MATERIAL SAFETY DATA SHEET

QuickGene RNA blood cell kit S

MSDS_LRB01_01E
MSDS_WRB01_01E
MSDS_CRB01_01E

KURABO INDUSTRIES LTD.

Bio-Medical Department

Address	Neyagawa Techno Center 3F
	14-5 Shimokida-Cho, Neyagawa, Osaka 572-0823, Japan
Telephone Number	+81-72-820-3079
FAX Number	+81-72-820-3095

KURABO

MATERIAL SAFETY DATA SHEET

1. Chemical product and company identification

Product name	**Lysis Buffer LRB-01**
Product usage	QuickGene RNA blood cell kit S: Lysis Buffer
Company Name	KURABO INDUSTRIES LTD.
Division	Bio-Medical Department
Address	Neyagawa Techno Center 3F
	14-5 Shimokida-Cho, Neyagawa, Osaka 572-0823, Japan
Telephone Number	+81-72-820-3079
FAX Number	+81-72-820-3095
Reference file name	MSDS_LRB01_01E

2. Hazards identification

GHS-classification

Health hazards	Acute toxicity (Oral)	Category 4
	Skin corrosion/irritation	Category 2
	Serious eye damage/eye irritation	Category 2

*Degree of Hazards: Smaller category number is more hazardous.

*Hazards not stated here are "Not applicable" or "Classification not possible".

GHS label elements

Symbol

Signal word Warning

Hazard statement Harmful if swallowed. (Category 4)
Causes skin irritation. (Category 2)
Causes serious eye irritation. (Category 2)

Precautionary statements

Prevention Wear eye/face protection. Wear protective gloves. Do not eat, drink or smoke when using this product. Wash thoroughly after handling.

Response IF SWALLOWED: Call a doctor/physician if you feel unwell. Rinse mouth.
IF ON SKIN: 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. Take off contaminated clothing and wash before reuse.

Disposal Dispose of contents/container in accordance with local/regional/national/international regulations.

National/local information See Section 15. REGULATORY INFORMATION

3. Composition/information on ingredients

Substance or Mixture Mixture

		Gazette notification		
Components	**CAS #**	**ENCS no.**	**ISHL no.**	**Concentration (%)**
water	7732-18-5	-----		50 - 70
guanidinium thiocyanate	593-84-0	2-1773		30 - 50
amino alcohol	---			1 - 5
hydrochloride salts of aminoalcohol	---			1 - 5

Chemical formula H2O (7732-18-5), CH5N3.CHNS (593-84-0)

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

Note: The notes / remarks within the brackets [ ] following the chemical substance names are used to communicate the following indications:

"PRTR S1" : Chemical substances that are designated in the Law for Promoting the Management of Chemical Substances as Specific Class 1 Chemical Substances.

"PRTR 1" : Chemical substances that are designated as Class 1 Chemical substances in the same Law.

"PRTR 2" : Chemical substances that are designated as Class 2 Chemical substances in the same Law.

"SSN" : Chemical substances that are subject to notification in accordance with the Labor Safety and Health Law.

4. First aid measures

In case of inhalation	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a doctor/physician.
Skin contact	Remove contaminated clothing. Wash off with soap and plenty of water. If skin irritation occurs: Get medical advice/attention.
Eye contact	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.
Ingestion	Rinse mouth. Call a doctor/physician if you feel unwell.
Protection of first-aid responders	Rescuers should wear proper personal protective equipment suitable for situation.

5. Fire-fighting measures

Extinguishing media	Carbon dioxide, dry chemical and protein based foam.
Extinguishing media to avoid	None.
Special fire fighting Procedures	Keep personnel removed from and upwind of fire. Water runoff can damage the environment. 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

Personal precautions, protective equipment and emergency measures	Wear adequate personal protective equipment, see Section 8 (Exposure Controls/Personal Protection)
Environmental precautions	Prevent from entering into soil, waterways and ground water.
Clean-up methods and materials and containment measures	Spills should be contained by, and covered with suitable absorbent material and removed for disposal

.

