

# **SAFETY DATA SHEET**

# QuickGene DNA tissue kit S

MSDS\_EDT01\_01EU MSDS\_LDT01\_01EU MSDS\_MDT01\_01EU MSDS\_WDT01\_01EU MSDS\_CDT01\_01EU

# KURABO INDUSTRIES LTD.

# **Bio-Medical Department**

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## SAFETY DATA SHEET

Creation Date 2012/04/13

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

**Nucleic acid Isolation Kit** ProteinaseK EDT-01 Product name

Product usage QuickGene DNA tissue kit: Protease K

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\_EDT01\_01EU

#### 2. Hazards identification

Information pertaining to particular dangers for man and environment

Not applicable

Classification system:

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

Labelling(REGULATION(EC) No 1272/2008)

Health hazards Acute toxicity (Oral) Not classified

> Not classified Skin corrosion/irritation Category 2 Serious eye damage/eye irritation

Hazard pictograms



Signal word Warning

Hazard statement H319 Causes serious eye irritation. (Category 2)

**Precautionary statements** 

Prevention P280 Wear eye/face protection.

> P264 Wash thoroughly after handling.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Response

Remove contact lenses, if present and easy to do. Continue rinsing.

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

### 3. Composition/information on ingredients

Chemical characterization

Substance or Mixture Mixture

Description: Mixture of substances listed below with nonhazardous additions.

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#### Dangerous components:

	Components	Concentration (%)
<b>CAS</b> :56-81-5	glycerin	40 - 60
EINECS:200-289-5		
CAS:7732-18-5	water	40 - 60
EINECS:215-185-5		
CAS:39450-01-6	proteinase K	1 - 5
EINECS:254-457-8		
Chemical formula	C3H8O3 (56-81-5), C3H8O3 (56-81-5), H2O (7732-18-5)	

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

#### 4. First aid measures

General information Never make an unconscious person vomit or drink fluids.

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

After skin contact Immediately wash with soap and water and rinse thoroughly.

After eye contact Rinse open eye for several minutes under running water. Then consult a doctor.

**After swallowing** Call for a doctor immediately.

5. Fire-fighting measures

Suitable extinguish agents: CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

For safety reasons unsuitable Water with full jet.

extinguishing agents

**Extinguishing media** Dry chemical, foam, carbon dioxide, water fog.

Additional information Cool endangered containers with water spray. Collect contaminated fire fighting water separately.

It must not enter the sewage system.

6. Accidental release measures

**Person-related safety precautions:** Refer to the protective measures stated in Sections 7 and 8. Keep unprotected personnel away.

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

Protection)

**Mesures for environmental protection:** Do not allow product to reach sewage system or any water course.

Inform respective authorities if seepage into water course or sewage system occurs.

Measures for cleaning/collecting: Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Dispose of contaminated material as waste according to section 13.

7. Handling and storage

Handling

**Information for safe handling:** Store in cool, dry place in tightly sealed containers. Keep away from heat and direct sunlight.

Ensure good ventilation and extraction at the workplace.

**Storage:** Store in accordance with current national regulations.

Requirements to be met by storerooms and receptacles: Store between  $5-30^{\circ}$ C.

Further information about storage conditions: Keep receptacle tightly sealed.

# 8. Exposure controls/personal protection

## Additional information about design of technical facilities:

Provide adequate ventilation. Where reasonably practicable, this should be achieved by the use of local exhaust ventilation and good general extraction. If these are not sufficient to maintain concentrations of particulates or solvent vapour below the occupational exposure limit stated, then suitable respirately protection must be worn as a temporary measure and is specified below.

#### Components with limit values that require monitoring at the workplace:

No components with limit values.

Additional information: The instructions and information provided by the manufacturer of the personal protective equipment on use,

storage, maintenance and replacement must always be followed.

General protective and hygienic measures:

Immediately remove all soiled and contaminated clothing

Wash hands before breaks and at the end of work.

Store protective clothing separately.

Avoid contact with the eyes and skin.

Keep away from foodstuffs, beverages and feed.

**Breathing equipment:** Not necessary if room is well-ventilated.

**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.

**Eye protection:** Safety glasses. Use face shield in case of splash risk.

**Body protection:** Protective work clothing; disposable overalls are preferable.

## 9. Physical and chemical properties

General Information

Form: Clear liquid

Colour: Transparent colourless
Odour: Practically odourless

Change in condition

Melting point/Melting range:No data available.Boiling point/Boiling range:No data available.Flash point:Not flammable.

