

# SAFETY DATA SHEET

QuickGene DNA whole blood kit S

MSDS\_EDB01\_01EU MSDS\_LDB04\_01EU MSDS\_WDB03\_01EU MSDS\_CDB02\_01EU

# KURABO INDUSTRIES LTD.

# **Bio-Medical Department**

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	14-5 Shimokida-Cho, Neyagawa, Osaka 572-0823, Japan
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MSDS file name: MSDS\_EDB01\_01EU



# SAFETY DATA SHEET

Protease EDB-01

1. Identification	of Product/1	mixture and the	company/undertakin	ıg	
Use :	Nucleic ac	id Isolation Kit			
Product name:	Protease I	EDB-01			
Product usage	QuickGen	e DNA whole blood l	cit : Protease		
Manufacturer / Su	ipplier :				
KURAB	O INDUSTRI	ES LTD.			
Bio-Med	lical Departmer	nt			
Neyagav	Neyagawa Techno Center 3F 14-5 Shimokida-Cho, Neyagawa, Osaka 572-0823, Japan				
Telepho	ne Number	+81-72-820-3079	<b>FAX Number</b>	+81-72-820-3095	
Information depar	tment:				
Bio-Med	Bio-Medical Department				
Telepho	ne Number	+81-72-820-3079	Email: bio@ad.ku	rabo.co.jp	
Emergency information:					
Telepho	ne Number	+81-72-820-3079	9:00AM - 6:00PM		
Reference file name MSDS_EDB01_01EU					

# 2. Hazards identification

Information pertaining to particular dangers for man and environment

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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)

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.
	P305+P351+P33	38 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 :76774-43-1	protease	80-100
EINECS: 278-547-1		
CAS:10035-04-8	Calcium Chloride, Dihydrate	0.5-1.5
EINECS: 233-140-8		
CAS :1185-53-1	2-amino-2 (hydroxymethyl)propan-1,3-diol	0.5-1.5
Additional information		

For the wording of the listed risk phrases refer to section 16.

### 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

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.

Protease EDB-01

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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:	Solid.				
Colour:	Light yello	Light yellow			
Odour:	Character	erristic			
Change in condition					
Melting point/Melting range:	>100°C.				
Boiling point/Boiling range:	undetermi	mined			
Flash point:	Not applic	licable			
Self-igniting:	Product is	is not self-igniting.			
Density	Not deterr	ermined			
Solubility in / Miscibility with water:	Soluble				
Solvent content:					
Organic solvents:	0.0%				
pH	Not Appli	plicable			
10. Stability and reactivity					
Thermal decomposition / conditions to be a	voided:	No decomposition if used according to specifications.			
Dangerous reaction		No dangerous reactions known.			
11. Toxicological information					
Acute toxicity:					
LD/LC50 values that are relevant for classi	fication:				
10035-04-8 Calcium Chloride, Di	ihydrate	Dermal LD50 Rat: 1000 mg/kg			
Additional toxicological information:		No further data			
12. Ecological information					
Ecotoxical effects:					
Aquatic toxicity: 10035-04-8 Calcium	1 Chloride, Dil	Dihydrate LC50 10650 (Lepomis macrochirus).			

 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.

European waste catalogue

18 01 03 wastes whose collection and disposal is subject to special requirements in order to prevent infection

### 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**

36 Irritating to eyes.

#### Recommended restriction of use

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

MSDS file name: MSDS\_LDB04\_01EU



# SAFETY DATA SHEET

1 Idoutie	adian of	Dres dres 4/10			••••
Lidenum Use :	cation of		d Isolation Kit	company/undertak	ang
Product n	ame	Lysis Buffe	er LDB-04		
Product u	sage	QuickGene	DNA whole blood k	cit : Lysis Buffer	
Manufact	urer / Supp	blier :			
	KURABO	INDUSTRIE	S LTD.		
	Bio-Medica	al Department	t		
	Neyagawa'	Techno Cente	er 3F 14-5 Shimoki	ida-Cho, Neyagawa, Osal	ka 572-0823, Japan
	Telephone	Number	+81-72-820-3079	<b>FAX Number</b>	+81-72-820-3095
Informati	on departn	nent:			
	Bio-Medica	al Department	t		
1	Telephone	Number	+81-72-820-3079	Email: bio@ad.l	kurabo.co.jp
Emergenc	cy informat	ion:			
1	Telephone	Number	+81-72-820-3079	9:00AM - 6:00PM	
Reference	file name	MSDS_LD	B04_01EU		
2. Hazard	s identifi	cation			
Informati	on pertaini	ng to particu	lar dangers for hun	nan and environment	
	Xn	harmful			
Classificat	tion system:	:			
	The classifi	cation is acco	ording to the latest o	editions of the EU-lists, a	and extended by company and literature data.
Classificat	tion(REGU	LATION(E	C) No 1272/2008		
	Skin irritat	ion, Categor	y 2, H315		
	Eye irritati	on, Category	y 2, H319		
Classificat	tion (67/548	/EEC or 199	9/45/EC)		
	Xn	R: 22-36/38	3		
Labelling	(REGULA	TION(EC)	No 1272/2008)		
Hazard	pictogram	S			