7. Handling and storage

Handling

Technical measures	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).
Safe handling 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

Appearance	
Form	Clear liquid
Color	Transparent colourless
Odor	Odourless
pH	6.5 Approx.
Melting point/Freezing point	No data available.
Boiling point, initial boiling point, and boiling range	No data available.
Flash point	Not flammable
Auto-ignition temperature	Not flammable.
Flammability limit - lower (%)	No data available.
Flammability limit - upper (%)	No data available.
Vapor pressure	No data available.
Vapor density	No data available.
Specific gravity	No data available.
Solubility (water)	Completely soluble
Partition coefficient (n-octanol/water)	No data available.
Decomposition temperature	No data available.

10. Stability and reactivity

Stability	Stable at normal conditions.
Possibility of hazardous reactions	None.
Conditions to avoid	Freezing. Protect against direct sunlight.
Incompatible materials	None.
Hazardous decomposition products	CO,CO2 Nitrogen oxides (NOx).

11. Toxicological information

Test Results	Acute Oral LD50 Rat: > 500 mg/kg
Skin corrosion/irritation	moderate
Serious eye damage/eye irritation	May cause slight transient (temporary) eye irritation.
Carcinogenicity	Substances in group [1;2A;2B] by IARC (International Agency for Research on Cancer):None

12. Ecological information

Bioaccumulation	Not established.
Mobility in soil	Not established.
Other hazardous 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

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

---------- Information for marine and air transportation to be passed to the shipping company ----------

IMDG

Not regulated as dangerous goods.

IATA

Not regulated as dangerous goods.

Emergency Response Guide Number 171

15. Regulatory information

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

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

Industrial Safety and Health Law

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

Poisonous and Deleterious Substances Control Law

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

Fire Service Law

Class 1 Oxidizing Solids:	Not regulated.
Class 2 Flammable Solids:	Not regulated.
Class 3 Spontaneous combustibility and Water-reactivity Substances:	Not regulated.
Class 4 Flammable Liquids:	Not regulated.

Class 5 Self-Reactive Substances:	Not regulated.
Class 6 Oxidizing Liquids:	Not regulated.
Designated Flammable Substances:	Not regulated.
Storage Reporting Substance:	Not regulated.
Japan PRTR	
Specific Class 1 Designated Substance:	Not regulated.
Class 1 Designated Substance:	Not regulated.
Class 2 Designated Substance:	Not regulated.
Ship Safety Law	Not regulated.
Civil Aeronautics law	Not regulated.
Japan Marine Pollution Prevention Law	Not regulated.
High Pressure Gas Safety law	Not regulated.
Gun Powder Control Law	Not regulated.

16. Other information

This information is provided without warranty. The information is believed to be correct. This information should be used to make an independent determination of the methods to safeguard workers and the environment. This MSDS is prepared according to the MSDS guideline of Japan Chemical Industry Association based on JIS Z7250:2005.

KURABO

MATERIAL SAFETY DATA SHEET

1. Chemical product and company identification

Product name **Wash Buffer WRB-01**
Product usage QuickGene RNA blood cell kit S: Wash Buffer
Company Name KURABO INDUSTRIES LTD.
Division Bio-Medical Department
Address Neyagawa Techno Center 3F
14-5 Shimokida-Cho, Neyagawa, Osaka 572-0823, Japan
Telephone Number +81-72-820-3079
FAX Number +81-72-820-3095
Reference file name MSDS_WRB01_01E

2. Hazards identification

GHS-classification

Health hazards	Acute toxicity (Oral)	Not classified
	Skin corrosion/irritation	Not classified
	Serious eye damage/eye irritation	Not classified

*Degree of Hazards: Smaller category number is more hazardous.

No hazards resulting from the material as supplied.

National/local information See Section 15. REGULATORY INFORMATION

3. Composition/information on ingredients

Substance or Mixture Mixture

			Gazette notification		
Components	**CAS #**	**ENCS no.**	**ISHL no.**	**Concentration (%)**
water	7732-18-5	-----		80 - 100

Chemical formula H2O (7732-18-5)

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

Note: The notes / remarks within the brackets [ ] following the chemical substance names are used to communicate the following indications:

"PRTR S1" : Chemical substances that are designated in the Law for Promoting the Management of Chemical Substances as Specific Class 1 Chemical Substances.

