

**Buffer RLC**

Version 2.1

Revision Date 10/19/2015

Print Date 11/30/2015

**SECTION 1. PRODUCT AND COMPANY IDENTIFICATION**

Product name : Buffer RLC

**Manufacturer or supplier's details**Company : QIAGEN GmbH  
QIAGEN Str. 1  
D-40724 Hilden

Telephone : +49-02103-29-0

Responsible Department : QIAGEN Technical Service, QIAGEN Inc.,  
27220 Turnberry Lane,  
Valencia, CA 91355, USA,  
Tel.: 1-800-DNA-PREP (1-800-362-7737),  
Email: techservice-us@qiagen.comE-mail : cpc@qiagen.com  
addressResponsible/issuing  
personEmergency telephone : CHEMTREC  
USA & Canada 1-800-424-9300**Recommended use of the chemical and restrictions on use**

Recommended use : Laboratory chemicals

**SECTION 2. HAZARDS IDENTIFICATION****GHS Classification**Acute toxicity (Oral) : Category 4  
Skin irritation : Category 2  
Eye irritation : Category 2A**GHS Label element**

Hazard pictograms :



Signal Word : Warning

Hazard Statements : H302 Harmful if swallowed.  
H315 Causes skin irritation.  
H319 Causes serious eye irritation.

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Precautionary Statements : **Prevention:**  
 P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.

### Potential Health Effects

Aggravated Medical Condition : None known.  
 Symptoms of Overexposure : No information available.

### Carcinogenicity:

**IARC** No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

**ACGIH** No ingredient of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

**OSHA** No ingredient of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

**NTP** No ingredient of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

## SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

### Hazardous ingredients

Chemical Name	CAS-No.	Concentration [%]
guanidine hydrochloride	50-01-1	>= 50 - < 70

## SECTION 4. FIRST AID MEASURES

General advice : Move out of dangerous area.  
 Show this material safety data sheet to the doctor in attendance.

If inhaled : If unconscious place in recovery position and seek medical advice.  
 If symptoms persist, call a physician.

In case of skin contact : Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes.  
 If symptoms persist, call a physician.

In case of eye contact : Immediately flush eye(s) with plenty of water.

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	Remove contact lenses. Protect unharmed eye. Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.
If swallowed	: If accidentally swallowed obtain immediate medical attention. Rinse mouth with water. Never give anything by mouth to an unconscious person.
Most important symptoms and effects, both acute and delayed	: Harmful if swallowed. Causes skin irritation. Causes serious eye irritation.  No information available.
Notes to physician	: No information available.

### SECTION 5. FIRE-FIGHTING MEASURES

Suitable extinguishing media	: Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Specific hazards during fire fighting	: Exposure to decomposition products may be a hazard to health.
Hazardous combustion products	: No hazardous combustion products are known
Specific extinguishing methods	: In the event of fire and/or explosion do not breathe fumes.
Special protective equipment for fire-fighters	: Wear self-contained breathing apparatus for firefighting if necessary.

### SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures	: Use personal protective equipment. Avoid breathing dust/ fume/ gas/ mist/ vapors/ spray.
Environmental precautions	: Do not flush into surface water or sanitary sewer system. Prevent further leakage or spillage if safe to do so.
Methods and materials for containment and cleaning up	: Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Keep in suitable, closed containers for disposal.

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**SECTION 7. HANDLING AND STORAGE**

- Advice on safe handling : Do not breathe vapors/dust.  
Avoid contact with skin and eyes.  
For personal protection see section 8.  
Smoking, eating and drinking should be prohibited in the application area.  
Dispose of rinse water in accordance with local and national regulations.
- Conditions for safe storage : Keep container tightly closed in a dry and well-ventilated place.
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**SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION****Ingredients with workplace control parameters**

Contains no substances with occupational exposure limit values.

**Personal protective equipment**

- Hand protection  
Remarks : The choice of an appropriate glove does not only depend on its material but also on other quality features and is different from one producer to the other. Take note of the information given by the producer concerning permeability and break through times, and of special workplace conditions (mechanical strain, duration of contact).
- Material : Protective gloves
- Eye protection : Safety glasses  
Wear face-shield and protective suit for abnormal processing problems.  
Ensure that eyewash stations and safety showers are close to the workstation location.
- Skin and body protection : Choose body protection according to the amount and concentration of the dangerous substance at the work place.  
Footwear protecting against chemicals
- Hygiene measures : Keep away from food and drink.  
Wash hands before breaks and at the end of workday.  
Ensure adequate ventilation, especially in confined areas.  
Avoid contact with the skin and the eyes.  
When using do not eat, drink or smoke.
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**SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**

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Appearance	: liquid
Color	: No data available
Odor	: characteristic
Odor Threshold	: No data available
pH	: 7, neutral
Melting point/range	: No data available
Boiling point/boiling range	: No data available
Flash point	: Not applicable
Evaporation rate	: No data available
Burning rate	: No data available
Upper explosion limit	: No data available
Lower explosion limit	: No data available
Vapor pressure	: No data available
Relative vapor density	: No data available
Relative density	: No data available
Density	: 1.18 g/cm <sup>3</sup>
Solubility(ies)	
Water solubility	: No data available
Solubility in other solvents	: No data available
Partition coefficient: n-octanol/water	: No data available
Autoignition temperature	: not determined
Thermal decomposition	: No data available
Viscosity	
Viscosity, dynamic	: No data available
Viscosity, kinematic	: No data available
Explosive properties	: No data available
Oxidizing properties	: No data available

**SECTION 10. STABILITY AND REACTIVITY**

Reactivity	: No decomposition if stored and applied as directed.
Chemical stability	: No decomposition if stored and applied as directed.
Possibility of hazardous	: Stable under recommended storage conditions.