Signal word	Warning	
Hazard statement	H302	Harmful if swallowed. (Category 4)
	H315	Causes skin irritation. (Category 2)
	H319	Causes serious eye irritation. (Category 2)
Precautionary statements		
Prevention	P280	Wear eye/face protection. Wear protective gloves.
	P270	Do not eat, drink or smoke when using this product.
	P264	Wash thoroughly after handling.
Response	P312	Call a doctor/physician if you feel unwell.
	P330	Rinse mouth.
	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 + P	2338 IF IN EYES: Rinse cautiously with water for several minutes.

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

Lysis Buffer LDB-04

If eye irritation persists: Get medical advice/attention.

Take off contaminated clothing and wash before reuse.

P337 + P313 P362 Labelling (67/548/EEC or 1999/45/EC)

Gene ion En e on En	<i>(</i> )
Symbol(s)	Xn 🗙
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	guanidine hyrochloride	40-60
EINECS: 200-002-3	R 22-36/38 S 26-37	
CAS:	polyoxyethylene sorbitan fatty acid ester	5 - 10
EINECS :		
CAS:	hydrochloride salts of aminoalcohol	1 - 5
EINECS :		
Chemical formula	CH5N3.ClH (50-01-1)	
(*) 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: 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: No further data

Personal protective equipment:

General protective and hygienic measures: Keep away from foodstuffs, beverages and feed.

MSDS file name: MSDS_LDB04_01EU	Creation Date 2012/04/13	Lysis Buffer LDB-04	3/4
	Immediately remove all soiled a	nd contaminated clothing	
	Wash hands before breaks and a	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 g	loves does not only depend on the material, but	also on further
	marks of quality and varies from	n manufacturer to manufacturer.	
Penetration time of glove material	The exact break trough time has	to be found out by the manufacturer of the pro-	tective 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 (%)	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: (n-octanol/water)	рН. 6.0

# 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: on the eye:	moderate weakly irritant effect
Sensitization:	No sensitizing effects known
Additional toxicological information:	No further data

# 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:

Xn: harmful

# **Risk phrases:**

- 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.

MSDS file name: MSDS\_WDB03\_01EU



# SAFETY DATA SHEET

1 1 1	<b>D</b> 1 4/ •	4 14	/ 1	
	f Product/mixture and the company/undertaking			
Use : Product name	Nucleic acid Isolation Kit			
1100000100000	Wash Buffer WDB-03 QuickGene DNA whole blood kit: Wash Buffer			
Product usage	-	NA Whole blood kit: Wa	ash Buller	
Manufacturer / Supp				
	INDUSTRIES I	LID.		
	al Department Taabna Cantar 2	E 145 Shimelide Ch	Navagaria	o Ocalra 572 0922 Jaman
				a, Osaka 572-0823, Japan
Telephone		81-72-820-3079	FAX Num	<b>ber</b> +81-72-820-3095
Information departn				
	al Department	91 72 920 2070	<b>T</b>	
Telephone		81-72-820-3079	Email: Dio	@ad.kurabo.co.jp
Emergency informat				
Telephone		81-72-820-3079 9:00	AM - 6:00PN	V1
Reference file name	MSDS_WDB0	03_01EU		
<b>1</b> II	<b>1</b> •			
2. Hazards identifi			•	
-		dangers for man and		
•	•	Directive 67/548/EEC	and 1999/45/	/EC.
Classification system				
	-		EU-lists, and	d extended by company and literature data.
Health hazards		cute toxicity (Oral)		Not classified
		kin corrosion/irritation	• •, ,•	Not classified
	3	erious eye damage/eye i	irritation	Not classified
3. Composition/inf	formation on	ingredients		
Chemical characteriz				
Substance	or Mixture	Mixture		
Description Mixture	of substances lis	sted below with nonha	zardous add	litions.
Components:				
<b>F</b>	C	Components		Concentration (%)
<b>CAS:</b> 7732		/ater		80 - 100
EINECS :				
<b>CAS:</b> 7647	7-14-5 so	odium chloride		0.5 - 1.5
EINECS :	231-598-3			
Chemical f	f <b>ormula</b> H	120 (7732-18-5), NaCl	(7647-14-5)	
(*) General	ly chemical subs	tances greater than 1% of	of the total are	e listed.
		0		
4. First aid measur	es			
After inhalation: After skin contact	Supply fresh air.			
After eye contact	Remove contaminated clothing. Wash off with soap and plenty of water. Rinse out with water			
After swallowing		Call for a doctor if feeling	unwell	
Street Street Street	C			
5. Fire-fighting me	asures			
Suitable extinguish a	gents: C	CO2, powder or water sp	ray. Fight larg	ger fires with water spray or alcohol resistant foam.