"PRTR 1" : Chemical substances that are designated as Class 1 Chemical substances in the same Law.

"PRTR 2" : Chemical substances that are designated as Class 2 Chemical substances in the same Law.

"SSN" : Chemical substances that are subject to notification in accordance with the Labor Safety and Health Law.

4. First aid measures

In case of inhalation Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a doctor/physician.
Skin contact Rinse skin with water/shower. Get medical attention if irritation develops and persists.
Eye contact Rinse with water. Get medical attention if irritation develops and persists.
Ingestion Rinse mouth. Get medical attention if any discomfort continues.
Protection of first-aid responders Rescuers should wear proper personal protective equipment suitable for situation.

5. Fire-fighting measures

Extinguishing media	Carbon dioxide, dry chemical and protein based foam.
Extinguishing media to avoid	None.
Special fire fighting Procedures	Keep personnel removed from and upwind of fire. Water runoff can damage the environment. 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

Personal precautions, protective equipment and emergency measures	Wear adequate personal protective equipment, see Section 8 (Exposure Controls/Personal Protection)
Environmental precautions	Prevent from entering into soil, waterways and ground water.
Clean-up methods and materials and containment measures	Spills should be contained by, and covered with suitable absorbent material and removed for disposal

.

7. Handling and storage

Handling

Technical measures	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).
Safe handling 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	Handle in accordance with good industrial hygiene and safety practice.

9. Physical and chemical properties

Appearance

Form	Aqueous solution
Color	Transparent colourless
Odor	Odourless
pH	7.5 Approx. ; 25°C
Melting point/Freezing point	No data available.
Boiling point, initial boiling point, and boiling range	No data available.
Flash point	Not flammable
Auto-ignition temperature	Not flammable.
Flammability limit - lower (%)	No data available.
Flammability limit - upper (%)	No data available.
Vapor pressure	No data available.
Vapor density	No data available.
Specific gravity	No data available.

Solubility (water)	Completely soluble
Partition coefficient (n-octanol/water)	No data available.
Decomposition temperature	No data available.

10. Stability and reactivity

Stability	Stable at normal conditions.
Possibility of hazardous reactions	None.
Conditions to avoid	Freezing. Protect against direct sunlight.
Incompatible materials	None.
Hazardous decomposition products	CO,CO2 Nitrogen oxides (NOx).

11. Toxicological information

Test Results	Acute Oral LD50 Rat: > 2000 mg/kg
Skin corrosion/irritation	No irritation
Serious eye damage/eye irritation	non irritant
Carcinogenicity	Substances in group [1;2A;2B] by IARC (International Agency for Research on Cancer):None

12. Ecological information

Bioaccumulation	Not established.
Mobility in soil	Not established.
Other hazardous 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

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

---------- Information for marine and air transportation to be passed to the shipping company ----------

IMDG

Not regulated as dangerous goods.

IATA

Not regulated as dangerous goods.

15. Regulatory information

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

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

Industrial Safety and Health Law

Dangerous Substances Flammable:	Not regulated.
Dangerous Substances Flammable Gases:	Not regulated.
Dangerous Substances Oxidizing:	Not regulated.
Dangerous Substances Explosives:	Not regulated.
Dangerous Substances Ignitable:	Not regulated.
Harmful Substances Carcinogen:	Not regulated.

