



## **SAFETY DATA SHEET**

QuickGene RNA cultured cell kit S

**MSDS\_LRC01\_01EU**

**MSDS\_WRC01\_01EU**

**MSDS\_CRC01\_01EU**

**KURABO INDUSTRIES LTD.**

**Bio-Medical Department**

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



## SAFETY DATA SHEET

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

**Use :** Nucleic acid Isolation Kit

**Product name** Lysis Buffer LRC-01

**Product usage** QuickGene RNA cultured cell kit: Lysis Buffer

**Manufacturer / Supplier :**

KURABO INDUSTRIES LTD.

Bio-Medical Department

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

**Information department:**

Bio-Medical Department

**Telephone Number** +81-72-820-3079

**Email:** bio@ad.kurabo.co.jp

**Emergency information:**

**Telephone Number** +81-72-820-3079 9:00AM - 6:00PM

**Reference file name** MSDS\_LRC01\_01EU

### 2. Hazards identification

**Information pertaining to particular dangers for man and environment**

**Xn** harmful

**Classification system:**

The classification is according to the latest editions of the EU-lists, and extended by company and literature data.

**Classification(REGULATION(EC) No 1272/2008**

Flammable liquids ,Category 3, H226

Skin irritation, Category 2, H315

Eye irritation, Category 2, H319

**Classification (67/548/EEC or 1999/45/EC)**

**Xn** **R: 22-36/38**

**Labelling (REGULATION(EC) No 1272/2008)**

**Hazard pictograms**



**Signal word**

Warning

**Hazard statement**

H226

Flammable liquid and vapor. (Category 3)

H302

Harmful if swallowed. (Category 4)

H315

Causes skin irritation. (Category 2)

H319

Causes serious eye irritation. (Category 2)

**Precautionary statements**

**Prevention**

P210

Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

P233

Keep container tightly closed.

P240

Ground/bond container and receiving equipment.

P241

Use explosion-proof electrical/ventilating/lighting equipment.

P242

Use only non-sparking tools.

P243

Take precautionary measures against static discharges.

<b>Response</b>	P264	Wash thoroughly after handling
	P270	Do not eat, drink or smoke when using this product.
	P280	Wear protective gloves/protective clothing/eye protection/face protection.
	P312	Call a doctor/physician if you feel unwell.
	P330	Rinse mouth.
	P361	Remove/take off immediately all contaminated clothing.
	P353	Rinse skin with water/shower.
	P332+P313	If skin irritation occurs: Get medical advice/attention.
	P351	Rinse cautiously with water for several minutes.
	P338	Remove contact lenses, if present and easy to do. Continue rinsing.
<b>Storage</b>	P337+P313	If eye irritation persists: Get medical advice/attention.
<b>Disposal</b>	P403+P235	Store in a well-ventilated place. Keep cool.
	P501	Dispose of contents/container in accordance with local/regional/national/international regulations.

### 3. Composition/information on ingredients

#### Chemical characterization

Substance or Mixture                      Mixture

Description Mixture of substances listed below with nonhazardous additions.

#### Dangerous components:

	Components	Concentration (%)
CAS : 50-01-1	guanidine hydrochloride	40 – 60
EINECS : 200-002-3	<b>R 22-36/38 S 26-37</b>	
CAS : 7732-18-5	water	30 – 50
EINECS :231-791-2		
CAS : 64-17-5	ethanol	3 – 7
EINECS : 200-578-6		
CAS : ----	polyoxyethylene sorbitan fatty acid ester	1 - 5
EINECS :		
CAS : 57-09-0	hexadecyltrimethylammonium bromide	2.0
EINECS :200-311-3		
<b>Chemical formula</b>	CH <sub>5</sub> N <sub>3</sub> .ClH (50-01-1), H <sub>2</sub> O (7732-18-5), C <sub>2</sub> H <sub>6</sub> O (64-17-5), C <sub>19</sub> H <sub>42</sub> N.Br (57-09-0)	

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

### 4. First aid measures

<b>After inhalation:</b>	Supply fresh air and to be sure call for a doctor.
<b>After skin contact</b>	Remove contaminated clothing. Wash off with soap and plenty of water. If skin irritation occurs: Get medical advice/attention.
<b>After eye contact</b>	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.
<b>After swallowing</b>	Call for a doctor immediately.

### 5. Fire-fighting measures

<b>Suitable extinguish agents:</b>	CO <sub>2</sub> , powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
<b>Protective equipment:</b>	Do not inhale explosion gases or combustion gases.