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reactions

Hazardous decomposition products formed under fire conditions.  
Keep away from oxidizing agents, and acidic or alkaline products.

Conditions to avoid : No data available

Incompatible materials : No data available

Hazardous decomposition products : No decomposition if stored and applied as directed.

**SECTION 11. TOXICOLOGICAL INFORMATION****Acute toxicity****Product:**

Acute oral toxicity : No data available

Acute inhalation toxicity : No data available

Acute dermal toxicity : No data available

**Ingredients:****guanidine hydrochloride :**

Acute oral toxicity : LD50 Oral Rat: 1,120 mg/kg

**Skin corrosion/irritation****Product:**

May irritate skin.

**Serious eye damage/eye irritation****Product:**

Remarks:

May cause irreversible eye damage.

**Respiratory or skin sensitization**

No data available

**Germ cell mutagenicity**

No data available

**Carcinogenicity**

No data available

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**Reproductive toxicity**

No data available

**STOT-single exposure**

No data available

**STOT-repeated exposure**

No data available

**Aspiration toxicity**

No data available

**Further information**

No data available

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**SECTION 12. ECOLOGICAL INFORMATION****Ecotoxicity****Product:**

Toxicity to fish : No data available

Toxicity to algae : No data available

Toxicity to bacteria : No data available

**Persistence and degradability****Ingredients:****guanidine hydrochloride :**

Biodegradability : Method: OECD Test Guideline 301C

Remarks:

According to the results of tests of biodegradability this product is not readily biodegradable.

**Bioaccumulative potential****Product:**

Bioaccumulation : No data available

Partition coefficient: n-octanol/water : No data available

**Ingredients:****guanidine hydrochloride :**

Partition coefficient: n-octanol/water : log Pow: ca. -1.7 (20 °C)

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### Mobility in soil

No data available

### Other adverse effects

No data available

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## SECTION 13. DISPOSAL CONSIDERATIONS

### Disposal methods

Waste from residues : Send to a licensed waste management company.  
Dispose of as hazardous waste in compliance with local and national regulations.

Contaminated packaging : Dispose of as unused product.  
Do not re-use empty containers.

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## SECTION 14. TRANSPORT INFORMATION

### UNRTDG

Not regulated as a dangerous good

### IATA-DGR

Not regulated as a dangerous good

### IMDG-Code

Not regulated as a dangerous good

### Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

No data available

### Domestic regulation

#### 49 CFR

Not regulated as a dangerous good

### Special precautions for user :

For personal protection see section 8.

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## SECTION 15. REGULATORY INFORMATION

OSHA Hazards : Toxic by ingestion  
EPCRA - Emergency Planning and Community Right-to-Know

SARA 304 Extremely Hazardous Substances Reportable Quantity

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This material does not contain any components with a section 304 EHS RQ.

**SARA 311/312 Hazards** : Acute Health Hazard

**SARA 302** : No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

**SARA 313** : This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

### US State Regulations

**California Prop 65** This product does not contain any chemicals known to the State of California to cause cancer, birth, or any other reproductive defects.

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## SECTION 16. OTHER INFORMATION

The information provided in this Material Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

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Revision Date 10/27/2015

Print Date 11/30/2015

**SECTION 1. PRODUCT AND COMPANY IDENTIFICATION**

Product name : Buffer RLT

**Manufacturer or supplier's details**Company : QIAGEN GmbH  
QIAGEN Str. 1  
D-40724 Hilden

Telephone : +49-02103-29-0

Responsible Department : QIAGEN Technical Service, QIAGEN Inc.,  
27220 Turnberry Lane,  
Valencia, CA 91355, USA,  
Tel.: 1-800-DNA-PREP (1-800-362-7737),  
Email: techservice-us@qiagen.comE-mail : cpc@qiagen.com  
addressResponsible/issuing  
personEmergency telephone : CHEMTREC  
USA & Canada 1-800-424-9300**Recommended use of the chemical and restrictions on use**

Recommended use : Laboratory chemicals

**SECTION 2. HAZARDS IDENTIFICATION****GHS Classification**Acute toxicity (Oral) : Category 4  
Skin corrosion : Category 1C  
Serious eye damage : Category 1  
Acute aquatic toxicity : Category 3**GHS Label element**

Hazard pictograms :



Signal Word : Danger

Hazard Statements : H302 Harmful if swallowed.  
H314 Causes severe skin burns and eye damage.  
H402 Harmful to aquatic life.

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Precautionary Statements : **Prevention:**  
 P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.  
**Response:**  
 P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
 P308 + P311 IF exposed or concerned: Call a POISON CENTER or doctor/ physician.

### Potential Health Effects

Aggravated Medical Condition : None known.  
 Symptoms of Overexposure : No information available.

### Carcinogenicity:

**IARC** No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

**ACGIH** No ingredient of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

**OSHA** No ingredient of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

**NTP** No ingredient of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

## SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

### Hazardous ingredients

Chemical Name	CAS-No.	Concentration [%]
guanidinium thiocyanate	593-84-0	>= 30 - < 50

## SECTION 4. FIRST AID MEASURES

General advice : Move out of dangerous area.  
 Show this material safety data sheet to the doctor in attendance.

If inhaled : If unconscious place in recovery position and seek medical advice.

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If symptoms persist, call a physician.