**Self-igniting:** Product is not selfigniting.

DensityNo data available.Solubility in / Miscibility with water:Completely solublepH7.5 Approx.

10. Stability and reactivity

Thermal decomposition / conditions to be avoided:

No decomposition if used according to specifications.

**Dangerous reaction** None.

Stability Stable at normal conditions.

Conditions to avoid Freezing. Protect against direct sunlight.

Incompatible materials None.

Hazardous decomposition CO,CO2 Nitrogen oxides (NOx).

products

11. Toxicological information

Acute toxicity:

LD/LC50 values that are relevant for classification:

Acute Oral LD50 Rat: 12600 mg/kg

Additional toxicological information: No further data

Test Results

Skin corrosion/irritationNo irritationSerious eye damage/eyeweakly irritant

irritation

## 12. Ecological information

**Ecotoxical effects:** 

General notes: There are no data on the preparation itself. The preparation has been assessed following the conventional method

of the Dangerous Preparations Directive 1999/45/EC and is not classified as dangerous for the environment.

Do not allow product 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 IMOG:

IMOG Class: Marine pollutant: No

Air transport ICAO-TI and IATA-DGR

ICAO/IATA Class:

Transport /Additional information:

Not dangerous according to the above specifications.

#### 15. Regulatory information

Markings according to EU guidelines:

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

## 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 varid contractual relationship.

Relevant R-phrases

42 May cause sensitization by inhalation

Relevant S-phrases

23 Do not breathe fumes/vapor

45 In case of accident or if you feel unwell, seek medical advise immediately.

Recommended restriction of use

The product should not be used for any purpose other than that specified in Section 1.



## SAFETY DATA SHEET

Creation Date 2012/04/13

## 1. Identification of Product

Use: **Nucleic acid Isolation Kit** Lysis Buffer LDT-01 Product name

Product usage QuickGene DNA tissue 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\_LDT01\_01EU

#### 2. Hazards identification

Information pertaining to particular dangers for man and environment

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

Skin irritation, Category 2, H315

Eye irritation, Category 2, H319

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

R: 22-36/38 Xn

Labelling (REGULATION(EC) No 1272/2008)

Hazard pictograms



Warning

Hazard statement	H302	Harmful if swallowed. (Category 4)
	H315	Causes skin irritation. (Category 2)
	H319	Causes serious eye irritation. (Category 2)
cautionary statements		

Prec

Signal word

Prevention P280 Wear eye/face protection. Wear protective gloves. P270 Do not eat, drink or smoke when using this product. Wash thoroughly after handling. P264 Response P312 Call a doctor/physician if you feel unwell.

> P330 Rinse mouth.

P302 + P352IF ON SKIN: Wash with plenty of soap and water. P332 + P313If skin irritation occurs: Get medical advice/attention.

P 305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes.

Remove contact lenses, if present and easy to do. Continue rinsing.

P337 + P313 If eye irritation persists: Get medical advice/attention.
P362 Take off contaminated clothing and wash before reuse.

Labelling (67/548/EEC or 1999/45/EC)

Symbol(s) Xn **X**n **R**-phrase(s) 22-36/38

#### 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 40 - 60 guanidine hyrochloride EINECS: 200-002-3 R 22-36/38 S 26-37 CAS: 7732-18-5 20 - 40water **EINECS:** 215-185-5 **CAS: ---**polyoxyethylene sorbitan fatty acid ester 10 - 20**EINECS:** CAS: ---hydrochloride salts of aminoalcohol 1 - 5

**EINECS:** 

**Chemical formula** CH5N3.ClH (50-01-1), H2O (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 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.

**After swallowing** Call for a doctor immediately.

### 5. Fire-fighting measures

Suitable extinguish agents: CO2, 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:

Storage

No special measures required.

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 trough 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: Clear liquid

Colour: Colourless to light yellow

Odour: Practically 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 (%)

Flammability limit - upper (%)

No data available.

Vapor pressure at 20C

No data available.

No data available.

No data available.

Solubility in / Miscibility with water:

pH-value:

PH. 6 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

Acute toxicity: Harmful if swallowed.

**Primary irritant effect:** Acute Oral LD50 Rat: > 500 mg/kg

on the skin: Strong

on the eye:moderately irritant effectSensitization: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 IMOG:

**IMOG Class:** 

Air transport ICAO-TI and IATA-DGR

ICAO/IATA Class:

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:

Xn: harmful

## Risk phrases:

22 Harmful if swallowed

36/38 Iritating to eyes and skin.

