the safety data s	heet
Manufacturer/Supplier:	KURABO INDUSTRIES LTD.
Address:	Advanced Technology Center, 14-30 Shimokida-cho, Neyagawa, Osaka, 572-0823 JAP
Division:	Bio-Medical department
Telephone number:	+81-72-820-3079
FAX:	+81-72-820-3095
Relevant identified uses of the substance Relevant identified uses of the product: Uses advised against: For research use	: Reagents for automated nucleic acid isolation system
zards identification	
GHS classification and label elements of th	ne 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 w	ithout 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 irr	ritation
PRECAUTIONARY STATEM	
Prevention	
	arts thoroughly after handling.
P280 Wear protective gloves	
P280 Wear eye protection/f	
	noke when using this product.
Response	
	/ash with plenty of soap and water.
	n occurs: Get medical advice/attention.
	minated clothing and wash it before reuse.
	YES: Rinse cautiously with water for several minutes. Remove
	nd easy to do. Continue rinsing.
P337 + P313 If eye irritation	n persists: Get medical advice/attention.
P330 Rinse mouth.	
P301 + P312 IF SWALLOWE	D: Call a POISON CENTER or doctor/physician if you feel unwell.
Disposal	
-	container in accordance with local/national regulation.

3. Composition/information on ingredients			
Mixture/Substance selection	Mixture		

Ingredient name	Content(%)	CAS No.
guanidinium thiocyanate	30-40	50-01-1
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.

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.

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	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.

Information on basic physical and chemica	al properties		
Physical properties	<u> </u>		1
Appearance:	Liquid		1
Color:	Colourless, Clear		
Odor:	Odourless		
pH:	6.5 Approx.		
Flash point:	Not flammable		
Auto-ignition temperature	Not flammable		
Solubility			1
Solubility in water:	Completely soluble]
bility and Reactivity	Quality and a second		- Part
Chemical stability		ormal storage/handling con	ditions.
Conditions to avoid	-	ct against direct sunlight.	
Hazardous decomposition products	CO, CO2 Nitrog	en oxides (NOx).	
icological Information			
Acute toxicity	Harmful if swall	owed.	
TestResults	Acute OralLD50Rat	t:> 500mg/kg	
Skin corrosion/irritation	moderate		
Serious eyedamage/eye irritation	May cause slight tr	ansient (temporary) eye irritatior	1.
Carcinogenicity	Substances in grou	p [1;2A;2B] by IARC (Internation	al Agency for Research on Cancer):None
logical Information	N		
Bioaccumulation	Not established		
When your own wastewater treatment pla		ollect entire waste and ther	-
Otherhazardous effects	Not established	ollect entire waste and ther	-
Otherhazardous effects posal considerations When your own wastewater treatment pla management professional with manifests f	Not established	ollect entire waste and ther	-
Otherhazardous effects oosal considerations When your own wastewater treatment pla management professional with manifests f product or waste.	Not established nt is not available, c for industrial waste.	ollect entire waste and ther Follow the laws and regulati	-
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	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 PRTR	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.
		-

16. Other information

GHS classification and labelling Acute Tox. 4: H302 Skin Irrit. 2: H315 Eye Irrit. 2: H319