In case of skin contact	: Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Immediate medical treatment is necessary as untreated wounds from corrosion of the skin heal slowly and with difficulty.
In case of eye contact	: Small amounts splashed into eyes can cause irreversible tissue damage and blindness. In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Remove contact lenses. Protect unharmed eye.
If swallowed	: If accidentally swallowed obtain immediate medical attention. Rinse mouth with water. Never give anything by mouth to an unconscious person.
Most important symptoms and effects, both acute and delayed	: Harmful if swallowed. Causes serious eye damage. Causes severe burns.  No information available.
Notes to physician	: No information available.

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**SECTION 5. FIRE-FIGHTING MEASURES**

Suitable extinguishing media	: Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Specific hazards during fire fighting	: Do not allow run-off from fire fighting to enter drains or water courses. Exposure to decomposition products may be a hazard to health.
Hazardous combustion products	: Carbon oxides Sulfur oxides
Specific extinguishing methods	: In the event of fire and/or explosion do not breathe fumes.
Special protective equipment for fire-fighters	: Wear self-contained breathing apparatus for firefighting if necessary.

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**SECTION 6. ACCIDENTAL RELEASE MEASURES**

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Personal precautions, protective equipment and emergency procedures	: Use personal protective equipment. Ensure adequate ventilation. Avoid breathing dust/ fume/ gas/ mist/ vapors/ spray.
Environmental precautions	: Prevent product from entering drains. Prevent further leakage or spillage if safe to do so.
Methods and materials for containment and cleaning up	: Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Keep in suitable, closed containers for disposal. Unsuitable cleaning agents sodium hypochlorite

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**SECTION 7. HANDLING AND STORAGE**

Advice on safe handling	: Do not breathe vapors/dust. Avoid contact with skin and eyes. For personal protection see section 8. Smoking, eating and drinking should be prohibited in the application area. Dispose of rinse water in accordance with local and national regulations.
Conditions for safe storage	: Keep container tightly closed in a dry and well-ventilated place.

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**SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION**
**Ingredients with workplace control parameters**

Contains no substances with occupational exposure limit values.

**Personal protective equipment**

Respiratory protection	: In the case of vapor formation use a respirator with an approved filter.
Hand protection	
Remarks	: The choice of an appropriate glove does not only depend on its material but also on other quality features and is different from one producer to the other. Take note of the information given by the producer concerning permeability and break through times, and of special workplace conditions (mechanical strain, duration of contact).
Material	: Protective gloves
Eye protection	: Tightly fitting safety goggles Wear face-shield and protective suit for abnormal processing problems. Do not wear contact lenses.

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Ensure that eyewash stations and safety showers are close to the workstation location.

- Skin and body protection : Choose body protection according to the amount and concentration of the dangerous substance at the work place.  
acid-resistant protective clothing  
Footwear protecting against chemicals
- Hygiene measures : Keep away from food and drink.  
Wash hands before breaks and at the end of workday.  
Ensure adequate ventilation, especially in confined areas.  
Avoid contact with the skin and the eyes.  
When using do not eat, drink or smoke.

**SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**

- Appearance : liquid
- Color : No data available
- Odor : characteristic
- Odor Threshold : No data available
- pH : 7, neutral
- Melting point/range : No data available
- Boiling point/boiling range : No data available
- Flash point : No data available
- Evaporation rate : No data available
- Burning rate : No data available
- Upper explosion limit : No data available
- Lower explosion limit : No data available
- Vapor pressure : No data available
- Relative vapor density : No data available
- Relative density : No data available
- Density : 1.09 g/cm<sup>3</sup>
- Solubility(ies)
- Water solubility : No data available
- Solubility in other solvents : No data available
- Partition coefficient: n-octanol/water : No data available
- Autoignition temperature : not determined
- Thermal decomposition : No data available
- Viscosity

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Viscosity, dynamic	: No data available
Viscosity, kinematic	: No data available
Explosive properties	: No data available
Oxidizing properties	: No data available

**SECTION 10. STABILITY AND REACTIVITY**

Reactivity	: No decomposition if stored and applied as directed.
Chemical stability	: No decomposition if stored and applied as directed.
Possibility of hazardous reactions	: Stable under recommended storage conditions.  Hazardous decomposition products formed under fire conditions. Thiocyanates can develop poisonous gas in contact with strong acids. Keep away from oxidizing agents, and acidic or alkaline products.
Conditions to avoid	: No data available
Incompatible materials	: No data available
Hazardous decomposition products	: No decomposition if stored and applied as directed.

**SECTION 11. TOXICOLOGICAL INFORMATION****Acute toxicity****Product:**

Acute oral toxicity	: No data available
Acute inhalation toxicity	: No data available
Acute dermal toxicity	: No data available

**Ingredients:****guanidinium thiocyanate :**

Acute oral toxicity	: LD50 Oral Rat: 593 mg/kg
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**Skin corrosion/irritation****Product:**

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Extremely corrosive and destructive to tissue., Causes skin burns.

**Serious eye damage/eye irritation****Product:**

Remarks:

May cause irreversible eye damage.

**Respiratory or skin sensitization**

No data available

**Germ cell mutagenicity**

No data available

**Carcinogenicity**

No data available

**Reproductive toxicity**

No data available

**STOT-single exposure**

No data available

**STOT-repeated exposure**

No data available

**Aspiration toxicity**

No data available

**Further information**

No data available

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**SECTION 12. ECOLOGICAL INFORMATION****Ecotoxicity****Product:**

Toxicity to fish : No data available

Toxicity to algae : No data available

Toxicity to bacteria : No data available

**Ingredients:****guanidinium thiocyanate :**Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia): 42.4 mg/l  
Exposure time: 48 h



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### Persistence and degradability

No data available

### Bioaccumulative potential

#### Product:

Bioaccumulation : No data available

Partition coefficient: n-octanol/water : No data available

### Mobility in soil

No data available

### Other adverse effects

No data available

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## SECTION 13. DISPOSAL CONSIDERATIONS

### Disposal methods

Waste from residues : The product should not be allowed to enter drains, water courses or the soil.  
Send to a licensed waste management company.  
Dispose of as hazardous waste in compliance with local and national regulations.

