

| Version | ١ |
|---------|---|
| 1.0 | |

Revision Date: 09/04/2021

Date of last issue: -Date of first issue: 09/04/2021

Safety Data Sheet (SDS) cover letter for product:

QIAamp DNA Mini Kit (50)

| Catalog number: | 51304 |
|---------------------|-------------|
| Document ID: | 80000000510 |
| Country / Language: | US / EN |

This product contains one or more components with related SDS, listed below. You can find the SDS for each component on the following pages.

Components with SDS:

- Buffer AW2
- Proteinase K
- Buffer ATL
- Buffer AE
- Buffer AL
- Buffer AW1

Kind regards,, Your QIAGEN Team

Email cpc@qiagen.com | Website www.qiagen.com/safety



| Version | Revision Date: | Date of last issue: - |
|---------|----------------|---------------------------------|
| 1.0 | 09/04/2021 | Date of first issue: 09/04/2021 |
| | | |

SECTION 1. IDENTIFICATION

| Product name Manufacturer or supplier's of | - | Buffer AW2 ils |
|--|---|--|
| Company | : | QIAGEN GmbH QIAGEN Str. 1 D-40724 Hilden |
| Telephone | : | +49-(0)2103-29-0 |
| Responsible Department | : | QIAGEN Inc. 19300 Germantown Road Germantown, MD 20874, USA Tel.: 800-426-8157 http://support.qiagen.com |
| E-mail addressResponsible/issuing person | : | cpc@qiagen.com |
| Emergency 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 in accordance with the OSHA Hazard Communication Standard (29 CFR 1910.1200)

Not a hazardous substance or mixture.

GHS label elements

Not a hazardous substance or mixture.

Other hazards

None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

Components

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. |



| Version 1.0 | Revision Date: 09/04/2021 | Date of last issue: - Date of first issue: 09/04/2021 |
|---|---|--|
| In case of skin contact | | ly with soap and plenty of water while inated clothes and shoes. |
| In case of eye contact | : Remove contact lens Protect unharmed ex | ses. ye. h plenty of water for at least 15 minutes |
| If swallowed | : If accidentally swalld Rinse mouth with wa | wed obtain immediate medical attention |
| Most important symptoms and effects, both acute and delayed | : No information availa | |
| Notes to physician | : No information availa | able. |
| ECTION 5. FIRE-FIGHTING ME | ASURES | |
| Suitable extinguishing media | | easures that are appropriate to local he surrounding environment. |
| Specific hazards during fire fighting | | position products may be a hazard to |
| Hazardous combustion products | : None | |
| Further information Special protective equipment for fire-fighters | | nd/or explosion do not breathe fumes. breathing apparatus for firefighting if |
| SECTION 6. ACCIDENTAL RELI | EASE MEASURES | |
| Personal precautions, protective equipment and emergency procedures | : Use personal protec Avoid breathing dust | tive equipment. t/ fume/ gas/ mist/ vapors/ spray. |
| Methods and materials for | : Keep in suitable, clo | sed containers for disposal. |

SECTION 7. HANDLING AND STORAGE

containment and cleaning up

| Advice on protection against fire and explosion | : | Normal measures for preventive fire protection. |
|---|---|--|
| Advice on safe handling | : | For personal protection see section 8. Smoking, eating and drinking should be prohibited in the application area. |
| Further information on storage stability | : | No decomposition if stored and applied as directed. |

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Ingredients with workplace control parameters

Contains no substances with occupational exposure limit values.



Version 1.0 Revision Da 09/04/2021

Revision Date: 09/04/2021 Date of last issue: -Date of first issue: 09/04/2021

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. |

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

| Appearance | : | liquid |
|---|---|-------------------|
| Color | : | No data available |
| Odor | : | characteristic |
| Odor Threshold | : | No data available |
| рН | : | 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 / Upper flammability limit | : | No data available |
| Lower explosion limit / Lower flammability limit | : | No data available |
| Vapor pressure | : | No data available |
| Relative vapor density | : | No data available |
| Relative density | : | No data available |
| Density | : | 1.01 g/cm3 |
| Solubility(ies) Water solubility | : | No data available |
| Solubility in other solvents | : | No data available |



| Version 1.0 | Revision Date: 09/04/2021 | Date of last issue: - Date of first issue: 09/04/2021 |
|--|------------------------------|--|
| | | |
| Partition coefficient: n- octanol/water | : No data available | |
| Autoignition temperature | : not determined | |
| Decomposition temperature | : 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 Chemical stability Possibility of hazardous reactions | No decomposition if stored and applied as directed. No decomposition if stored and applied as directed. Stable under recommended storage conditions. Hazardous decomposition products formed under fire conditions. |
|--|---|
| Conditions to avoid Incompatible materials Hazardous decomposition products | No data available No data available No decomposition if stored and applied as directed. |

SECTION 11. TOXICOLOGICAL INFORMATION

Acute toxicity

Not classified based on available information.

Product:

| Acute oral toxicity | : | Remarks: No data available |
|---------------------------|---|----------------------------|
| Acute inhalation toxicity | : | Remarks: No data available |
| Acute dermal toxicity | : | Remarks: No data available |

Skin corrosion/irritation

Not classified based on available information.

Product:

Remarks

: May cause skin irritation in susceptible persons.

Serious eye damage/eye irritation

Not classified based on available information.

Product:

Remarks : May irritate eyes.



| Version | | |
|---------|--|--|
| 1.0 | | |

Revision Date: 09/04/2021

Date of last issue: -Date of first issue: 09/04/2021

Respiratory or skin sensitization

Skin sensitization

Not classified based on available information.

Respiratory sensitization

Not classified based on available information.

Product:

Remarks

: No data available

Germ cell mutagenicity

Not classified based on available information.

Carcinogenicity

Not classified based on available information.

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.

OSHA No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens.

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.

Reproductive toxicity

Not classified based on available information.

STOT-single exposure

Not classified based on available information.

STOT-repeated exposure

Not classified based on available information.

Aspiration toxicity

Not classified based on available information.

Further information

Product:

Remarks

: No data available

SECTION 12. ECOLOGICAL INFORMATION

| Ecotoxicity | |
|----------------------------------|---------------------------------|
| Product: Toxicity to fish | : Remarks: No data available |
| Toxicity to algae/aquatic plants | : Remarks: No data available |
| Toxicity to microorganisms | : Remarks: No data available |



| ersion D | Revision Date: 09/04/2021 | Date of last issue: - Date of first issue: 09/04/2021 |
|-----------------------------------|---|---|
| Persistence and degradat | bility | |
| No data available | | |
| Bioaccumulative potentia | l | |
| Product: | | |
| Bioaccumulation | : Remarks: No data av | ailable |
| Mobility in soil | | |
| No data available | | |
| Other adverse effects | | |
| Product: | | |
| Ozone-Depletion Potential | Protection of Stratosp Substances Remarks: This produc manufactured with a | Protection of Environment; Part 82 oheric Ozone - CAA Section 602 Class I ct neither contains, nor was Class I or Class II ODS as defined by the ection 602 (40 CFR 82, Subpt. A, App.A |
| Additional ecological information | : No data available | |

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

SECTION 14. TRANSPORT INFORMATION

International Regulations

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 Not applicable for product as supplied.

Domestic regulation

49 CFR

Not regulated as a dangerous good

SECTION 15. REGULATORY INFORMATION

CERCLA Reportable Quantity

| Components | CAS-No. | Component RQ | Calculated product RQ | |
|------------|---------|--------------|-----------------------|--|
|------------|---------|--------------|-----------------------|--|



| Ver | sion |
|-----|------|
| 1.0 | |

Revision Date: 09/04/2021

Date of last issue: -Date of first issue: 09/04/2021

| | | (lbs) | (lbs) |
|--------------|------------|-------|-------|
| sodium azide | 26628-22-8 | 1000 | * |
| | | | |

*: Calculated RQ exceeds reasonably attainable upper limit.