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

ntification of the substance/mixt	ture and of th	ne company/undertaking	5			
Product identifier:						
Product name:		Solubilization Buffer				
Product code:		SRT-01				
SDS NO:		SRT01_JPE_1.1				
Details of the supplier of the sa	afety data sh					
Manufacturer/Supplier:		KURABO INDUSTRIE				
Address:		Advanced Technology		imokida-cho, N	eyagawa, O	saka, 572-0823
Division:		Bio-Medical departme	ent			
Telephone num	nber:	+81-72-820-3079				
FAX: Delevent identified wass of the		+81-72-820-3095	duined evelopt			
Relevant identified uses of the			-	lation ovetom		
Relevant identified uses of t Uses advised against: For re	-	-	ed nucleic acid iso	ation system		
Uses advised against. For re	esearch use	only				
ards identification						
GHS classification and label ele	ements of th	e product				
Classification of the substance	e or mixture					
Not applicable to (GHS classifica	ation				
Label elements						
No hazard pictog	gram					
No Signal word						
nposition/information on ingredie	onto					
Mixture/Substance selection	encs	Mixture				
Mixture/ Substance selection						
		Mixture				
	Ingredient r		Content(%)	CAS No.		1
polyoxyethylene so	-	name	Content(%)	CAS No.]
polyoxyethylene so hydrochloride salts	sorbitan fatty a	name acid ester		CAS No.		-
	sorbitan fatty a	name acid ester	10-20			
hydrochloride salts Water	sorbitan fatty a	name acid ester	10-20 1-5 Balance	7732		
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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 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	
Conditions to avoid	
Hazardous decomposition products	

Stable under normal storage/handling conditions. Freezing. Protect against direct sunlight. CO, CO2 Nitrogen oxides (NOx).

11. Toxicological Information

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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

Bio	paccumulation	Not established.
Ма	bilityinsoil	Not established.
Ot	herhazardous 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.

UN No	, UN CLASS Not applicable	to UN NO.
		ortation is regulated by IATA Dangerous Goods Regulations.
IMDG		as dangerous goods.
IATA	-	as dangerous goods.
	ency Response Guide Number	171
and determined in the second second		
egulatory Information Law concerning the	Examination and Regulation of Manufact	ure etc. of Chemical Substances
-	1 Specified Chemical Substance:	Not regulated.
	2 Specified Chemical Substance:	Not regulated.
	Monitoring Chemical Substance:	Not regulated.
	2 Monitoring Chemical Substance:	Not regulated.
	Monitoring Chemical Substance:	Not regulated.
Industrial Safety and	-	Not regulated.
•	rous Substances Flammable:	Not regulated.
	rous Substances Flammable Gases:	Not regulated.
	rous Substances Planinable Gases.	Not regulated.
-	-	
	rous Substances Explosives:	Not regulated.
-	rous Substances Ignitable:	Not regulated.
	ul Substances Carcinogen:	Not regulated.
	1 Designated Chemical Substances:	Not regulated.
	2 Designated Chemical Substances:	Not regulated.
	3 Designated Chemical Substances:	Not regulated.
	1 Organic Solvents Preparations:	Not regulated.
	2 Organic Solvents Preparations:	Not regulated.
	3 Organic Solvents Preparations:	Not regulated.
	ble Substance:	Not regulated.
	ng Requirements:	Not regulated.
Others		Not regulated.
Poisonous and Dele	terious Substances Control Law	
Specif	ied Poisonous Substance – Main Law:	Not regulated.
•	ied Poisonous Substance – Cabinet Ord	er: Not regulated.
	ious Substances – Main Law:	Not regulated.
	ious Substances – Cabinet Order:	Not regulated.
Delete	rious Substances – Main Law:	Not regulated.
Delete	rious Substances – Cabinet Order:	Not regulated.
Enforc	ement Order Article 32–2:	Not regulated.
Enford	ement Order Article 32-3:	Not regulated.
Not C	onsidered Poisonous:	Not regulated.
Not C	onsidered Deleterious:	Not regulated.
Cabine	et 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.
Desigr	ated Flammable Substances:	Not regulated.
Stora	e 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 Aerona	utics law	Not regulated.
Japan Marin	e Pollution Prevention Law	Not regulated.
High Pressu	re Gas Safety law	Not regulated.
Gun Powder	r 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) JIS Z 7252:2014, JIS Z 7253:2012