Contaminated packaging : Dispose of as unused product.  
Do not re-use empty containers.

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## SECTION 14. TRANSPORT INFORMATION

### UNRTDG

Not regulated as a dangerous good

### IATA-DGR

Not regulated as a dangerous good

### IMDG-Code

Not regulated as a dangerous good

### Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

No data available

### Domestic regulation

49 CFR

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Not regulated as a dangerous good

### Special precautions for user :

For personal protection see section 8.

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## SECTION 15. REGULATORY INFORMATION

**OSHA Hazards** : Harmful by ingestion.  
**EPCRA - Emergency Planning and Community Right-to-Know**

### CERCLA Reportable Quantity

This material does not contain any components with a CERCLA RQ.

### SARA 304 Extremely Hazardous Substances Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

**SARA 311/312 Hazards** : Acute Health Hazard

**SARA 302** : No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

**SARA 313** : This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

### US State Regulations

**California Prop 65** This product does not contain any chemicals known to the State of California to cause cancer, birth, or any other reproductive defects.

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## SECTION 16. OTHER INFORMATION

The information provided in this Material Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

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**SECTION 1. PRODUCT AND COMPANY IDENTIFICATION**

Product name : Buffer RPE

**Manufacturer or supplier's details**Company : QIAGEN GmbH  
QIAGEN Str. 1  
D-40724 Hilden

Telephone : +49-02103-29-0

Responsible Department : QIAGEN Technical Service, QIAGEN Inc.,  
27220 Turnberry Lane,  
Valencia, CA 91355, USA,  
Tel.: 1-800-DNA-PREP (1-800-362-7737),  
Email: techservice-us@qiagen.comE-mail : cpc@qiagen.com  
addressResponsible/issuing  
personEmergency telephone : CHEMTREC  
USA & Canada 1-800-424-9300**Recommended use of the chemical and restrictions on use**

Recommended use : Laboratory chemicals

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**SECTION 2. HAZARDS IDENTIFICATION****GHS Classification**

Not a hazardous substance or mixture.

**GHS Label element**

Not a hazardous substance or mixture.

**Potential Health Effects**Aggravated Medical : None known.  
Condition

Symptoms of Overexposure : No information available.

**Carcinogenicity:****IARC** No ingredient of this product present at levels greater than or

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<b>ACGIH</b>	equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC. No ingredient of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.
<b>OSHA</b>	No ingredient of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.
<b>NTP</b>	No ingredient of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

**SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS**

Substance / Mixture : Mixture

**Hazardous ingredients**

No hazardous ingredients

**SECTION 4. FIRST AID MEASURES**

General advice	: Show this material safety data sheet to the doctor in attendance.
If inhaled	: Move to fresh air. If symptoms persist, call a physician.
In case of skin contact	: Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. If symptoms persist, call a physician.
In case of eye contact	: Remove contact lenses. Protect unharmed eye. Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.
If swallowed	: If accidentally swallowed obtain immediate medical attention. Rinse mouth with water. Never give anything by mouth to an unconscious person.
Most important symptoms and effects, both acute and delayed	: No information available.
Notes to physician	: No information available.

**SECTION 5. FIRE-FIGHTING MEASURES**

Suitable extinguishing media : Use extinguishing measures that are appropriate to local

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circumstances and the surrounding environment.

Specific hazards during fire fighting : Exposure to decomposition products may be a hazard to health.

Hazardous combustion products : No hazardous combustion products are known

Specific extinguishing methods : In the event of fire and/or explosion do not breathe fumes.

Special protective equipment for fire-fighters : Wear self-contained breathing apparatus for firefighting if necessary.

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**SECTION 6. ACCIDENTAL RELEASE MEASURES**

Personal precautions, protective equipment and emergency procedures : Use personal protective equipment.  
Avoid breathing dust/ fume/ gas/ mist/ vapors/ spray.

Methods and materials for containment and cleaning up : Keep in suitable, closed containers for disposal.

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**SECTION 7. HANDLING AND STORAGE**

Advice on safe handling : For personal protection see section 8.  
Smoking, eating and drinking should be prohibited in the application area.

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**SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION****Ingredients with workplace control parameters**

Contains no substances with occupational exposure limit values.

**Personal protective equipment**

Hand protection  
Remarks : The choice of an appropriate glove does not only depend on its material but also on other quality features and is different from one producer to the other. Take note of the information given by the producer concerning permeability and break through times, and of special workplace conditions (mechanical strain, duration of contact).

Eye protection : Safety glasses

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- Skin and body protection : Choose body protection according to the amount and concentration of the dangerous substance at the work place.  
Footwear protecting against chemicals
- Hygiene measures : Keep away from food and drink.  
When using do not eat, drink or smoke.

**SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**

- Appearance : liquid
- Color : No data available
- Odor : characteristic
- Odor Threshold : No data available
- pH : 7.5
- Melting point/range : No data available
- Boiling point/boiling range : No data available
- Flash point : No data available
- Evaporation rate : No data available
- Burning rate : No data available
- Upper explosion limit : No data available
- Lower explosion limit : No data available
- Vapor pressure : No data available
- Relative vapor density : No data available
- Relative density : No data available
- Density : 1 g/cm<sup>3</sup>
- Solubility(ies)
- Water solubility : No data available
- Solubility in other solvents : No data available
- Partition coefficient: n-octanol/water : No data available
- Autoignition temperature : not determined
- Thermal decomposition : No data available
- Viscosity
- Viscosity, dynamic : No data available
- Viscosity, kinematic : No data available
- Explosive properties : No data available
- Oxidizing properties : No data available

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**SECTION 10. STABILITY AND REACTIVITY**

Reactivity	:	No decomposition if stored and applied as directed.
Chemical stability	:	No decomposition if stored and applied as directed.
Possibility of hazardous reactions	:	Stable under recommended storage conditions. Hazardous decomposition products formed under fire conditions.
Conditions to avoid	:	No data available
Incompatible materials	:	No data available
Hazardous decomposition products	:	No decomposition if stored and applied as directed.

---

**SECTION 11. TOXICOLOGICAL INFORMATION****Acute toxicity****Product:**

Acute oral toxicity	:	No data available
Acute inhalation toxicity	:	No data available
Acute dermal toxicity	:	No data available

**Skin corrosion/irritation****Product:**

May cause skin irritation in susceptible persons.

**Serious eye damage/eye irritation****Product:**Remarks:  
May irritate eyes.**Respiratory or skin sensitization**

No data available

**Germ cell mutagenicity**

No data available

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### **Carcinogenicity**

No data available

### **Reproductive toxicity**

No data available

### **STOT-single exposure**

No data available

### **STOT-repeated exposure**

No data available

### **Aspiration toxicity**

No data available

### **Further information**

No data available

---

## **SECTION 12. ECOLOGICAL INFORMATION**

### **Ecotoxicity**

#### **Product:**

Toxicity to fish : No data available

Toxicity to algae : No data available

Toxicity to bacteria : No data available

### **Persistence and degradability**

No data available

### **Bioaccumulative potential**

#### **Product:**

Bioaccumulation : No data available

Partition coefficient: n-octanol/water : No data available

### **Mobility in soil**

No data available

### **Other adverse effects**

No data available

---



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### SECTION 13. DISPOSAL CONSIDERATIONS

#### Disposal methods

Waste from residues : Dispose of contents/container in accordance with local regulation.

Contaminated packaging : Empty containers should be taken to an approved waste handling site for recycling or disposal.

---

### SECTION 14. TRANSPORT INFORMATION

#### UNRTDG

Not regulated as a dangerous good

#### IATA-DGR

Not regulated as a dangerous good

#### IMDG-Code

Not regulated as a dangerous good

#### Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

No data available

#### Domestic regulation

##### 49 CFR

Not regulated as a dangerous good

#### Special precautions for user :

Remarks : Not classified as dangerous in the meaning of transport regulations.

---

### SECTION 15. REGULATORY INFORMATION

**OSHA Hazards** : No OSHA Hazards

**EPCRA - Emergency Planning and Community Right-to-Know**

#### SARA 304 Extremely Hazardous Substances Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

**SARA 311/312 Hazards** : No SARA Hazards

**SARA 302** : No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

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**SARA 313** : This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

### US State Regulations

**California Prop 65** This product does not contain any chemicals known to the State of California to cause cancer, birth, or any other reproductive defects.

---

## SECTION 16. OTHER INFORMATION

The information provided in this Material Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

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**SECTION 1. PRODUCT AND COMPANY IDENTIFICATION**

Product name : Buffer RW1

**Manufacturer or supplier's details**Company : QIAGEN GmbH  
QIAGEN Str. 1  
D-40724 Hilden

Telephone : +49-02103-29-0

Responsible Department : QIAGEN Technical Service, QIAGEN Inc.,  
27220 Turnberry Lane,  
Valencia, CA 91355, USA,  
Tel.: 1-800-DNA-PREP (1-800-362-7737),  
Email: techservice-us@qiagen.comE-mail : cpc@qiagen.com  
addressResponsible/issuing  
personEmergency telephone : CHEMTREC  
USA & Canada 1-800-424-9300**Recommended use of the chemical and restrictions on use**

Recommended use : Laboratory chemicals

**SECTION 2. HAZARDS IDENTIFICATION****GHS Classification**Flammable liquids : Category 3  
Skin corrosion : Category 1C  
Serious eye damage : Category 1**GHS Label element**

Hazard pictograms :



Signal Word : Danger

Hazard Statements : H226 Flammable liquid and vapor.  
H314 Causes severe skin burns and eye damage.Precautionary Statements : **Prevention:**

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P210 Keep away from heat/sparks/open flames/hot surfaces. -  
No smoking.

P280 Wear protective gloves/ protective clothing/ eye  
protection/ face protection.

**Response:**

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water  
for several minutes. Remove contact lenses, if present and  
easy to do. Continue rinsing.

P308 + P311 IF exposed or concerned: Call a POISON  
CENTER or doctor/ physician.

**Potential Health Effects**

Aggravated Medical Condition : None known.  
Symptoms of Overexposure : No information available.

**Carcinogenicity:**

**IARC** Group 1: Carcinogenic to humans  
ethanol 64-17-5

**ACGIH** Confirmed animal carcinogen with unknown relevance to  
humans  
ethanol 64-17-5

**OSHA** No ingredient of this product present at levels greater than or  
equal to 0.1% is identified as a carcinogen or potential  
carcinogen by OSHA.

**NTP** No ingredient of this product present at levels greater than or  
equal to 0.1% is identified as a known or anticipated carcinogen  
by NTP.

**SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS**

Substance / Mixture : Mixture

**Hazardous ingredients**

Chemical Name	CAS-No.	Concentration [%]
guanidinium thiocyanate	593-84-0	>= 10 - < 20
ethanol	64-17-5	>= 5 - < 10

**SECTION 4. FIRST AID MEASURES**

General advice : Move out of dangerous area.  
Show this material safety data sheet to the doctor in  
attendance.

If inhaled : If unconscious place in recovery position and seek medical

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	advice. If symptoms persist, call a physician.
In case of skin contact	: Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Immediate medical treatment is necessary as untreated wounds from corrosion of the skin heal slowly and with difficulty.
In case of eye contact	: Small amounts splashed into eyes can cause irreversible tissue damage and blindness. In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Remove contact lenses. Protect unharmed eye.
If swallowed	: If accidentally swallowed obtain immediate medical attention. Rinse mouth with water. Never give anything by mouth to an unconscious person.
Most important symptoms and effects, both acute and delayed	: Causes serious eye damage. Causes severe burns.  No information available.
Notes to physician	: No information available.

---

**SECTION 5. FIRE-FIGHTING MEASURES**

Suitable extinguishing media	: Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Specific hazards during fire fighting	: Do not allow run-off from fire fighting to enter drains or water courses. Exposure to decomposition products may be a hazard to health.
Hazardous combustion products	: Carbon oxides Sulfur oxides
Specific extinguishing methods	: In the event of fire and/or explosion do not breathe fumes. Use a water spray to cool fully closed containers.
Special protective equipment for fire-fighters	: Wear self-contained breathing apparatus for firefighting if necessary.

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### SECTION 6. ACCIDENTAL RELEASE MEASURES

- Personal precautions, protective equipment and emergency procedures : Use personal protective equipment.  
Remove all sources of ignition.  
Evacuate personnel to safe areas.  
Avoid breathing dust/ fume/ gas/ mist/ vapors/ spray.  
Beware of vapors accumulating to form explosive concentrations. Vapors can accumulate in low areas.
- Environmental precautions : Prevent product from entering drains.  
Prevent further leakage or spillage if safe to do so.
- Methods and materials for containment and cleaning up : Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13).  
Unsuitable cleaning agents  
sodium hypochlorite

### SECTION 7. HANDLING AND STORAGE

- Advice on safe handling : Avoid formation of aerosol.  
Do not breathe vapors/dust.  
Avoid contact with skin and eyes.  
For personal protection see section 8.  
Smoking, eating and drinking should be prohibited in the application area.  
Provide sufficient air exchange and/or exhaust in work rooms.  
Open drum carefully as content may be under pressure.  
Dispose of rinse water in accordance with local and national regulations.
- Do not breathe vapors/dust.  
Avoid contact with skin and eyes.  
For personal protection see section 8.  
Smoking, eating and drinking should be prohibited in the application area.  
Open drum carefully as content may be under pressure.  
Dispose of rinse water in accordance with local and national regulations.
- Conditions for safe storage : Keep container tightly closed in a dry and well-ventilated place.
- Materials to avoid : Do not store together with oxidizing and self-igniting products.

### SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

#### Ingredients with workplace control parameters

Ingredients	CAS-No.	Value type	Control	Basis
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		(Form of exposure)	parameters / Permissible concentration	
ethanol	64-17-5	TWA	1,000 ppm 1,900 mg/m <sup>3</sup>	NIOSH REL
		TWA	1,000 ppm 1,900 mg/m <sup>3</sup>	OSHA Z-1
		TWA	1,000 ppm 1,900 mg/m <sup>3</sup>	OSHA P0
		STEL	1,000 ppm	ACGIH

**Personal protective equipment**

## Hand protection

## Remarks

: The choice of an appropriate glove does not only depend on its material but also on other quality features and is different from one producer to the other. Take note of the information given by the producer concerning permeability and break through times, and of special workplace conditions (mechanical strain, duration of contact).

## Material

: Protective gloves

## Eye protection

: Tightly fitting safety goggles  
Wear face-shield and protective suit for abnormal processing problems.  
Do not wear contact lenses.  
Ensure that eyewash stations and safety showers are close to the workstation location.

## Skin and body protection

: Choose body protection according to the amount and concentration of the dangerous substance at the work place.  
acid-resistant protective clothing  
Footwear protecting against chemicals  
Workers should wear antistatic footwear.

## Hygiene measures

: Keep away from food and drink.  
Wash hands before breaks and at the end of workday.  
Ensure adequate ventilation, especially in confined areas.  
Avoid contact with the skin and the eyes.  
When using do not eat, drink or smoke.

**SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**

Appearance : liquid

Color : No data available

Odor : characteristic

Odor Threshold : No data available

pH : 7.5

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Melting point/range	: No data available
Boiling point/boiling range	: No data available
Flash point	: 50 °C
Evaporation rate	: No data available
Burning rate	: No data available
Upper explosion limit	: No data available
Lower explosion limit	: No data available
Vapor pressure	: No data available
Relative vapor density	: No data available
Relative density	: No data available
Density	: 1.01 g/cm <sup>3</sup>
Solubility(ies)	
Water solubility	: No data available
Solubility in other solvents	: No data available
Partition coefficient: n-octanol/water	: No data available
Autoignition temperature	: not determined
Thermal decomposition	: No data available
Viscosity	
Viscosity, dynamic	: No data available
Viscosity, kinematic	: No data available
Explosive properties	: No data available
Oxidizing properties	: No data available

---

**SECTION 10. STABILITY AND REACTIVITY**

Reactivity	: No decomposition if stored and applied as directed.
Chemical stability	: No decomposition if stored and applied as directed.
Possibility of hazardous reactions	: Stable under recommended storage conditions.  Hazardous decomposition products formed under fire conditions. Vapors may form explosive mixture with air. Thiocyanates can develop poisonous gas in contact with strong acids. Keep away from oxidizing agents, and acidic or alkaline products.