SARA 304 Extremely Hazardous Substances Reportable Quantity

| Components | CAS-No. | Component RQ | Calculated product RQ |
|--------------|------------|--------------|-----------------------|
| | | (lbs) | (lbs) |
| sodium azide | 26628-22-8 | 1000 | * |

*: Calculated RQ exceeds reasonably attainable upper limit.

SARA 302 Extremely Hazardous Substances Threshold Planning Quantity

This material does not contain any components with a section 302 EHS TPQ.

| SARA 311/312 Hazards | : | No SARA Hazards |
|----------------------|---|---|
| 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. |

Clean Air Act

This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B).

This product does not contain any hazardous air pollutants (HAP), as defined by the U.S. Clean Air Act Section 112 (40 CFR 61).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 112(r) for Accidental Release Prevention (40 CFR 68.130, Subpart F).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 111 SOCMI Intermediate or Final VOC's (40 CFR 60.489).

Clean Water Act

This product does not contain any Hazardous Substances listed under the U.S. CleanWater Act, Section 311, Table 116.4A.

This product does not contain any Hazardous Chemicals listed under the U.S. CleanWater Act, Section 311, Table 117.3.

This product does not contain any toxic pollutants listed under the U.S. Clean Water Act Section 307

This product does not contain any priority pollutants related to the U.S. Clean Water Act

Maine Chemicals of High Concern

This product does not contain any chemicals that are listed as Maine Chemicals of High Concern.

Maine Chemicals of High Concern

Product does not contain any listed chemicals

TSCA list

No substances are subject to a Significant New Use Rule.

No substances are subject to TSCA 12(b) export notification requirements.

SECTION 16. OTHER INFORMATION

Full text of other abbreviations



Version 1.0

Revision Date: 09/04/2021 Date of last issue: -Date of first issue: 09/04/2021

AICS - Australian Inventory of Chemical Substances; AIIC - Australian Inventory of Industrial Chemicals; ASTM - American Society for the Testing of Materials; bw - Body weight; CERCLA -Comprehensive Environmental Response, Compensation, and Liability Act; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DOT - Department of Transportation; DSL - Domestic Substances List (Canada); ECx -Concentration associated with x% response; EHS - Extremely Hazardous Substance; ELx -Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; HMIS - Hazardous Materials Identification System; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC -International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; MSHA - Mine Safety and Health Administration; n.o.s. -Not Otherwise Specified; NFPA - National Fire Protection Association; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; RCRA - Resource Conservation and Recovery Act; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RQ -Reportable Quantity; SADT - Self-Accelerating Decomposition Temperature; SARA - Superfund Amendments and Reauthorization Act; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB -Very Persistent and Very Bioaccumulative

SDS Number : 60000001230

Revision Date : 09/04/2021

The information provided in this 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.

US / Z8



| Version | Revision Date: | Date of last issue: - |
|---------|----------------|---------------------------------|
| 1.0 | 09/04/2021 | Date of first issue: 09/04/2021 |
| | | |

SECTION 1. IDENTIFICATION

| Product name : Manufacturer or supplier's de | Proteinase K ails |
|--|--|
| Company | QIAGEN GmbH QIAGEN Str. 1 D-40724 Hilden |
| Telephone | +49-(0)2103-29-0 |
| Responsible Department | QIAGEN Inc. 19300 Germantown Road Germantown, MD 20874, USA Tel.: 800-426-8157 http://support.qiagen.com |
| E-mail : addressResponsible/issuing person | cpc@qiagen.com |
| Emergency 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 in accordance with the OSHA Hazard Communication Standard (29 CFR 1910.1200) | | | |
|---|---|--|--|
| Respiratory sensitization | : | Category 1 | |
| GHS label elements | | | |
| Hazard pictograms | : | | |
| Signal Word | : | Danger | |
| Hazard Statements | : | H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled. | |
| Precautionary Statements | : | Prevention: P261 Avoid breathing dust/ fume/ gas/ mist/ vapors/ spray. P280 Wear protective gloves/ protective clothing/ eye protection/ face protection. P285 In case of inadequate ventilation wear respiratory protection. | |



| Version | Revision Date: | Date of last issue: - |
|---------|----------------|---------------------------------|
| 1.0 | 09/04/2021 | Date of first issue: 09/04/2021 |

Response:

P304 + P341 IF INHALED: If breathing is difficult, remove person to fresh air and keep comfortable for breathing. P342 + P311 If experiencing respiratory symptoms: Call a POISON CENTER/ doctor.

Disposal:

P501 Dispose of contents/ container to an approved waste disposal plant.

Other hazards

None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture

: Mixture

Components

| Chemical name | CAS-No. | Concentration (% w/w) | |
|--|------------|-----------------------|--|
| proteinase K | 39450-01-6 | >= 1 - < 10 | |
| Actual concentration is withheld as a trade secret | | | |

SECTION 4. FIRST AID MEASURES

| General advice | Move out of dangerous area. Show this material safety data sheet to the attendance. | doctor in |
|---|--|------------------|
| If inhaled | If unconscious, place in recovery position a advice. Keep respiratory tract clear. If symptoms persist, call a physician. | nd seek medical |
| In case of skin contact | Wash off immediately with soap and plenty removing all contaminated clothes and sho 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 and consult a physician. | least 15 minutes |
| If swallowed | If accidentally swallowed obtain immediate Rinse mouth with water. Never give anything by mouth to an uncons | |
| Most important symptoms and effects, both acute and delayed Notes to physician | May cause allergy or asthma symptoms or difficulties if inhaled. No information available. 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. |



| Version 1.0 | | rision Date:)4/2021 | Date of last issue: - Date of first issue: 09/04/2021 |
|--|-----|-----------------------------|---|
| Hazardous combustion products | : | No data available | |
| Further information Special protective equipment for fire-fighters | | | plosion do not breathe fumes. ng apparatus for firefighting if |
| SECTION 6. ACCIDENTAL RELE | EAS | E MEASURES | |
| Personal precautions, | : | Use personal protective equ | lipment. |

| protective equipment and emergency procedures | • | 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. |

SECTION 7. HANDLING AND STORAGE

| Advice on protection against fire and explosion | : | Normal measures for preventive fire protection. |
|---|---|---|
| Advice on safe handling | : | Avoid formation of aerosol. Do not breathe vapors/dust. Avoid exposure - obtain special instructions before use. 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. Dispose of rinse water in accordance with local and national regulations. Persons susceptible to skin sensitization problems or asthma, allergies, chronic or recurrent respiratory disease should not be employed in any process in which this mixture is being used. |
| Conditions for safe storage | : | Keep container tightly closed in a dry and well-ventilated place. |
| Further information on storage stability | : | No decomposition if stored and applied as directed. |

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 | | |
| Material | : | Protective gloves |

| | | 0 | |
|---|----|----|----|
| Ö | | Õ | Ď |
| O | AC | FI | V® |
| - | | | • |

| Version 1.0 | Revision Date: 09/04/2021 | Date of last issue: - Date of first issue: 09/04/2021 |
|--------------------------|---|---|
| | | |
| Remarks | its material but also on othe from one producer to the of | • |
| Eye protection | : Tightly fitting safety goggle Do not wear contact lenses | S |
| Skin and body protection | : Choose body protection ac concentration of the dange Footwear protecting agains | rous substance at the work place. |
| Hygiene measures | | and at the end of workday. n, especially in confined areas. and the eyes. |