### 6. Accidental release measures

<b>Person-related safety precautions:</b>	Ensure adequate ventilation Wear adequate personal protective equipment, see Section 8 (Exposure Controls/Personal Protection)
<b>Measures for environmental protection:</b>	Do not allow to enter sewers/ surface or ground water.

**Measures for cleaning/collecting:**

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

**7. Handling and storage****Handling****Information for safe handling:**

Keep receptacles tightly sealed. Avoid contact with skin, eyes and clothing.

Wash hands after handling.

**Information about fire - and explosion protection:**

No special measures required.

**Storage:****Requirements to be met by storerooms and receptacles:**

No special requirement

**Further information about storage conditions:**

Keep receptacle tightly sealed.

**8. Exposure controls/personal protection****Additional information about design of technical facilities:****Personal protective equipment:****General protective and hygienic measures:**

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing

Wash hands before breaks and at the end of work.

Avoid contact with the eyes and skin.

**Protection of hands:**

Protective gloves.

**Material of gloves**

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

**Penetration time of glove material**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

**Eye protection:**

Tightly sealed goggles.

**9. Physical and chemical properties****General Information****Form:**

Liquid

**Colour:**

Pale yellow

**Odour:**

Practically odourless

**Change in condition****Melting point/Melting range:**

No data available.

**Boiling point/Boiling range:**

No data available.

**Flash point:**

127.4 °F (52.7 °C) Closed cup method

**Self-igniting:**

Product is not self-igniting.

**Danger of explosion:**

Product does not present an explosion hazard.

**Flammability limit - lower (%)**

No data available.

**Flammability limit - upper (%)**

No data available.

**Vapor pressure at 20°C**

No data available.

**Density**

No data available.

**Solubility in / Miscibility with water:**

Completely soluble

**pH-value :**

pH. 5.5 Approx

(n-octanol/water)

**10. Stability and reactivity****Thermal decomposition / conditions to be avoided:**

No decomposition if used according to specifications.

**Dangerous reaction**

None.

**Dangerous decomposition products:**

CO,CO2 Nitrogen oxides (NOx).

## 11. Toxicological information

<b>Acute toxicity:</b>	Harmful if swallowed.
<b>Primary irritant effect:</b>	Acute Oral LD50 Rat: > 500 mg/kg
<b>on the skin:</b>	moderate
<b>on the eye:</b>	moderately irritant
<b>Sensitization:</b>	No sensitizing effects known
<b>Additional toxicological information:</b>	No further data

## 12. Ecological information

<b>General notes:</b>	Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
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## 13. Disposal considerations

<b>Product:</b>	
<b>Recommendation</b>	Must not be disposed together with household garbage. Do not allow product to reach sewage system.

## 14. Transport information

<b>Land transport ADR/RID (cross-border)</b>	
<b>ADR/RID class:</b>	
<b>Maritime transport IMO:</b>	
<b>IMO Class:</b>	
<b>Air transport ICAO-TI and IATA-DGR</b>	
<b>ICAO/IATA Class:</b>	-
<b>Transport /Additional information:</b>	Not dangerous according to the above specifications.

## 15. Regulatory information

### Labelling according to EU guidelines:

The product has been classified and marked in accordance with EU Directives / Ordinance on Hazardous Materials.

### Code letter and hazard designation of product:

Xn: harmful

### Risk phrases:

- 10 Flammable
- 22 Harmful if swallowed
- 36/38 Irritating to eyes and skin.

### Safety phrases:

- 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
- 37 Wear suitable gloves

## 16. Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.



## SAFETY DATA SHEET

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

Use : Nucleic acid Isolation Kit

Product name Wash Buffer WRC-01

Product usage QuickGene RNA cultured cell kit: Wash Buffer

Manufacturer / Supplier :

KURABO INDUSTRIES LTD.

Bio-Medical Department

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

Information department:

Bio-Medical Department

Telephone Number +81-72-820-3079

Email: bio@ad.kurabo.co.jp

Emergency information:

Telephone Number +81-72-820-3079 9:00AM - 6:00PM

Reference file name MSDS\_WRC01\_01EU

### 2. Hazards identification

Information pertaining to particular dangers for man and environment

No hazardous product as specified in Directive 67/548/EEC and 1999/45/EC.

Classification system:

The classification is according to the latest editions of the EU-lists, and extended by company and literature data.

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

### 3. Composition/information on ingredients

Chemical characterization

Substance or Mixture

Mixture

Description Mixture of substances listed below with nonhazardous additions.