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Conditions to avoid : Heat, flames and sparks.

Incompatible materials : No data available

Hazardous decomposition products : No decomposition if stored and applied as directed.

**SECTION 11. TOXICOLOGICAL INFORMATION****Acute toxicity****Product:**

Acute oral toxicity : No data available

Acute inhalation toxicity : No data available

Acute dermal toxicity : No data available

**Ingredients:****guanidinium thiocyanate :**

Acute oral toxicity : LD50 Oral Rat: 593 mg/kg

**ethanol :**

Acute oral toxicity : LD50 Oral Rat: 10,470 mg/kg

Acute inhalation toxicity : LC50 Rat: 20000 ppm  
Exposure time: 10 h**Skin corrosion/irritation****Product:**

Extremely corrosive and destructive to tissue., Causes skin burns.

**Serious eye damage/eye irritation****Product:**Remarks:  
May cause irreversible eye damage.**Ingredients:****ethanol:**

Result: Eye irritation

**Respiratory or skin sensitization**

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No data available

**Germ cell mutagenicity**

No data available

**Carcinogenicity**

No data available

**Reproductive toxicity**

No data available

**STOT-single exposure**

No data available

**STOT-repeated exposure**

No data available

**Aspiration toxicity**

No data available

**Further information****Product:**

Remarks:

Solvents may degrease the skin.

---

**SECTION 12. ECOLOGICAL INFORMATION****Ecotoxicity****Product:**

Toxicity to fish : No data available

Toxicity to algae : No data available

Toxicity to bacteria : No data available

**Ingredients:****guanidinium thiocyanate :**Toxicity to daphnia and other : EC50 (Daphnia): 42.4 mg/l  
aquatic invertebrates Exposure time: 48 h**Persistence and degradability**

No data available

**Bioaccumulative potential**

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**Product:**

Bioaccumulation : No data available

Partition coefficient: n-  
octanol/water : No data available**Mobility in soil**

No data available

**Other adverse effects**

No data available

---

**SECTION 13. DISPOSAL CONSIDERATIONS****Disposal methods**Waste from residues : Send to a licensed waste management company.  
Dispose of as hazardous waste in compliance with local and  
national regulations.Contaminated packaging : Dispose of as unused product.  
Do not re-use empty containers.

---

**SECTION 14. TRANSPORT INFORMATION****UNRTDG**

Not regulated as a dangerous good

**IATA-DGR**

Not regulated as a dangerous good

**IMDG-Code**

Not regulated as a dangerous good

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code**

No data available

**Domestic regulation****49 CFR**

Not regulated as a dangerous good

**Special precautions for user :**

For personal protection see section 8.

**Buffer RW1**

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**SECTION 15. REGULATORY INFORMATION**

**OSHA Hazards** : Combustible Liquid, Carcinogen, Harmful by ingestion.  
**EPCRA - Emergency Planning and Community Right-to-Know**

**SARA 304 Extremely Hazardous Substances Reportable Quantity**

This material does not contain any components with a section 304 EHS RQ.

**SARA 311/312 Hazards** : Fire Hazard  
Acute Health Hazard

**SARA 302** : No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

**SARA 313** : This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

**US State Regulations**

**California Prop 65**

ethanol	WARNING! This product contains a chemical known in the State of California to cause cancer.	64-17-5
ethanol	WARNING: This product contains a chemical known in the State of California to cause birth defects or other reproductive harm.	64-17-5

**SECTION 16. OTHER INFORMATION**

The information provided in this Material Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

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**SECTION 1. PRODUCT AND COMPANY IDENTIFICATION**

Product name : Water

**Manufacturer or supplier's details**Company : QIAGEN GmbH  
QIAGEN Str. 1  
D-40724 Hilden

Telephone : +49-02103-29-0

Responsible Department : QIAGEN Technical Service, QIAGEN Inc.,  
27220 Turnberry Lane,  
Valencia, CA 91355, USA,  
Tel.: 1-800-DNA-PREP (1-800-362-7737),  
Email: techservice-us@qiagen.comE-mail : cpc@qiagen.com  
addressResponsible/issuing  
personEmergency telephone : CHEMTREC  
USA & Canada 1-800-424-9300**Recommended use of the chemical and restrictions on use**

Recommended use : Laboratory chemicals

**SECTION 2. HAZARDS IDENTIFICATION****GHS Classification**

Not a hazardous substance or mixture.

**GHS Label element**

Not a hazardous substance or mixture.

**Potential Health Effects**Aggravated Medical : None known.  
Condition

Symptoms of Overexposure : No information available.

**Carcinogenicity:****IARC** No ingredient of this product present at levels greater than or

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<b>ACGIH</b>	equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC. No ingredient of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.
<b>OSHA</b>	No ingredient of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.
<b>NTP</b>	No ingredient of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

**SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS**

Substance / Mixture : Substance

**Hazardous ingredients**

No hazardous ingredients

**SECTION 4. FIRST AID MEASURES**

General advice	: Show this material safety data sheet to the doctor in attendance.
If inhaled	: Not applicable
In case of skin contact	: Not applicable
In case of eye contact	: Not applicable
If swallowed	: Not applicable
Most important symptoms and effects, both acute and delayed	: No information available.
Notes to physician	: No information available.