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

| Appearance | : | liquid |
|---|---|-------------------|
| Color | : | light cream |
| Odor | : | odorless |
| Odor Threshold | : | No data available |
| рН | : | 7.5 |
| Melting point/range | : | No data available |
| Boiling point/boiling range | : | No data available |
| Flash point | : | does not flash |
| Evaporation rate | : | No data available |
| Burning rate | : | No data available |
| Upper explosion limit / Upper flammability limit | : | No data available |
| Lower explosion limit / Lower flammability limit | : | No data available |
| Vapor pressure | : | No data available |
| Relative vapor density | : | No data available |
| Relative density | : | No data available |
| Density | : | 1.10 g/cm3 |
| Solubility(ies) Water solubility | : | No data available |



| Version | Revision Date: | Date of last issue: - |
|---------------------|----------------------|---------------------------------|
| 1.0 | 09/04/2021 | Date of first issue: 09/04/2021 |
| Solubility in other | r solvents : soluble | |

| Partition coefficient: n- | : | No data available |
|---------------------------------|---|--|
| Autoignition temperature | : | not determined |
| Decomposition temperature | : | No data available |
| Viscosity Viscosity, dynamic | : | No data available |
| Viscosity, kinematic | : | 7.741 mm2/s (68 °F / 20 °C) Method: DIN 51562 |
| Explosive properties | : | Not applicable |
| Oxidizing properties | : | No data available |

SECTION 10. STABILITY AND REACTIVITY

| Reactivity Chemical stability Possibility of hazardous reactions | No decomposition if stored and applied as directed. No decomposition if stored and applied as directed. Stable under recommended storage conditions. Hazardous decomposition products formed under fire conditions. Keep away from oxidizing agents, and acidic or alkaline products. |
|--|---|
| Conditions to avoid Incompatible materials Hazardous decomposition products | No data available No data available No decomposition if stored and applied as directed. |

SECTION 11. TOXICOLOGICAL INFORMATION

Acute toxicity

Not classified based on available information.

|--|

| Acute oral toxicity | : | Remarks: No data available |
|---------------------------|---|----------------------------|
| Acute inhalation toxicity | : | Remarks: No data available |
| Acute dermal toxicity | : | Remarks: No data available |

Skin corrosion/irritation

Not classified based on available information.

Product:

| Remarks : | May cause skin irritation and/or dermatitis. |
|-----------|--|
|-----------|--|

Serious eye damage/eye irritation

Not classified based on available information.



| Aamp DN | NA Mini Kit (50) | |
|------------------------------|---|--|
| rsion | Revision Date: 09/04/2021 | Date of last issue: - Date of first issue: 09/04/202 |
| Product: Remarks | : The product cause membranes. | es irritation of eyes, skin and mucous |
| Respirator | y or skin sensitization | |
| Skin sensit Not classifie | t ization ad based on available information. | |
| | y sensitization | |
| | allergy or asthma symptoms or breathing | difficulties if inhaled. |
| <u>Product:</u> Remarks | : May cause sensitiz | zation by inhalation and skin contact. |
| | nutagenicity ed based on available information. | |
| Carcinoger | nicity | |
| Not classifie IARC | ed based on available information. No ingredient of this product present identified as probable, possible or co | at levels greater than or equal to 0.1% i nfirmed human carcinogen by IARC. |
| OSHA | No component of this product presen on OSHA's list of regulated carcinoge | it at levels greater than or equal to 0.1% ens. |
| NTP | No ingredient of this product present identified as a known or anticipated c | at levels greater than or equal to 0.1% i arcinogen by NTP. |
| Reproducti | ive toxicity | |
| | ed based on available information. | |
| - | le exposure ed based on available information. | |
| | ated exposure | |
| • | ed based on available information. | |
| Aspiration | toxicity | |
| - | ed based on available information. | |
| Further info | ormation | |
| <u>Product:</u> Remarks | : No data available | |
| CTION 12. E | COLOGICAL INFORMATION | |
| Ecotoxicity | , | |
| Product: | | |
| | | |

Toxicity to fish

Remarks: No data available

:



QIAamp DNA Mini Kit (50)

| ersion) | Revision Date: 09/04/2021 | Date of last issue: - Date of first issue: 09/04/2021 |
|--|---|--|
| Toxicity to algae/aquatic plants | : Remarks: No data ava | ilable |
| Toxicity to microorganisms | : Remarks: No data ava | ilable |
| Persistence and degradab No data available | ility | |
| Bioaccumulative potential | | |
| Product: Bioaccumulation | : Remarks: No data ava | ilable |
| Mobility in soil No data available | | |
| Other adverse effects | | |
| Product: | | |
| Ozone-Depletion Potential | Protection of Stratosph Substances Remarks: This product manufactured with a C | rotection of Environment; Part 82 heric Ozone - CAA Section 602 Class I t neither contains, nor was class I or Class II ODS as defined by th ction 602 (40 CFR 82, Subpt. A, App.A |
| Additional ecological information | : 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

International Regulations

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

Not applicable for product as supplied.

Domestic regulation



Version 1.0

Revision Date: 09/04/2021

Date of last issue: -Date of first issue: 09/04/2021

49 CFR

Not regulated as a dangerous good

SECTION 15. REGULATORY INFORMATION

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 302 Extremely Hazardous Substances Threshold Planning Quantity

This material does not contain any components with a section 302 EHS TPQ.

| SARA 311/312 Hazards | Respiratory or skin sensitization | |
|----------------------|---|----------|
| SARA 313 | This material does not contain any chemical compone known CAS numbers that exceed the threshold (De M reporting levels established by SARA Title III, Section | linimis) |

Clean Air Act

This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B).

This product does not contain any hazardous air pollutants (HAP), as defined by the U.S. Clean Air Act Section 112 (40 CFR 61).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 112(r) for Accidental Release Prevention (40 CFR 68.130, Subpart F).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 111 SOCMI Intermediate or Final VOC's (40 CFR 60.489).

Clean Water Act

This product does not contain any Hazardous Substances listed under the U.S. CleanWater Act, Section 311, Table 116.4A.

This product does not contain any Hazardous Chemicals listed under the U.S. CleanWater Act, Section 311, Table 117.3.

This product does not contain any toxic pollutants listed under the U.S. Clean Water Act Section 307

This product does not contain any priority pollutants related to the U.S. Clean Water Act

Maine Chemicals of High Concern

This product does not contain any chemicals that are listed as Maine Chemicals of High Concern.

Maine Chemicals of High Concern

Product does not contain any listed chemicals

TSCA list

No substances are subject to a Significant New Use Rule.

No substances are subject to TSCA 12(b) export notification requirements.



Version 1.0

Revision Date: 09/04/2021

Date of last issue: -Date of first issue: 09/04/2021

SECTION 16. OTHER INFORMATION

Full text of other abbreviations

AICS - Australian Inventory of Chemical Substances; AIIC - Australian Inventory of Industrial Chemicals; ASTM - American Society for the Testing of Materials; bw - Body weight; CERCLA -Comprehensive Environmental Response, Compensation, and Liability Act; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DOT - Department of Transportation; DSL - Domestic Substances List (Canada); ECx -Concentration associated with x% response; EHS - Extremely Hazardous Substance; ELx -Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; HMIS - Hazardous Materials Identification System; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC -International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan): ISO - International Organisation for Standardization: KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; MSHA - Mine Safety and Health Administration; n.o.s. -Not Otherwise Specified; NFPA - National Fire Protection Association; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; RCRA - Resource Conservation and Recovery Act; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RQ -Reportable Quantity; SADT - Self-Accelerating Decomposition Temperature; SARA - Superfund Amendments and Reauthorization Act; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB -Very Persistent and Very Bioaccumulative

| SDS Number | : | 60000001246 |
|------------|---|-------------|
| | | |

Revision Date : 09/04/2021

The information provided in this 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.