Class 1 Designated Chemical Substances:	Not regulated.
Class 2 Designated Chemical Substances:	Not regulated.
Class 3 Designated Chemical Substances:	Not regulated.
Class 1 Organic Solvents Preparations:	Not regulated.
Class 2 Organic Solvents Preparations:	Not regulated.
Class 3 Organic Solvents Preparations:	Not regulated.
Notifiable Substance:	Not regulated.
Labeling Requirements:	Not regulated.
Others:	Not regulated.
Poisonous and Deleterious Substances Control Law	
Specified Poisonous Substance - Main Law:	Not regulated.
Specified Poisonous Substance - Cabinet Order:	Not regulated.
Poisonous Substances - Main Law:	Not regulated.
Poisonous Substances - Cabinet Order:	Not regulated.
Deleterious Substances - Main Law:	Not regulated.
Deleterious Substances - Cabinet Order:	Not regulated.
Enforcement Order Article 32-2:	Not regulated.
Enforcement Order Article 32-3:	Not regulated.
Not Considered Poisonous:	Not regulated.
Not Considered Deleterious:	Not regulated.
Cabinet Order, Preparations:	
Fire Service Law	
Class 1 Oxidizing Solids:	Not regulated.
Class 2 Flammable Solids:	Not regulated.
Class 3 Spontaneous combustibility and Water-reactivity Substances:	Not regulated.
Class 4 Flammable Liquids:	Not regulated.
Class 5 Self-Reactive Substances:	Not regulated.
Class 6 Oxidizing Liquids:	Not regulated.
Designated Flammable Substances:	Not regulated.
Storage Reporting Substance:	Not regulated.
Japan PRTR	
Specific Class 1 Designated Substance:	Not regulated.
Class 1 Designated Substance:	Not regulated.
Class 2 Designated Substance:	Not regulated.
Ship Safety Law	Not regulated.
Civil Aeronautics law	Not regulated.
Japan Marine Pollution Prevention Law	Not regulated.
High Pressure Gas Safety law	Not regulated.
Gun Powder Control Law	Not regulated.

16. Other information

This information is provided without warranty. The information is believed to be correct. This information should be used to make an independent determination of the methods to safeguard workers and the environment. This MSDS is prepared according to the MSDS guideline of Japan Chemical Industry Association based on JIS Z7250:2005.

KURABO

MATERIAL SAFETY DATA SHEET

1. Chemical product and company identification

Product name	**Elution Buffer CRB-01**
Product usage	QuickGene RNA blood cell kit S: Elution Buffer
Company Name	KURABO INDUSTRIES LTD.
Division	Bio-Medical Department
Address	Neyagawa Techno Center 3F
	14-5 Shimokida-Cho, Neyagawa, Osaka 572-0823, Japan
Telephone Number	+81-72-820-3079
FAX Number	+81-72-820-3095
Reference file name	MSDS_CRB01_01E

2. Hazards identification

GHS-classification

Health hazards	Acute toxicity (Oral)	Not classified
	Skin corrosion/irritation	Not classified
	Serious eye damage/eye irritation	Not classified

*Degree of Hazards: Smaller category number is more hazardous.

No hazards resulting from the material as supplied.

National/local information See Section 15. REGULATORY INFORMATION

3. Composition/information on ingredients

Substance or Mixture Mixture

		Gazette notification		
Components	**CAS #**	**ENCS no.**	**ISHL no.**	**Concentration (%)**
water	7732-18-5	-----		80 - 100

Chemical formula H2O (7732-18-5)

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

Note: The notes / remarks within the brackets [ ] following the chemical substance names are used to communicate the following indications:

"PRTR S1" : Chemical substances that are designated in the Law for Promoting the Management of Chemical Substances as Specific Class 1 Chemical Substances.

"PRTR 1" : Chemical substances that are designated as Class 1 Chemical substances in the same Law.

"PRTR 2" : Chemical substances that are designated as Class 2 Chemical substances in the same Law.

"SSN" : Chemical substances that are subject to notification in accordance with the Labor Safety and Health Law.

4. First aid measures

In case of inhalation	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a doctor/physician.
Skin contact	Rinse skin with water/shower. Get medical attention if irritation develops and persists.
Eye contact	Rinse with water. Get medical attention if irritation develops and persists.
Ingestion	Rinse mouth. Get medical attention if any discomfort continues.
Protection of first-aid responders	Rescuers should wear proper personal protective equipment suitable for situation.

5. Fire-fighting measures

Extinguishing media	Carbon dioxide, dry chemical and protein based foam.
Extinguishing media to avoid	None.
Special fire fighting Procedures	Keep personnel removed from and upwind of fire. Water runoff can damage the environment. 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

Personal precautions, protective equipment and emergency measures	Wear adequate personal protective equipment, see Section 8 (Exposure Controls/Personal Protection)
Environmental precautions	Prevent from entering into soil, waterways and ground water.
Clean-up methods and materials and containment measures	Spills should be contained by, and covered with suitable absorbent material and removed for disposal

.