MSDS file name: MSDS\_WDB03\_01EU Creation Date 2012/04/13 Wash Buffer WDB-03

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).	

# 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:	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: Danger of explosion:	Product is not self-igniting. 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: (n-octanol/water)	рН. 7.5	

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:
on the skin:
on the eye:
Sensitization:
Additional toxicological information:

No toxicity Acute Oral LD50 Rat: > 2000 mg/kg No initation No initation No sensitizing effects known No further data

# 12. Ecological information

General notes:

**Product:** 

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

## 13. Disposal considerations

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.

MSDS file name: MSDS\_CDB02\_01EU



# SAFETY DATA SHEET

	Product/mixture and the	oomnonv/undortolrin		
	Product/mixture and the Nucleic acid Isolation Kit	e company/undertakin		
	Flucieic acid Isolauon Kit			
	OuickGene DNA whole blood kit: Elution Buffer			
8	Manufacturer / Supplier :			
	NDUSTRIES LTD.			
Bio-Medical				
	echno Center 3F 14-5 Shimol	kida-Cho Nevagawa Osaka	572-0823 Japan	
Telephone N			+81-72-820-3095	
Information departme			101 12 020 3033	
Bio-Medical				
Telephone N	-	) Email: bio@ad.ku	raho.co.in	
Emergency information			morealb	
Telephone N		9:00AM - 6:00PM		
Reference file name		2.002 E.1 0.002 IVI		
Reference me mune	M0D0_0D002_0110			
2. Hazards identific	ation			
	g to particular dangers for hu	ıman and environment		
	s product as specified in Directiv		EC.	
Classification system:	- F			
-	according to the latest edition	s of the EU-lists, and extend	ed by company and literature data.GHS-classification	
Health haza	-		Not classified	
	Skin corrosion/irri	itation	Not classified	
	Skin corrosion/irri Serious eve dama		Not classified Not classified	
	Skin corrosion/irri Serious eye dama		Not classified Not classified	
3. Composition/info	Serious eye dama	ge/eye initation		
3. Composition/info Chemical characteriza	Serious eye dama	ge/eye initation		
Chemical characteriza	Serious eye dama rmation on ingredients ation	ge/eye irritation		
Chemical characteriza Substance or Mixture	Serious eye dama rmation on ingredients ntion Mixt	ge/eye irritation		
Chemical characteriza Substance or Mixture Description Mixture of	Serious eye dama rmation on ingredients ation	ge/eye irritation		
Chemical characteriza Substance or Mixture	Serious eye dama rmation on ingredients ation Mixt f substances listed below with	ge/eye irritation ture nonhazardous additions.	Not classified	
Chemical characteriza Substance or Mixture Description Mixture of Components:	Serious eye dama rmation on ingredients ation Mixt f substances listed below with Components	ge/eye irritation ture nonhazardous additions.	Not classified	
Chemical characteriza Substance or Mixture Description Mixture of Components: CAS : 7732-	Serious eye damager rmation on ingredients ation Mixe f substances listed below with Components 18-5 water	ge/eye irritation ture nonhazardous additions. Concer	Not classified	
Chemical characteriza Substance or Mixture Description Mixture of Components: CAS : 7732- EINECS: 23	Serious eye damager rmation on ingredients ation Mixe f substances listed below with Components 18-5 water 1-791-2	ge/eye irritation ture nonhazardous additions. Conce 80 – 1	Not classified	
Chemical characteriza Substance or Mixture Description Mixture of Components: CAS : 7732- EINECS: 23 Chemical fo	Serious eye damager rmation on ingredients tion Mixe f substances listed below with Components 18-5 water 1-791-2 rmula H2O (7732-18-5)	ge/eye irritation ture nonhazardous additions. Concer 80 – 1	Not classified	
Chemical characteriza Substance or Mixture Description Mixture of Components: CAS : 7732- EINECS: 23 Chemical fo	Serious eye damager rmation on ingredients ation Mixe f substances listed below with Components 18-5 water 1-791-2	ge/eye irritation ture nonhazardous additions. Concer 80 – 1	Not classified	
Chemical characteriza Substance or Mixture Description Mixture of Components: CAS : 7732- EINECS: 23 Chemical fo	Serious eye dama, rmation on ingredients ation Mixe f substances listed below with Components 18-5 water 1-791-2 rmula H2O (7732-18-5) r chemical substances greater that	ge/eye irritation ture nonhazardous additions. Concer 80 – 1	Not classified	
Chemical characteriza Substance or Mixture Description Mixture of Components: CAS : 7732- EINECS: 23 Chemical fo (*) Generally	Serious eye dama, rmation on ingredients ation Mixe f substances listed below with Components 18-5 water 1-791-2 rmula H2O (7732-18-5) r chemical substances greater that s	ture nonhazardous additions. Concer 80 – 1 an 1% of the total are listed.	Not classified ntration (%) 100	
Chemical characteriza Substance or Mixture Description Mixture of Components: CAS : 7732- EINECS: 23 Chemical for (*) Generally 4. First aid measure	serious eye damag rmation on ingredients ation Mixe f substances listed below with Components 18-5 water 1-791-2 rmula H2O (7732-18-5) chemical substances greater that s Supply fresh air at	ture nonhazardous additions. Concer $80-1an 1% of the total are listed.nd to be sure call for a doctor.nated clothing. Wash off with$	Not classified ntration (%) 100	
Chemical characteriza Substance or Mixture Description Mixture of Components: CAS : 7732- EINECS: 23 Chemical for (*) Generally 4. First aid measure After inhalation:	serious eye damageneric station on ingredients and mixed states and the series of the	ture nonhazardous additions. Concer 80-1 an 1% of the total are listed. Ind to be sure call for a doctor. nated clothing. Wash off with xe/attention.	Not classified ntration (%) .00	
Chemical characteriza Substance or Mixture Description Mixture of Components: CAS : 7732- EINECS: 23 Chemical for (*) Generally 4. First aid measure After inhalation: After skin contact:	serious eye damageneric station on ingredients and mixed states and the series of the	ture nonhazardous additions. Concer 80-1 an 1% of the total are listed. Ind to be sure call for a doctor. nated clothing. Wash off with xe/attention.	Not classified <b>ntration (%)</b> .00 soap and plenty of water. If skin irritation occurs:	
Chemical characteriza Substance or Mixture Description Mixture of Components: CAS : 7732- EINECS: 23 Chemical for (*) Generally 4. First aid measure After inhalation: After skin contact:	Serious eye dama, rmation on ingredients ation Mixe f substances listed below with Components 18-5 water 1-791-2 rmula H2O (7732-18-5) chemical substances greater that s Supply fresh air at Remove contamin Get medical advic Rinse opened eye	ture nonhazardous additions. Concer 80 – 1 ) an 1% of the total are listed. nd to be sure call for a doctor. nated clothing. Wash off with xe/attention.	Not classified <b>ntration (%)</b> .00 soap and plenty of water. If skin irritation occurs:	