US / Z8



| Version | Revision Date: | Date of last issue: - |
|---------|----------------|---------------------------------|
| 1.0 | 09/04/2021 | Date of first issue: 09/04/2021 |
| | | |

SECTION 1. IDENTIFICATION

| Product name | : | Buffer ATL | | | | | |
|--|------------------------------------|--|--|--|--|--|--|
| Manufacturer or supplier's o | Manufacturer or supplier's details | | | | | | |
| Company | : | QIAGEN GmbH QIAGEN Str. 1 D-40724 Hilden | | | | | |
| Telephone | : | +49-(0)2103-29-0 | | | | | |
| Responsible Department | : | QIAGEN Inc. 19300 Germantown Road Germantown, MD 20874, USA Tel.: 800-426-8157 http://support.qiagen.com | | | | | |
| E-mail addressResponsible/issuing person | : | cpc@qiagen.com | | | | | |
| Emergency telephone | : | CHEMTREC USA & Canada 1-800-424-9300 | | | | | |

Recommended use of the chemical and restrictions on use

| Recommended use : L | _aboratory chemicals |
|---------------------|----------------------|

SECTION 2. HAZARDS IDENTIFICATION

GHS classification in accordance with the OSHA Hazard Communication Standard (29 CFR 1910.1200)

Not a hazardous substance or mixture.

GHS label elements

Not a hazardous substance or mixture.

Other hazards

None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

Components

| Chemical name | CAS-No. | Concentration (% w/w) | |
|--|----------|-----------------------|--|
| sodium dodecyl sulphate | 151-21-3 | >= 1 - < 10 | |
| Actual concentration is withheld as a trade secret | | | |

Actual concentration is withheld as a trade secret

SECTION 4. FIRST AID MEASURES

General advice

: Show this material safety data sheet to the doctor in attendance.



| /ersion I.0 | Revision Date: 09/04/2021 | Date of last issue: - Date of first issue: 09/04/2021 |
|---|---|--|
| | | |
| If inhaled | : Move to fresh air. If symptoms persist, | call a physician. |
| In case of skin contact | : Wash off immediate | ly with soap and plenty of water while inated clothes and shoes. |
| In case of eye contact | Remove contact len Protect unharmed e Rinse thoroughly wir and consult a physic | ye. th plenty of water for at least 15 minutes |
| If swallowed | Rinse mouth with wa | owed obtain immediate medical attentior ater. by mouth to an unconscious person. |
| Most important symptoms and effects, both acute and delayed | : No information avail | |
| Notes to physician | : No information avail | able. |

SECTION 5. FIRE-FIGHTING MEASURES

| Suitable extinguishing media Specific hazards during fire fighting | : | Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Exposure to decomposition products may be a hazard to health. |
|--|---|--|
| Hazardous combustion products | : | Carbon oxides Nitrogen oxides (NOx) Sulfur oxides |
| Further information Special protective equipment for fire-fighters | : | In the event of fire and/or explosion do not breathe fumes. 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 | : | Prevent further leakage or spillage if safe to do so. |
| Methods and materials for containment and cleaning up | : | Keep in suitable, closed containers for disposal. |

SECTION 7. HANDLING AND STORAGE

| Advice on protection against fire and explosion | : | Normal measures for preventive fire protection. |
|---|---|--|
| Advice on safe handling | : | 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 |



| Version 1.0 | Revision Date: 09/04/2021 | Date of last issue: - Date of first issue: 09/04/2021 | |
|--|--------------------------------------|--|--|
| Materials to avoid | place. : Do not store near acids. | | |
| Further information on storage stability | : No decomposition if stored | and applied as directed. | |

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. 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 |
| рН | : | 8.3 |
| 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 / Upper flammability limit | : | No data available |
| Lower explosion limit / Lower | : | No data available |



| | Revision Date: 09/04/2021 | Date of last issue: - Date of first issue: 09/04/2021 |
|--|------------------------------|--|
| flammability limit | | |
| Vapor pressure | : No data available | |
| Relative vapor density | : No data available | |
| Relative density | : No data available | |
| Density | : 1.03 g/cm3 | |
| 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 | |
| Decomposition temperature | : 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 Chemical stability Possibility of hazardous reactions | No decomposition if stored and applied as direct No decomposition if stored and applied as direct Stable under recommended storage conditions. Hazardous decomposition products formed under conditions. Keep away from oxidizing agents, and acidic or a products. | ed. er fire |
|--|---|----------------|
| Conditions to avoid Incompatible materials Hazardous decomposition products | No data available No data available No decomposition if stored and applied as direct | ed. |

SECTION 11. TOXICOLOGICAL INFORMATION

Acute toxicity

Not classified based on available information.

Product:

| Acute oral toxicity | : | Remarks: No data available |
|---------------------------|---|----------------------------|
| Acute inhalation toxicity | : | Remarks: No data available |



| | (50) | |
|--|---|--|
| sion | Revision Date: 09/04/2021 | Date of last issue: - Date of first issue: 09/04/2021 |
| Acute dermal toxicity | : Remarks: No data av | ailable |
| Components: | | |
| sodium dodecyl sulphate: | | |
| Acute oral toxicity | : LD50 Oral (Rat): 977 | mg/kg |
| Acute dermal toxicity | : LD50 Dermal (Rabbit | t): 580 mg/kg |
| Skin corrosion/irritation Not classified based on avail | lable information. | |
| Product: | | |
| Remarks | : May cause skin irritat | tion and/or dermatitis. |
| Components: | | |
| sodium dodecyl sulphate: | | |
| Species | : Rabbit | |
| Exposure time Result | : 24 h : Irritating to skin. | |
| Serious eye damage/eye ir Not classified based on avail | | |
| Product: | | |
| Remarks | : The product causes i membranes. | rritation of eyes, skin and mucous |
| Components: | | |
| sodium dodecyl sulphate: | | |
| Species | : Rabbit | |
| Result | : Risk of serious dama : OECD Test Guideline | |
| Method | | 5 405 |
| Respiratory or skin sensiti | zation | |
| Skin sensitization Not classified based on avail | lable information. | |
| Respiratory sensitization Not classified based on avail | lable information. | |
| Product: | | |
| Remarks | : No data available | |
| Germ cell mutagenicity | labla information | |
| Not classified based on avail | | |
| Carcinogenicity | | |



| Version 1.0 | | vision Date: 04/2021 | Date of last issue: - Date of first issue: 09/04/2021 |
|---|--|---|--|
| ide | dentified as probable, possible or confirmed hu | | uman carcinogen by IARC. |
| | No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens. | | |
| | 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. | | |
| Reproductive toxi Not classified base | - | information. | |
| STOT-single expo Not classified base | | information. | |
| Components: | | | |
| sodium dodecyl s Routes of exposure Assessment | - | Inhalation May cause respiratory irritat | tion. |
| STOT-repeated ex Not classified base | - | information. | |
| Aspiration toxicity | | information. | |
| Further information | on | | |
| <u>Product:</u> Remarks | : | No data available | |
| SECTION 12. ECOLOG | | MATION | |
| Ecotoxicity | | | |
| <u>Product:</u> Toxicity to fish | : | Remarks: No data available |) |
| Toxicity to algae/ac plants | juatic : | Remarks: No data available | 9 |
| Toxicity to microor | janisms : | Remarks: No data available | 9 |
| Components: | | | |
| sodium dodecyl s | ulphate: | | |
| Toxicity to fish | : | NOEC (Oncorhynchus myki Exposure time: 96 h | iss (rainbow trout)): 19.5 mg/l |
| | | LC50 (Oncorhynchus mykis Exposure time: 96 h | s (rainbow trout)): 3.6 mg/l |
| Toxicity to algae/ad | juatic : | (Pseudokirchneriella subca | pitata (green algae)): 2.68 mg/l |



| ersion 0 | | vision Date: 04/2021 | Date of last issue: - Date of first issue: 09/04/2021 |
|---|-------|--|--|
| plants | | Exposure time: 150 h Test Type: Growth inhibitior | 1 |
| Persistence and degradab No data available | ility | | |
| Bioaccumulative potential | | | |
| Product: Bioaccumulation | : | Remarks: No data available | |
| Components: | | | |
| sodium dodecyl sulphate: Partition coefficient: n- octanol/water | : | log Pow: 1.6 | |
| Mobility in soil No data available | | | |
| Other adverse effects | | | |
| Product: | | | |
| Ozone-Depletion Potential | : | Substances Remarks: This product neith manufactured with a Class I | Ozone - CAA Section 602 Class I |
| Additional ecological information | : | No data available | |

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

International Regulations

UNRTDG

Not regulated as a dangerous good

IATA-DGR

Not regulated as a dangerous good

IMDG-Code

Not regulated as a dangerous good



Version 1.0 Revision Date: 09/04/2021

Date of last issue: -Date of first issue: 09/04/2021

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not applicable for product as supplied.

tot applicable for product as sup

Domestic regulation

49 CFR

Not regulated as a dangerous good

SECTION 15. REGULATORY INFORMATION

CERCLA Reportable Quantity

| Components | CAS-No. | Component RQ | Calculated product RQ |
|----------------|-----------|--------------|-----------------------|
| | | (lbs) | (lbs) |
| kaustiskā soda | 1310-73-2 | 1000 | * |

*: Calculated RQ exceeds reasonably attainable upper limit.