**SECTION 5. FIRE-FIGHTING MEASURES**

Suitable extinguishing media	: Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Specific hazards during fire fighting	: Exposure to decomposition products may be a hazard to health.
Hazardous combustion	: No hazardous combustion products are known

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products

Specific extinguishing methods : In the event of fire and/or explosion do not breathe fumes.

Special protective equipment for fire-fighters : Wear self-contained breathing apparatus for firefighting if necessary.

**SECTION 6. ACCIDENTAL RELEASE MEASURES**

Personal precautions, protective equipment and emergency procedures : Use personal protective equipment. Avoid breathing dust/ fume/ gas/ mist/ vapors/ spray.

Methods and materials for containment and cleaning up : Keep in suitable, closed containers for disposal.

**SECTION 7. HANDLING AND STORAGE**

Advice on safe handling : For personal protection see section 8. Smoking, eating and drinking should be prohibited in the application area.

**SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION****Ingredients with workplace control parameters**

Contains no substances with occupational exposure limit values.

**Personal protective equipment**

Hand protection

Remarks : The choice of an appropriate glove does not only depend on its material but also on other quality features and is different from one producer to the other. Take note of the information given by the producer concerning permeability and break through times, and of special workplace conditions (mechanical strain, duration of contact).

Eye protection : Safety glasses

Skin and body protection : Choose body protection according to the amount and concentration of the dangerous substance at the work place. Footwear protecting against chemicals

Hygiene measures : Keep away from food and drink. When using do not eat, drink or smoke.

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**SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**

Appearance	: liquid
Color	: colorless
Odor	: odorless
Odor Threshold	: No data available
pH	: 6 - 8
Melting point/range	: 0 °C
Boiling point/boiling range	: 100 °C (1,013 hPa)
Flash point	: Not applicable
Evaporation rate	: No data available
Burning rate	: No data available
Upper explosion limit	: Not applicable
Lower explosion limit	: Not applicable
Vapor pressure	: 23 hPa (20 °C)
Relative vapor density	: No data available
Relative density	: 1 (3.98 °C)
Density	: 1.00 g/cm <sup>3</sup>
Solubility(ies)	
Water solubility	: completely miscible
Solubility in other solvents	: No data available
Partition coefficient: n-octanol/water	: No data available
Autoignition temperature	: does not ignite
Thermal decomposition	: No data available
Viscosity	
Viscosity, dynamic	: No data available
Viscosity, kinematic	: No data available
Explosive properties	: Not applicable
Oxidizing properties	: No data available
Molecular weight	: 18.02 g/mol



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**SECTION 10. STABILITY AND REACTIVITY**

Reactivity	:	No decomposition if stored and applied as directed.
Chemical stability	:	No decomposition if stored and applied as directed.
Possibility of hazardous reactions	:	Stable under recommended storage conditions. Hazardous decomposition products formed under fire conditions.
Conditions to avoid	:	No data available
Incompatible materials	:	No data available
Hazardous decomposition products	:	No decomposition if stored and applied as directed.

**SECTION 11. TOXICOLOGICAL INFORMATION****Acute toxicity****Product:**

Acute oral toxicity	:	No data available
Acute inhalation toxicity	:	No data available
Acute dermal toxicity	:	No data available

**Skin corrosion/irritation****Product:**

No data available

**Serious eye damage/eye irritation****Product:**

No data available

**Respiratory or skin sensitization**

No data available

**Germ cell mutagenicity**

No data available

**Carcinogenicity**

No data available

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### Reproductive toxicity

No data available

### STOT-single exposure

No data available

### STOT-repeated exposure

No data available

### Aspiration toxicity

No data available

### Further information

No data available

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## SECTION 12. ECOLOGICAL INFORMATION

### Ecotoxicity

#### Product:

Toxicity to fish : No data available

Toxicity to algae : No data available

Toxicity to bacteria : No data available

### Persistence and degradability

No data available

### Bioaccumulative potential

#### Product:

Bioaccumulation : No data available

Partition coefficient: n-octanol/water : No data available

### Mobility in soil

No data available

### Other adverse effects

No data available

## Water

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### SECTION 13. DISPOSAL CONSIDERATIONS

#### Disposal methods

Waste from residues : Dispose of contents/container in accordance with local regulation.

Contaminated packaging : Empty containers should be taken to an approved waste handling site for recycling or disposal.

---

### SECTION 14. TRANSPORT INFORMATION

#### UNRTDG

Not regulated as a dangerous good

#### IATA-DGR

Not regulated as a dangerous good

#### IMDG-Code

Not regulated as a dangerous good

#### Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

No data available

#### Domestic regulation

##### 49 CFR

Not regulated as a dangerous good

#### Special precautions for user :

Remarks : Not classified as dangerous in the meaning of transport regulations.

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### SECTION 15. REGULATORY INFORMATION

TSCA list : Not relevant  
Not relevant

OSHA Hazards : No OSHA Hazards

#### EPCRA - Emergency Planning and Community Right-to-Know

#### CERCLA Reportable Quantity

This material does not contain any components with a CERCLA RQ.

#### SARA 304 Extremely Hazardous Substances Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

SARA 311/312 Hazards : No SARA Hazards

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**SARA 302** : No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

**SARA 313** : This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

### US State Regulations

**California Prop 65** This product does not contain any chemicals known to the State of California to cause cancer, birth, or any other reproductive defects.

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## SECTION 16. OTHER INFORMATION

The information provided in this Material Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.