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

General Disclaimer

dentification of the s	substance/mixture and	of the company/undertal	king		
Product identifie	ər:				
Product name:		Wash Buffer			
Pre	oduct code:	WRT-02			
SD	IS NO:	WRT02_JPE_1.1			
Details of the su	upplier of the safety dat	a sheet			
Manufacturer/	/Supplier:	KURABO INDUSTRIE	S LTD.		
A	ddress:	Advanced Technolog	y Center, 14–30 Shin	nokida-cho, Neyagawa, C)saka, 572–0823 JAF
-	Division:	Bio-Medical departm	ent		
	elephone number:	+81-72-820-3079			
	AX:	+81-72-820-3095			
		nce or mixture and uses	0		
		ct: Reagents for automat	ed nucleic acid isola	tion system	
Uses advised a	against: For research us	se only			
lazards identification	n				
GHS classificati	on and label elements o	f the product			
Classification of	the substance or mixtur	e			
Not	t applicable to GHS classi	fication			
Label elements					
	hazard pictogram				
	Signal word				
	8				
omposition/informa	tion on ingredients				
Mixture/Substa		Mixture			
		WIXCULE			
	Ingredier		Content(%)	CAS No.	1
soc			Content(%) 0.5 - 1.5	CAS No. 7647-14-5]
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Wa	Ingredie dium chloride ter Note : The figures shown	nt name above are not the specifica	0.5 - 1.5 Balance tions of the product.	7647-14-5 7732-18-5	
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irst-aid measures Descriptions of IF INHALED IF ON SKIN (or IF IN EYES IF SWALLOWEI ire-fighting measure Extinguishing me Suitable extingu Extinguishing me Special fire fight	Ingredier dium chloride ter Note : The figures shown Generally chemica first-aid measures hair) D 28 edia uishing media edia to avoid	nt name above are not the specifical I substances greater than 1 Rescuers should we Remove person to fr Call a POISON CEN Remove contaminate If skin irritation occu Rinse cautiously wit if present and easy f If eye irritation persi Rinse mouth. Call a POISON CEN Carbon dioxide, dry None. Keep personnel remothe environment.	0.5 - 1.5 Balance tions of the product. % of the total are liste ar proper personal p resh air and keep co TER or doctor/phys ed clothing. Wash w urs: Get medical advi h water for several r to do. Continue rinsi ists: Get medical adv TER or doctor/phys chemical and proteir oved from and upwir	7647-14-5 7732-18-5 d. rotective equipment su 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. ician if you feel unwell.	vater. ot 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:	7.6			
	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

-	professional with manifests for industrial waste. F	llect entire waste and then charge to a licensed industrial waste ollow the laws and regulations in your country while disposing of
Transport Inform	ation	
	UN No, UN CLASS Not applicable to	UN NO.
Marine transp	portation is regulated by IMDG Code. Air transport	ation is regulated by IATA Dangerous Goods Regulations.
	IMDG Not regulated as	dangerous goods.
	IATA Not regulated as	dangerous goods.
Regulatory Inform	nation	
Law concern	ing the Examination and Regulation of Manufact	ure 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 Sat	fety 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 ar	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 PRTR		not rogalatou.
ναραπειλικ	Specific Class 1 Designated Substance:	Not regulated.
	Class 1 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) JIS Z 7252:2014, JIS Z 7253:2012 NITE CHRIP (http://www.safe.nite.go.jp/japan/sougou/view/SystemTop_jp.faces)