SARA 304 Extremely Hazardous Substances Reportable Quantity

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

SARA 302 Extremely Hazardous Substances Threshold Planning Quantity

This material does not contain any components with a section 302 EHS TPQ.

| SARA 311/312 Hazards | : No SARA Hazards |
|----------------------|---|
| 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. |

Clean Air Act

This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B).

This product does not contain any hazardous air pollutants (HAP), as defined by the U.S. Clean Air Act Section 112 (40 CFR 61).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 112(r) for Accidental Release Prevention (40 CFR 68.130, Subpart F).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 111 SOCMI Intermediate or Final VOC's (40 CFR 60.489).

Clean Water Act

The following Hazardous Substances are listed under the U.S. CleanWater Act, Section 311, Table 116.4A:

kaustiskā soda 1310-73-2 >= 0.1 - < 1 % The following Hazardous Chemicals are listed under the U.S. CleanWater Act, Section 311, Table 117.3:

kaustiskā soda 1310-73-2 >= 0.1 - < 1 % This product does not contain any toxic pollutants listed under the U.S. Clean Water Act Section 307

This product does not contain any priority pollutants related to the U.S. Clean Water Act

Maine Chemicals of High Concern

This product does not contain any chemicals that are listed as Maine Chemicals of High Concern.

Maine Chemicals of High Concern

Product does not contain any listed chemicals



Version 1.0 Revision Date: 09/04/2021

Date of last issue: -Date of first issue: 09/04/2021

TSCA list

No substances are subject to a Significant New Use Rule.

No substances are subject to TSCA 12(b) export notification requirements.

SECTION 16. OTHER INFORMATION

Full text of other abbreviations

AICS - Australian Inventory of Chemical Substances; AIIC - Australian Inventory of Industrial Chemicals; ASTM - American Society for the Testing of Materials; bw - Body weight; CERCLA -Comprehensive Environmental Response, Compensation, and Liability Act; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DOT - Department of Transportation; DSL - Domestic Substances List (Canada); ECx -Concentration associated with x% response; EHS - Extremely Hazardous Substance; ELx -Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; HMIS - Hazardous Materials Identification System; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC -International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; MSHA - Mine Safety and Health Administration; n.o.s. Not Otherwise Specified; NFPA - National Fire Protection Association; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; RCRA - Resource Conservation and Recovery Act; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RQ -Reportable Quantity; SADT - Self-Accelerating Decomposition Temperature; SARA - Superfund Amendments and Reauthorization Act; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory: TSCA - Toxic Substances Control Act (United States): UN - United Nations: UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB -Very Persistent and Very Bioaccumulative

SDS Number : 60000001257

Revision Date : 09/04/2021

The information provided in this 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



Version 1.0 Revision Date: 09/04/2021

Date of last issue: -Date of first issue: 09/04/2021

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.

US / Z8



| Version | Revision Date: | Date of last issue: - |
|---------|----------------|---------------------------------|
| 1.0 | 09/04/2021 | Date of first issue: 09/04/2021 |
| | | |

SECTION 1. IDENTIFICATION

| Product name | : | Buffer AE |
|--|------|--|
| Manufacturer or supplier's d | etai | ils |
| Company | : | QIAGEN GmbH QIAGEN Str. 1 D-40724 Hilden |
| Telephone | : | +49-(0)2103-29-0 |
| Responsible Department | : | QIAGEN Inc. 19300 Germantown Road Germantown, MD 20874, USA Tel.: 800-426-8157 http://support.qiagen.com |
| E-mail addressResponsible/issuing person | : | cpc@qiagen.com |
| Emergency telephone | : | CHEMTREC USA & Canada 1-800-424-9300 |

Recommended use of the chemical and restrictions on use

| Recommended use Eaboratory chemicals | Recommended use | : Laboratory chemicals |
|--------------------------------------|-----------------|------------------------|
|--------------------------------------|-----------------|------------------------|

SECTION 2. HAZARDS IDENTIFICATION

GHS classification in accordance with the OSHA Hazard Communication Standard (29 CFR 1910.1200)

Not a hazardous substance or mixture.

GHS label elements

Not a hazardous substance or mixture.

Other hazards

None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

Components

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. |



| Version 1.0 | Revision Date: 09/04/2021 | Date of last issue: - Date of first issue: 09/04/2021 |
|--|--|---|
| In case of skin contact | | ly with soap and plenty of water while ninated clothes and shoes. |
| In case of eye contact | : Remove contact len Protect unharmed e | eye. th plenty of water for at least 15 minutes |
| If swallowed | : If accidentally swall Rinse mouth with w | owed obtain immediate medical attention. |
| Most important symptoms and effects, both acute and delayed | : No information avail | |
| Notes to physician | : No information avai | lable. |
| SECTION 5. FIRE-FIGHTING ME | ASURES | |
| Suitable extinguishing media | | neasures that are appropriate to local the surrounding environment. |
| Specific hazards during fire fighting | | position products may be a hazard to |
| Hazardous combustion products | : No hazardous comb | pustion products are known |
| Further information Special protective equipment for fire-fighters | | and/or explosion do not breathe fumes. I breathing apparatus for firefighting if |
| SECTION 6. ACCIDENTAL RELE | EASE MEASURES | |
| Personal precautions, protective equipment and | : Use personal protect Avoid breathing dust | ctive equipment. st/ fume/ gas/ mist/ vapors/ spray. |

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

SECTION 7. HANDLING AND STORAGE

| Advice on protection against fire and explosion | : | Normal measures for preventive fire protection. |
|---|---|--|
| Advice on safe handling | : | For personal protection see section 8. Smoking, eating and drinking should be prohibited in the application area. |
| Materials to avoid | : | Do not store near acids. |
| Further information on storage stability | : | No decomposition if stored and applied as directed. |



Version 1.0

Revision Date: 09/04/2021

Date of last issue: -Date of first issue: 09/04/2021

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. |

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

| Appearance | : | liquid |
|---|---|-------------------|
| Color | : | No data available |
| Odor | : | characteristic |
| Odor Threshold | : | No data available |
| рН | : | 9 |
| 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 / Upper flammability limit | : | No data available |
| Lower explosion limit / Lower flammability limit | : | No data available |
| Vapor pressure | : | No data available |
| Relative vapor density | : | No data available |
| Relative density | : | No data available |



| Version 1.0 | | |
|---|--|--|
| Density | : 1 g/cm3 | |
| Solubility(ies) Water solubility | : No data available | |
| Solubility in other solvents | s : No data available | |
| Partition coefficient: n- | : No data available | |
| octanol/water Autoignition temperature | : not determined | |
| Decomposition temperature | : No data available | |
| Viscosity Viscosity, dynamic Viscosity, kinematic | : No data available : No data available | |
| Explosive properties | : No data available | |
| Oxidizing properties | : No data available | |
| | | |

SECTION 10. STABILITY AND REACTIVITY

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

SECTION 11. TOXICOLOGICAL INFORMATION

Acute toxicity

Not classified based on available information.