# 5. Fire-fighting measures

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

MSDS file name: MSDS_CDB02_01EU	Creation I	Date 2012/04/13	Elution Buffer CDB-02	2/3
Protectiv equipment: Do not inhal		le explosion gases or com	bustion gases.	
6. Accidental release measures				
Person-related safety precautions:				
	Wear adeque Protection)	ate personal protective equ	ipment, see Section 8 (Exposure Controls/Person	al
Mesures for environmental protection:	Do not allow	w to enter sewers/ surface of	or ground water.	
Measures for cleaning/collecting:	Absorb with	n liquid-binding material (s	and, diatomite, acid binders, universal binders, sav	vdust).
7. Handling and storage				
Handling				
Information for safe handling:		Keep receptacles tightly	sealed. Avoid contact with skin, eyes and clothing	
		Wash hands after handlin	ng.	
Information about fire - and explosion protection: Storage:		No special measures requ	uired.	
Requirements to be met by storerooms and receptacles:		No special requirement		
Further information about storage conditions:		Keep receptacle tightly s	ealed.	

# 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

<i>Fi</i> Hysical 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: Danger of explosion: Flammability limit - lower (%)	Product is not self-igniting. Product does not present an explosion hazard. 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: (n-octanol/water)	рН 9.

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: on the skin: on the eye: Sensitization: Additional toxicological information: No toxicity Acute Oral LD50 Rat: > 2000 mg/kg No irritation No sensitizing effects known 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.