General Disclaimer

Product identifier:					
Product name:		Elution Buffer			
Product code:	:	CRT-01			
SDS NO:		CRT01 JPE 1.1			
Details of the supplier of the	e safetv dat				
Manufacturer/Supplier:		KURABO INDUSTRIE	S LTD.		
Address:		Advanced Technolog	y Center, 14–30 Shi	mokida-cho, Neyagawa, (Osaka, 572-0823 JA
Division:		Bio-Medical departm			
Telephone n	umber:	+81-72-820-3079			
FAX:		+81-72-820-3095			
Relevant identified uses of	f the substa	nce or mixture and uses	advised against		
Relevant identified uses o Uses advised against: For			ed nucleic acid isol	ation system	
zards identification					
GHS classification and label	l elements o	f the product			
Classification of the substan	ice or mixtur	e			
Not applicable to	o GHS classi	fication			
Label elements					
No hazard picto	ogram				
No Signal word	1				
mposition/information on ingre	edients				
Mixture/Substance selectio		Mixture			
					_
	Ingredier	nt name	Content(%)	CAS No.]
Water	-		80-100	CAS No. 7732-18-5	
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Note : The fig Gener	gures shown a	above are not the specifica I substances greater than 1	80-100 tions of the product. % of the total are list	7732-18-5	itable for situation.
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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 chemic	cal properties
Physical prop	perties	
	Appearance:	Liquid
	Color:	Colourless, Clear
	Odor:	Odourless
	pH:	6.5
	Flash point:	Not flammable
	Auto-ignition temperature	Non combustible
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 consideratio				
	-	ble, 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.				
Tuonon out Information				
Transport Information		ble to UN NO.		
Marine transportation is regulated by IMDG Code. Air transportation is regulated by IATA Dangerous Goods Regulations.				
-	Marine transportation is regulated by IMDG Gode. Air transportation is regulated by IATA Dangerous Goods Regulations. IMDG Not regulated as dangerous goods. IATA Not regulated as dangerous goods.			
Regulatory Informatio	n			
Law concerning t	ne Examination and Regulation of Mar	nufacture etc. of Chemical Substances		
Clas	s 1 Specified Chemical Substance:	Not regulated.		
Clas	s 2 Specified Chemical Substance:	Not regulated.		
Туре	e 1 Monitoring Chemical Substance:	Not regulated.		
Туре	e 2 Monitoring Chemical Substance:	Not regulated.		
Туре	e 3 Monitoring Chemical Substance:	Not regulated.		
Industrial Safety	and Health Law			
Dan	erous Substances Flammable:	Not regulated.		
	erous Substances Flammable Gases:	Not regulated.		
Dan	erous Substances Oxidizing:	Not regulated.		
	erous Substances Explosives:	Not regulated.		
	erous Substances Ignitable:	Not regulated.		
	nful Substances Carcinogen:	Not regulated.		
	s 1 Designated Chemical Substances:	Not regulated.		
	s 2 Designated Chemical Substances:	Not regulated.		
	s 3 Designated Chemical Substances:	Not regulated.		
	s 1 Organic Solvents Preparations:	Not regulated.		
	s 2 Organic Solvents Preparations:	Not regulated.		
	s 3 Organic Solvents Preparations:	Not regulated.		
	iable Substance:	Not regulated.		
Othe	ling Requirements:	Not regulated.		
	leterious Substances Control Law	Not regulated.		
	ified Poisonous Substance - Main Law	v: Not regulated.		
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•	onous Substances – Main Law:	Not regulated.		
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Not	Considered Poisonous:	Not regulated.		
Not	Considered Deleterious:	Not regulated.		
Cabi	net Order, Preparations:	Not regulated.		
Fire Service Law				
Clas	s 1 Oxidizing Solids:	Not regulated.		
Clas	s 2 Flammable Solids:	Not regulated.		
Clas	s 3 Spontaneous combustibility and	Not regulated.		
Wat	er-reactivity Substances:	Not regulated.		
Clas	s 4 Flammable Liquids:	Not regulated.		
Clas	s 5 Self-Reactive Substances:	Not regulated.		
Clas	s 6 Oxidizing Liquids:	Not regulated.		
Desi	gnated Flammable Substances:	Not regulated.		
Stor	age Reporting Substance:	Not regulated.		
Japan PRTR				
Spe	ific Class 1 Designated Substance:	Not regulated.		
Clas	s 1 Designated Substance:	Not regulated.		
Clas	s 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) JIS Z 7252:2014, JIS Z 7253:2012 NITE CHRIP (http://www.safe.nite.go.jp/japan/sougou/view/SystemTop_jp.faces)

General Disclaimer