Product:

| Acute oral toxicity | : | Remarks: No data available |
|---------------------------|---|----------------------------|
| Acute inhalation toxicity | : | Remarks: No data available |
| Acute dermal toxicity | : | Remarks: No data available |

Skin corrosion/irritation

Not classified based on available information.

Product:

| Remarks : | : May cause skin irritation in susceptible persons | 3. |
|-----------|--|----|
|-----------|--|----|



Version 1.0

Revision Date: 09/04/2021

Date of last issue: -Date of first issue: 09/04/2021

Serious eye damage/eye irritation

Not classified based on available information.

Product:

Remarks

: May irritate eyes.

Respiratory or skin sensitization

Skin sensitization

Not classified based on available information.

Respiratory sensitization

Not classified based on available information.

Product:

Remarks : No data available

Germ cell mutagenicity

Not classified based on available information.

Carcinogenicity

Not classified based on available information.

- **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.
- **OSHA** No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens.
- **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.

Reproductive toxicity

Not classified based on available information.

STOT-single exposure

Not classified based on available information.

STOT-repeated exposure

Not classified based on available information.

Aspiration toxicity

Not classified based on available information.

Further information

Product:

Remarks

: No data available

÷

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

Product:

Toxicity to fish



| ersion 0 | Revision Date: 09/04/2021 | Date of last issue: - Date of first issue: 09/04/2021 |
|--|--|---|
| | Remarks: No data | available |
| Toxicity to algae/aquatic plants | : Remarks: No data | available |
| Toxicity to microorganisms | : Remarks: No data | available |
| Persistence and degradab No data available | ility | |
| Bioaccumulative potential | | |
| Product: Bioaccumulation | : Remarks: No data | available |
| Mobility in soil No data available | | |
| Other adverse effects | | |
| Product: | | |
| Ozone-Depletion Potential | Protection of Strate Substances Remarks: This pro manufactured with | R Protection of Environment; Part 82 ospheric Ozone - CAA Section 602 Class duct neither contains, nor was a Class I or Class II ODS as defined by th Section 602 (40 CFR 82, Subpt. A, App.A |
| Additional ecological information | : No data available | |

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

International Regulations

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

Not applicable for product as supplied.



Version 1.0

Revision Date: 09/04/2021

Date of last issue: -Date of first issue: 09/04/2021

Domestic regulation

49 CFR

Not regulated as a dangerous good

SECTION 15. REGULATORY INFORMATION

CERCLA Reportable Quantity

| Components | CAS-No. | Component RQ | Calculated product RQ |
|----------------|-----------|--------------|-----------------------|
| | | (lbs) | (lbs) |
| kaustiskā soda | 1310-73-2 | 1000 | * |

*: Calculated RQ exceeds reasonably attainable upper limit.

.

SARA 304 Extremely Hazardous Substances Reportable Quantity

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

SARA 302 Extremely Hazardous Substances Threshold Planning Quantity

This material does not contain any components with a section 302 EHS TPQ.

| SARA 311/312 Hazards | : | No SARA Hazards |
|----------------------|---|---|
| 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. |

Clean Air Act

. . . . *. . . .*

This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B).

This product does not contain any hazardous air pollutants (HAP), as defined by the U.S. Clean Air Act Section 112 (40 CFR 61).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 112(r) for Accidental Release Prevention (40 CFR 68.130, Subpart F).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 111 SOCMI Intermediate or Final VOC's (40 CFR 60.489).

Clean Water Act

The following Hazardous Substances are listed under the U.S. CleanWater Act, Section 311, Table 116.4A:

kaustiskā soda 1310-73-2 >= 0 - < 0.1 % The following Hazardous Chemicals are listed under the U.S. CleanWater Act, Section 311, Table 117.3:

1310-73-2 >= 0 - < 0.1 % kaustiskā soda This product does not contain any toxic pollutants listed under the U.S. Clean Water Act Section 307

This product does not contain any priority pollutants related to the U.S. Clean Water Act

Maine Chemicals of High Concern

This product does not contain any chemicals that are listed as Maine Chemicals of High Concern.

Maine Chemicals of High Concern

Product does not contain any listed chemicals

TSCA list

No substances are subject to a Significant New Use Rule.



Version 1.0 Revision Date: 09/04/2021

Date of last issue: -Date of first issue: 09/04/2021

No substances are subject to TSCA 12(b) export notification requirements.

SECTION 16. OTHER INFORMATION

Full text of other abbreviations

AICS - Australian Inventory of Chemical Substances; AIIC - Australian Inventory of Industrial Chemicals: ASTM - American Society for the Testing of Materials: bw - Body weight: CERCLA -Comprehensive Environmental Response, Compensation, and Liability Act; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DOT - Department of Transportation; DSL - Domestic Substances List (Canada); ECx -Concentration associated with x% response; EHS - Extremely Hazardous Substance; ELx -Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; HMIS - Hazardous Materials Identification System; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC -International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; MSHA - Mine Safety and Health Administration; n.o.s. -Not Otherwise Specified; NFPA - National Fire Protection Association; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate: NTP - National Toxicology Program: NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; RCRA - Resource Conservation and Recovery Act; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RQ -Reportable Quantity; SADT - Self-Accelerating Decomposition Temperature; SARA - Superfund Amendments and Reauthorization Act; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB -Very Persistent and Very Bioaccumulative

| SDS Number | : | 60000001262 |
|------------|---|-------------|
| | | |

Revision Date : 09/04/2021

The information provided in this 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.



| Version | Revision Date: | Date of last issue: - |
|---------|----------------|---------------------------------|
| 1.0 | 09/04/2021 | Date of first issue: 09/04/2021 |
| | | |

SECTION 1. IDENTIFICATION

| Product name | Buffer AL | | | | |
|--|--|--|--|--|--|
| Manufacturer or supplier's details | | | | | |
| Company | : QIAGEN GmbH QIAGEN Str. 1 D-40724 Hilden | | | | |
| Telephone | : +49-(0)2103-29-0 | | | | |
| Responsible Department | : QIAGEN Inc. 19300 Germantown Road Germantown, MD 20874, USA Tel.: 800-426-8157 http://support.qiagen.com | | | | |
| E-mail addressResponsible/issuing person | : cpc@qiagen.com | | | | |
| Emergency telephone | : CHEMTREC USA & Canada 1-800-424-9300 | | | | |

Recommended use of the chemical and restrictions on use

SECTION 2. HAZARDS IDENTIFICATION

| GHS classification in accor 1910.1200) | dan | ce with the OSHA Hazard Communication Standard (29 CFR |
|--|-----|--|
| Skin irritation | : | Category 2 |
| Eye irritation | : | Category 2A |
| Skin sensitization | : | Category 1 |
| GHS label elements | | |
| Hazard pictograms | : | |
| Signal Word | : | Warning |
| Hazard Statements | : | H315 Causes skin irritation. H317 May cause an allergic skin reaction. H319 Causes serious eye irritation. |
| Precautionary Statements | : | Prevention: |



| Version | Revision Date: | Date of last issue: - |
|---------|----------------|---------------------------------|
| 1.0 | 09/04/2021 | Date of first issue: 09/04/2021 |

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

Response:

P333 + P313 If skin irritation or rash occurs: Get medical advice/ attention.

P362 Take off contaminated clothing and wash before reuse.

Disposal:

P501 Dispose of contents/ container to an approved waste disposal plant.