Components:

	Components	Concentration (%)
CAS: 7732-18-5	water	80 - 100
EINECS : 231-791-2		
Chemical formula	H <sub>2</sub> O (7732-18-5),	

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

### 4. First aid measures

After inhalation:	Supply fresh air.
After skin contact	Remove contaminated clothing. Wash off with soap and plenty of water.
After eye contact	Rinse out with water
After swallowing	Call for a doctor if feeling unwell.

### 5. Fire-fighting measures

Suitable extinguish agents:	CO <sub>2</sub> , powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
Protective equipment:	Do not inhale explosion gases or combustion gases.
Special risks:	Non-combustible

## 6. Accidental release measures

<b>Person-related safety precautions:</b>	Do not inhale vapours/aerosols.
<b>Measures for environmental protection:</b>	Do not allow to enter sewers/ surface or ground water.
<b>Measures for cleaning/collecting:</b>	Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

## 7. Handling and storage

### Handling

<b>Information for safe handling:</b>	Keep receptacles tightly sealed. Avoid contact with skin, eyes and clothing. Wash hands after handling.
<b>Information about fire - and explosion protection:</b>	No special measures required.
<b>Storage:</b>	
<b>Requirements to be met by storerooms and receptacles:</b>	No special requirement
<b>Further information about storage conditions:</b>	Keep receptacle tightly sealed.

## 8. Exposure controls/personal protection

### Additional information about design of technical facilities:

### Personal protective equipment:

<b>General protective and hygienic measures:</b>	Keep away from foodstuffs, beverages and feed. Immediately remove all soiled and contaminated clothing Wash hands before breaks and at the end of work. Avoid contact with the eyes and skin.
<b>Protection of hands:</b>	Protective gloves.
<b>Material of gloves</b>	The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.
<b>Penetration time of glove material</b>	The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
<b>Eye protection:</b>	Tightly sealed goggles.

## 9. Physical and chemical properties

### General Information

<b>Form:</b>	Clear liquid
<b>Colour:</b>	Transparent colourless
<b>Odour:</b>	Odourless

### Change in condition

<b>Melting point/Melting range:</b>	Undetermined.
<b>Boiling point/Boiling range:</b>	No data available.
<b>Flash point:</b>	Not flammable
<b>Self-igniting:</b>	Product is not self-igniting.
<b>Danger of explosion:</b>	Product does not present an explosion hazard.
<b>Flammability limit - lower (%)</b>	No data available.
<b>Flammability limit - upper (%)</b>	No data available.
<b>Vapor pressure at 20°C</b>	No data available.
<b>Density</b>	No data available.
<b>Solubility in / Miscibility with water:</b>	Completely soluble
<b>pH-value: (n-octanol/water)</b>	pH. 7.5 Approx. ; 25°C

## 10. Stability and reactivity

<b>Thermal decomposition / conditions to be avoided:</b>	No decomposition if used according to specifications.
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**Dangerous reaction**

None.

**Dangerous decomposition products:**

CO,CO2 Nitrogen oxides (NOx).

**11. Toxicological information****Acute toxicity:**

No toxicity

**Primary irritant effect:**

Acute Oral LD50 Rat: &gt; 2000 mg/kg

**on the skin:**

No irritation

**on the eye:**

No irritation

**Sensitization:**

No sensitizing effects known

**Additional toxicological information:**

No further data

**12. Ecological information****General notes:**

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

**13. Disposal considerations****Product:****Recommendation**

Must not be disposed together with household garbage.

Do not allow product to reach sewage system.

**14. Transport information****Land transport ADR/RID (cross-border)****ADR/RID class:****Maritime transport IMO:****IMO Class:****Air transport ICAO-TI and IATA-DGR****ICAO/IATA Class:**

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**Transport /Additional information:**

Not dangerous according to the above specifications.

**15. Regulatory information****Lavelling according to EU guidelines:**

The product has been classified and marked in accordance with EU Directives / Ordinance on Hazardous Materials.

**Code letter and hazard designation of product:**

Not regulated.

**Risk phrases:****Safety phrases:****16. Other information**

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.





## SAFETY DATA SHEET

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

Use : Nucleic acid Isolation Kit

Product name Elution Buffer CRC-01

Product usage QuickGene RNA cultured cell kit: Elution Buffer

Manufacturer / Supplier :

KURABO INDUSTRIES LTD.