7. Handling and storage

Handling

Technical measures	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).
Safe handling 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	Handle in accordance with good industrial hygiene and safety practice.

9. Physical and chemical properties

Appearance

Form	Aqueous solution
Color	Transparent colourless
Odor	Odourless
pH	6.5
Melting point/Freezing point	No data available.
Boiling point, initial boiling point, and boiling range	No data available.
Flash point	Not flammable
Auto-ignition temperature	Non combustible
Flammability limit - lower (%)	No data available.
Flammability limit - upper (%)	No data available.
Vapor pressure	No data available.
Vapor density	No data available.
Specific gravity	No data available.

Solubility (water)	Completely soluble
Partition coefficient (n-octanol/water)	No data available.
Decomposition temperature	No data available.
Viscosity	Like water

10. Stability and reactivity

Stability	Stable at normal conditions.
Possibility of hazardous reactions	None.
Conditions to avoid	Freezing. Protect against direct sunlight.
Incompatible materials	None.
Hazardous decomposition products	CO,CO2 Nitrogen oxides (NOx).

11. Toxicological information

Test Results	Acute Oral LD50 Rat: > 2000 mg/kg
Skin corrosion/irritation	No irritation
Serious eye damage/eye irritation	non irritant
Carcinogenicity	Substances in group [1;2A;2B] by IARC (International Agency for Research on Cancer):None

12. Ecological information

Bioaccumulation	Not established.
Mobility in soil	Not established.
Other hazardous 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

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

---------- Information for marine and air transportation to be passed to the shipping company ----------

IMDG

Not regulated as dangerous goods.

IATA

Not regulated as dangerous goods.

15. Regulatory information

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

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

Industrial Safety and Health Law

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

Harmful Substances Carcinogen:	Not regulated.
Class 1 Designated Chemical Substances:	Not regulated.
Class 2 Designated Chemical Substances:	Not regulated.
Class 3 Designated Chemical Substances:	Not regulated.
Class 1 Organic Solvents Preparations:	Not regulated.
Class 2 Organic Solvents Preparations:	Not regulated.
Class 3 Organic Solvents Preparations:	Not regulated.
Notifiable Substance:	Not regulated.
Labeling Requirements:	Not regulated.
Others:	Not regulated.
Poisonous and Deleterious Substances Control Law	
Specified Poisonous Substance - Main Law:	Not regulated.
Specified Poisonous Substance - Cabinet Order:	Not regulated.
Poisonous Substances - Main Law:	Not regulated.
Poisonous Substances - Cabinet Order:	Not regulated.
Deleterious Substances - Main Law:	Not regulated.
Deleterious Substances - Cabinet Order:	Not regulated.
Enforcement Order Article 32-2:	Not regulated.
Enforcement Order Article 32-3:	Not regulated.
Not Considered Poisonous:	Not regulated.
Not Considered Deleterious:	Not regulated.
Cabinet Order, Preparations:	
Fire Service Law	
Class 1 Oxidizing Solids:	Not regulated.
Class 2 Flammable Solids:	Not regulated.
Class 3 Spontaneous combustibility and Water-reactivity Substances:	Not regulated.
Class 4 Flammable Liquids:	Not regulated.
Class 5 Self-Reactive Substances:	Not regulated.
Class 6 Oxidizing Liquids:	Not regulated.
Designated Flammable Substances:	Not regulated.
Storage Reporting Substance:	Not regulated.
Japan PRTR	
Specific Class 1 Designated Substance:	Not regulated.
Class 1 Designated Substance:	Not regulated.
Class 2 Designated Substance:	Not regulated.
Ship Safety Law	Not regulated.
Civil Aeronautics law	Not regulated.
Japan Marine Pollution Prevention Law	Not regulated.
High Pressure Gas Safety law	Not regulated.
Gun Powder Control Law	Not regulated.

16. Other information

This information is provided without warranty. The information is believed to be correct. This information should be used to make an independent determination of the methods to safeguard workers and the environment. This MSDS is prepared according to the MSDS guideline of Japan Chemical Industry Association based on JIS Z7250:2005.