Other hazards

None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

Components

| Chemical name | CAS-No. | Concentration (% w/w) |
|----------------------------------|----------|-----------------------|
| guanidine hydrochloride | 50-01-1 | >= 30 - < 50 |
| maleic acid | 110-16-7 | >= 0.1 - < 1 |
| Actual concentration is withhalf | | 2= 0:1 < 1 |

Actual concentration is withheld as a trade secret

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. 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. Causes skin irritation. May cause an allergic skin reaction. Causes serious eye irritation. |
| 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.



| | evision Date: 9/04/2021 | Date of last issue: - Date of first issue: 09/04/2021 |
|--|---|---|
| Specific hazards during fire fighting | : Exposure to decomposition health. | n products may be a hazard to |
| Hazardous combustion products | : Carbon oxides Nitrogen oxides (NOx) | |
| Further information Special protective equipment for fire-fighters | | explosion do not breathe fumes. hing apparatus for firefighting if |
| SECTION 6. ACCIDENTAL RELEA | SE MEASURES | |
| Personal precautions, | : Use personal protective eq | uipment. |
| protective equipment and emergency procedures | Avoid breathing dust/ fume | |
| protective equipment and | Avoid breathing dust/ fume Prevent product from enter Prevent further leakage or | gas/ mist/ vapors/ spray. |

SECTION 7. HANDLING AND STORAGE

| Advice on protection against fire and explosion | : | Normal measures for preventive fire protection. |
|---|---|--|
| Advice on safe handling | : | Do not breathe vapors/dust. Avoid exposure - obtain special instructions before use. 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. Persons susceptible to skin sensitization problems or asthma, allergies, chronic or recurrent respiratory disease should not be employed in any process in which this mixture is being used. |
| Conditions for safe storage | : | Keep container tightly closed in a dry and well-ventilated place. |
| Further information on storage stability | : | No decomposition if stored and applied as directed. |

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Ingredients with workplace control parameters

Contains no substances with occupational exposure limit values.

Personal protective equipment

Hand protection

Material

: Protective gloves

| 00000 | |
|----------------------------|---|
| 00000 | |
| QIAGEN [®] |) |

| Version 1.0 | Revision Date: 09/04/2021 | Date of last issue: - Date of first issue: 09/04/2021 | | |
|--------------------------|--|--|--|--|
| Remarks | its material but also of from one producer to given by the produce | propriate glove does not only depend on on other quality features and is different o the other. Take note of the information er concerning permeability and break of special workplace conditions duration of contact). | | |
| Eye protection | : Safety glasses Wear face-shield and problems. Ensure that eyewash | d protective suit for abnormal processing | | |
| Skin and body protection | | tion according to the amount and dangerous substance at the work place. | | |
| 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. Keep working clothes separately. 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 |
| рН | : | 6 |
| 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 / Upper flammability limit | : | No data available |
| Lower explosion limit / Lower flammability limit | : | No data available |
| Vapor pressure | : | No data available |
| Relative vapor density | : | No data available |
| Relative density | : | No data available |
| Density | : | 1.16 g/cm3 |



| | Revision Date: 09/04/2021 | Date of last issue: - Date of first issue: 09/04/2021 |
|--|------------------------------|--|
| | | |
| 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 | |
| Decomposition temperature | : 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 Chemical stability Possibility of hazardous reactions | No decomposition if stored and applied as directed. No decomposition if stored and applied as directed. Stable under recommended storage conditions. Hazardous decomposition products formed under fire conditions. Keep away from oxidizing agents, and acidic or alkaline products. |
|--|---|
| Conditions to avoid Incompatible materials Hazardous decomposition products | No data available No data available No decomposition if stored and applied as directed. |

SECTION 11. TOXICOLOGICAL INFORMATION

Acute toxicity

Not classified based on available information.

| Product: | |
|---------------------------|------------------------------|
| Acute oral toxicity | : Remarks: No data available |
| Acute inhalation toxicity | : Remarks: No data available |
| Acute dermal toxicity | : Remarks: No data available |
| <u>Components:</u> | |

guanidine hydrochloride:

| Acute oral toxicity : | | LD50 Oral (| Rat): 1,120 mg/kg |
|-----------------------|--|-------------|-------------------|
|-----------------------|--|-------------|-------------------|

maleic acid:



| sion | | | ision Date: 4/2021 | Date of last issue: - Date of first issue: 09/04/2021 |
|------------------------------------|-------------------------------|---------|---|--|
| Acute oral toxic | ity | : | LD50 Oral (Rat): 708 mg/kg | g |
| Acute inhalatior | n toxicity | : | (Rat): 0.72 mg/l Exposure time: 1 h | |
| Acute dermal to | oxicity | : | LD50 Dermal (Rabbit): 1,56 | 60 mg/kg |
| Skin corrosion Causes skin irri | | | | |
| Product: | | | | |
| Remarks | | : | May cause skin irritation ar | nd/or dermatitis. |
| Components: | | | | |
| maleic acid: | | | | |
| Species | | : | Rabbit | |
| Exposure time | | : | 24 h | |
| Result | | : | Mild skin irritation | |
| Serious eye da | | | on | |
| Causes serious | eye irritation. | • | | |
| Product: | | | | |
| Remarks | | : | May cause irreversible eye | damage. |
| Components: | | | | |
| maleic acid: | | | | |
| Species | | : | Rabbit | |
| Result | | : | Eye irritation | |
| Respiratory or | skin sensitiz | zatio | n | |
| Skin sensitizat | ion | | | |
| May cause an a | allergic skin re | eactio | n. | |
| Respiratory se | nsitization | | | |
| Not classified ba | | able | information. | |
| Product: | | | | |
| Remarks | | : | Causes sensitization. | |
| Germ cell muta | agenicity | | | |
| Not classified b | | able | information. | |
| Carcinogenicit | y | | | |
| Not classified be | ased on avail No ingredien | t of th | nis product present at levels | greater than or equal to 0.1% is numan carcinogen by IARC. |
| 00114 | | | - | |
| OSHA | INO COMPONE | nt of | this product present at level regulated carcinogens. | s greater than or equal to 0.1% is |



| | | | GIA |
|---|-----------|--|--|
| IAamp DN | A Mini K | it (50) | |
| ersion 0 | | Revision Date: 09/04/2021 | Date of last issue: - Date of first issue: 09/04/2021 |
| NTP | | lient of this product pres as a known or anticipate | ent at levels greater than or equal to 0.1% is ed carcinogen by NTP. |
| Reproductiv Not classified | • | vailable information. | |
| STOT-single Not classified | • | vailable information. | |
| <u>Components</u> | <u>s:</u> | | |
| maleic acid: Routes of exp Assessment | oosure | : Inhalation : May cause res | piratory irritation. |
| STOT-repeat | • | e vailable information. | |
| Aspiration to Not classified | • | vailable information. | |
| Further info | mation | | |
| Product: Remarks | | : No data availal | ble |

Ecotoxicity

| <u>Product:</u> Toxicity to fish | : | Remarks: No data available |
|---|---|---|
| Toxicity to algae/aquatic plants | : | Remarks: No data available |
| Toxicity to microorganisms | : | Remarks: No data available |
| <u>Components:</u> | | |
| maleic acid: Toxicity to fish | : | LC50 (Pimephales promelas (fathead minnow)): 5 mg/l Exposure time: 96 h |
| | | LC0 (Lepomis macrochirus (Bluegill sunfish)): 300 mg/l Exposure time: 96 h |
| Toxicity to daphnia and other aquatic invertebrates | : | EC100 (Daphnia magna (Water flea)): 160 mg/l Exposure time: 48 h |
| | | EC50 (Daphnia magna (Water flea)): 160 mg/l Exposure time: 48 h |



| ersion 0 | - | ision Date:)4/2021 | Date of last issue: - Date of first issue: 09/04/2021 |
|--|-------|---|---|
| | | EC100 (Daphnia m Exposure time: 24 | agna (Water flea)): 200 mg/l h |
| Toxicity to algae/aquatic plants | : | EC50 (Desmodesr Exposure time: 72 | nus subspicatus (green algae)): 41 mg/l h |
| Persistence and degradab | ility | | |
| Components: | | | |
| guanidine hydrochloride: Biodegradability | : | | st Guideline 301C g to the results of tests of biodegradability eadily biodegradable. |
| Bioaccumulative potential | | | |
| Product: Bioaccumulation | : | Remarks: No data | available |
| Components: | | | |
| guanidine hydrochloride: Partition coefficient: n- octanol/water | : | log Pow: ca1.7 (6 | 68 °F / 20 °C) |
| Mobility in soil No data available | | | |
| Other adverse effects | | | |
| Product: | | | |
| Ozone-Depletion Potential | : | Protection of Strato Substances Remarks: This pro- manufactured with | R Protection of Environment; Part 82 spheric Ozone - CAA Section 602 Class duct neither contains, nor was a Class I or Class II ODS as defined by t Section 602 (40 CFR 82, Subpt. A, App.A |
| Additional ecological information | : | 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 |
|------------------------|---|--|
| Contaminated packaging | : | national regulations. Dispose of as unused product. Do not re-use empty containers. |



Version 1.0 Revision Date: 09/04/2021

Date of last issue: -Date of first issue: 09/04/2021

SECTION 14. TRANSPORT INFORMATION

International Regulations

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

Not applicable for product as supplied.