Bio-Medical Department

Neyagawa Techno Center 3F 14-5 Shimokida-Cho, Neyagawa, Osaka 572-0823, Japan

Telephone Number +81-72-820-3079

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Email: bio@ad.kurabo.co.jp

Emergency information:

Telephone Number +81-72-820-3079 9:00AM - 6:00PM

Reference file name MSDS\_CRC01\_01EU

### 2. Hazards identification

Information pertaining to particular dangers for human and environment

No hazardous product as specified in Directive 67/548/EEC and 1999/45/EC

Classification system:

The classification is according to the latest editions of the EU-lists, and extended by company and literature data. GHS-classification

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

### 3. Composition/information on ingredients

Chemical characterization

Substance or Mixture Mixture

Description Mixture of substances listed below with nonhazardous additions.

Components:

	Components	Concentration (%)
CAS : 7732-18-5	water	80 – 100
EINECS: 231-791-2		
Chemical formula	H <sub>2</sub> O (7732-18-5)	

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

### 4. First aid measures

After inhalation: Supply fresh air and to be sure call for a doctor.

After skin contact: Remove contaminated clothing. Wash off with soap and plenty of water. If skin irritation occurs: Get medical advice/attention.

After eye contact: Rinse opened eye for several minutes under running water. Get medical attention if irritation develops and persists.

After swallowing: Call for a doctor immediately.

### 5. Fire-fighting measures

Suitable extinguish agents: CO<sub>2</sub>, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

**Protective equipment:**

Do not inhale explosion gases or combustion gases.

**6. Accidental release measures****Person-related safety precautions:**

Ensure adequate ventilation

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

**Measures for environmental protection:**

Do not allow to enter sewers/ surface or ground water.

**Measures for cleaning/collecting:**

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

**7. Handling and storage****Handling****Information for safe handling:**

Keep receptacles tightly sealed. Avoid contact with skin, eyes and clothing.

Wash hands after handling.

**Information about fire - and explosion protection:**

No special measures required.

**Storage:****Requirements to be met by storerooms and receptacles:** No special requirement**Further information about storage conditions:**

Keep receptacle tightly sealed.

**8. Exposure controls/personal protection****Additional information about design of technical facilities:****Personal protective equipment:****General protective and hygienic measures:**

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing

Wash hands before breaks and at the end of work.

Avoid contact with the eyes and skin.

**Protection of hands:**

Protective gloves.

**Material of gloves**

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

**Penetration time of glove material**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

**Eye protection:**

Tightly sealed goggles.

**9. Physical and chemical properties****General Information****Form:**

Aqueous solution

**Colour:**

Transparent colourless

**Odour:**

Odourless

**Change in condition****Melting point/Melting range:**

Undetermined.

**Boiling point/Boiling range:**

No data available.

**Flash point:**

Not flammable

**Self-igniting:**

Product is not self-igniting.

**Danger of explosion:**

Product does not present an explosion hazard.

**Flammability limit - lower (%)**

No data available.

**Flammability limit - upper (%)**

No data available.

**Vapor pressure at 20°C**

No data available.

**Density**

No data available.

**Solubility in / Miscibility with water:**

Completely soluble

**pH-value:**

pH 6.5.

**(n-octanol/water)**

## 10. Stability and reactivity

<b>Thermal decomposition / conditions to be avoided:</b>	No decomposition if used according to specifications.
<b>Dangerous reaction</b>	None.
<b>Dangerous decomposition products:</b>	CO,CO2 Nitrogen oxides (NOx).

## 11. Toxicological information

<b>Acute toxicity:</b>	No toxicity
<b>Primary irritant effect:</b>	Acute Oral LD50 Rat: > 2000 mg/kg
<b>on the skin:</b>	No irritation
<b>on the eye:</b>	No irritation
<b>Sensitization:</b>	No sensitizing effects known
<b>Additional toxicological information:</b>	No further data

## 12. Ecological information

<b>General notes:</b>	Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
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## 13. Disposal considerations

<b>Product:</b>	
<b>Recommendation</b>	Must not be disposed together with household garbage. Do not allow product to reach sewage system.

## 14. Transport information

<b>Land transport ADR/RID (cross-border)</b>	
<b>ADR/RID class:</b>	
<b>Maritime transport IMO:</b>	
<b>IMO Class:</b>	
<b>Air transport ICAO-TI and IATA-DGR</b>	
<b>ICAO/IATA Class:</b>	-
<b>Transport /Additional information:</b>	Not dangerous according to the above specifications

## 15. Regulatory information

<b>Labelling according to EU guidelines:</b>	The product has been classified and marked in accordance with EU Directives / Ordinance on Hazardous Materials.
<b>Code letter and hazard designation of product:</b>	Not regulated.

## 16. Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.