## Safety phrases:

- 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advise.
- 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.



## MATERIAL SAFETY DATA SHEET

Creation Date 2012/04/13

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

Use: Nucleic acid Isolation Kit
Product name Tissue lysis Buffer MDT-01

Product usage QuickGene DNA tissue kit: Tissue 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\_MDT01\_01E

#### 2. Hazards identification

Information pertaining to particular dangers for man and environment

## 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

Skin irritation, Category 2, H315

 $Eye\ irritation, Category\ 2, H319$ 

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

Health hazards Acute toxicity (Oral) Not classified

Skin corrosion/irritation Category 2
Serious eye damage/eye irritation Category 2

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

Hazard pictograms



Signal word Warning

**Hazard statement** H315 Causes skin irritation. (Category 2)

H319 Causes serious eye irritation. (Category 2)

Precautionary statements

**Prevention** P280 Wear eye/face protection. Wear protective gloves.

P264 Wash thoroughly after handling.

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

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

P 305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes.

Remove contact lenses, if present and easy to do. Continue rinsing.

P337 + P313 If eye irritation persists: Get medical advice/attention.
P362 Take off contaminated clothing and wash before reuse.

#### 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: 7732-18-5 water 80 – 100
EINECS: 231-791-2
CAS: 139-33-3 disodium ethylenediamine tetraacetate 1 – 5

**EINECS:**205-358-3

CAS: 151-21-3 sodium lauryl sulfate 2.5

EINECS:205-788-1

**Chemical formula** H2O (7732-18-5), C10H16N2O8.2Na (139-33-3), C12H26O4S.Na (151-21-3)

(\*) 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 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.

After swallowing Call for a doctor immediately.

## 5. Fire-fighting measures

Suitable extinguish agents: CO2, 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)

**Mesures 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: Protect from sunlight.

Further information about storage conditions: Keep receptacle tightly sealed.

#### 8. Exposure controls/personal protection

Additional information about design of technical facilities: No further data

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.

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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 trough 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: Clear liquid

Colour: Transparent colourless

Odourless 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 (%)

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. 8.4

(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

Acute toxicity:

**Primary irritant effect:** Acute Oral LD50 Rat: > 2000 mg/kg

**on the skin:** strong

on the eye: weakly irritant effectSensitization: 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 IMOG:

**IMOG Class:** 

Air transport ICAO-TI and IATA-DGR

ICAO/IATA Class:

Transport /Additional information:

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:

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 varid contractual relationship.



## SAFETY DATA SHEET

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

Use: Nucleic acid Isolation Kit
Product name Wash Buffer WDT-01

Product usage QuickGene DNA tissue 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\_WDT01\_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

**CAS:** 7647-14-5 sodium chloride 0.5 - 1.5

**EINECS:** 231-598-3

**Chemical formula** H2O (7732-18-5), NaCl (7647-14-5)

 $(\sp{*})$  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: CO2, 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

Person-related safety precautions: Do not inhale vapours/aerosols.

**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).

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## 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 trough 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: Clear liquid

Colour: Transparent colourless

Odourless 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 (%)

Flammability limit - upper (%)

Vapor pressure at 20°C

No data available.

No data available.

No data available.

Solubility in / Miscibility with water:

Completely soluble

**pH-value:** pH. 7.5

(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

Acute toxicity: No toxicity

**Primary irritant effect:** Acute Oral LD50 Rat: > 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 IMOG:

**IMOG Class:** 

Air transport ICAO-TI and IATA-DGR

ICAO/IATA Class:

#### 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 varid contractual relationship.

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

**Nucleic acid Isolation Kit Elution Buffer CDT-01** Product name

Product usage QuickGene DNA tissue 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

Creation Date 2012/04/13

SAFETY DATA SHEET

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\_CDT01\_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 80 - 100water

EINECS: 231-791-2

Chemical formula H2O (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: CO2, powder or water spray. Fight larger fires with water spray or alcohol resistant foam. **Protectiv 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)

**Mesures 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

 $\label{lem:reconstant} \textbf{Requirements to be met by storerooms and receptacles:} \quad \text{No special requirement}$ 

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 trough 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

Odourless 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 (%)

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 9.

(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

Acute toxicity:

No toxicity

**Primary irritant effect:** Acute Oral LD50 Rat: > 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 IMOG:

**IMOG Class:** 

Air transport ICAO-TI and IATA-DGR

ICAO/IATA Class:

#### Transport /Additional information:

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:

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.