Domestic regulation

49 CFR

Not regulated as a dangerous good

SECTION 15. REGULATORY INFORMATION

CERCLA Reportable Quantity

| Components | CAS-No. | Component RQ | Calculated product RQ |
|----------------|-----------|--------------|-----------------------|
| | | (lbs) | (lbs) |
| kaustiskā soda | 1310-73-2 | 1000 | * |

*: Calculated RQ exceeds reasonably attainable upper limit.

SARA 304 Extremely Hazardous Substances Reportable Quantity

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

SARA 302 Extremely Hazardous Substances Threshold Planning Quantity

This material does not contain any components with a section 302 EHS TPQ.

| SARA 311/312 Hazards | : | Respiratory or skin sensitization Skin corrosion or irritation Serious eye damage or eye irritation |
|----------------------|---|---|
| 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. |

Clean Air Act

This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B).

This product does not contain any hazardous air pollutants (HAP), as defined by the U.S. Clean Air Act Section 112 (40 CFR 61).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 112(r) for Accidental Release Prevention (40 CFR 68.130, Subpart F).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 111 SOCMI Intermediate or Final VOC's (40 CFR 60.489).

Clean Water Act

The following Hazardous Substances are listed under the U.S. CleanWater Act, Section 311, Table 116.4A:



| Version 1.0 | Revision Date: 09/04/2021 | Date of last issue: - Date of first issue: 09/04/2021 | | |
|-----------------------|---|--|--|--|
| maleic a | acid 110-16-7 | >= 0.1 - < 1 % | | |
| kaustisk | | >= 0.1 - < 1 % | | |
| | | | | |
| 0 | ardous Chemicals are listed under | the U.S. CleanWater Act, Section 311, Table | | |
| 117.3: | | | | |
| maleic a | acid 110-16-7 | >= 0.1 - < 1 % | | |
| kaustisk | (ā soda 1310-73-2 | >= 0.1 - < 1 % | | |
| This product does 307 | not contain any toxic pollutants lis | ted under the U.S. Clean Water Act Section | | |
| This product does | not contain any priority pollutants | related to the U.S. Clean Water Act | | |
| Maine Chemicals | of High Concern | | | |
| This pro | This product does not contain any chemicals that are listed as Maine Chemicals of | | | |

This product does not contain any chemicals that are listed as Maine Chemicals of High Concern.

Maine Chemicals of High Concern

Product does not contain any listed chemicals

TSCA list

No substances are subject to a Significant New Use Rule.

No substances are subject to TSCA 12(b) export notification requirements.

SECTION 16. OTHER INFORMATION

Full text of other abbreviations

AICS - Australian Inventory of Chemical Substances; AIIC - Australian Inventory of Industrial Chemicals; ASTM - American Society for the Testing of Materials; bw - Body weight; CERCLA -Comprehensive Environmental Response, Compensation, and Liability Act; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DOT - Department of Transportation; DSL - Domestic Substances List (Canada); ECx -Concentration associated with x% response; EHS - Extremely Hazardous Substance; ELx -Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonized System; GLP - Good Laboratory Practice: HMIS - Hazardous Materials Identification System: IARC - International Agency for Research on Cancer: IATA - International Air Transport Association: IBC -International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; MSHA - Mine Safety and Health Administration; n.o.s. -Not Otherwise Specified; NFPA - National Fire Protection Association; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; RCRA - Resource Conservation and Recovery Act; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RQ -



| Version | Revision Date: | Date of last issue: - |
|---------|----------------|---------------------------------|
| 1.0 | 09/04/2021 | Date of first issue: 09/04/2021 |

Reportable Quantity; SADT - Self-Accelerating Decomposition Temperature; SARA - Superfund Amendments and Reauthorization Act; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative

SDS Number : 60000001271

Revision Date : 09/04/2021

The information provided in this 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.

US / Z8



| Version | Revision Date: | Date of last issue: - |
|---------|----------------|---------------------------------|
| 1.0 | 09/04/2021 | Date of first issue: 09/04/2021 |
| | | |

SECTION 1. IDENTIFICATION

| Product name Manufacturer or supplier's of | : Buffer AW1 details |
|--|--|
| Company | : QIAGEN GmbH QIAGEN Str. 1 D-40724 Hilden |
| Telephone | : +49-(0)2103-29-0 |
| Responsible Department | : QIAGEN Inc. 19300 Germantown Road Germantown, MD 20874, USA Tel.: 800-426-8157 http://support.qiagen.com |
| E-mail addressResponsible/issuing person | : cpc@qiagen.com |
| Emergency telephone | : CHEMTREC USA & Canada 1-800-424-9300 |

Recommended use of the chemical and restrictions on use

SECTION 2. HAZARDS IDENTIFICATION

GHS classification in accordance with the OSHA Hazard Communication Standard (29 CFR 1910.1200)

| 1310.1200) | | |
|---|---|--|
| Acute toxicity (Oral) | : | Category 4 |
| Acute toxicity (Inhalation) | : | Category 4 |
| Skin irritation | : | Category 2 |
| Eye irritation | : | Category 2A |
| GHS label elements Hazard pictograms | : | <u>!</u> |
| Signal Word | : | Warning |
| Hazard Statements | : | H302 + H332 Harmful if swallowed or if inhaled. H315 Causes skin irritation. H319 Causes serious eye irritation. |



| Version 1.0 | Revision Date: 09/04/2021 | Date of last issue: - Date of first issue: 09/04/2021 |
|--------------------------|---|--|
| Precautionary Statements | Prevention: P280 Wear protecti face protection. | ve gloves/ protective clothing/ eye protection/ |
| | Response: P362 Take off conta | aminated clothing and wash before reuse. |
| | Disposal: P501 Dispose of co disposal plant. | ntents/ container to an approved waste |

Other hazards

None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

: Mixture

| Substance / Mixture | |
|---------------------|--|
|---------------------|--|

Components

| Chemical name | CAS-No. | Concentration (% w/w) | | | |
|--|---------|-----------------------|--|--|--|
| guanidine hydrochloride | 50-01-1 | >= 50 - < 70 | | | |
| Actual concentration is withheld as a trade secret | | | | | |

Actual concentration is withheld as a trade secret

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. 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. Harmful if swallowed or if inhaled. Causes skin irritation. Causes serious eye irritation. |
| 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. |



| | Revision Date: 09/04/2021 | Date of last issue: - Date of first issue: 09/04/2021 |
|--|---|---|
| Hazardous combustion products | : Carbon oxides Nitrogen oxides (NOx) | |
| Further information Special protective equipment for fire-fighters | In the event of fire and/or ex Wear self-contained breathin necessary. | plosion do not breathe fumes. ng apparatus for firefighting if |

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. |

SECTION 7. HANDLING AND STORAGE

| : | Normal measures for preventive fire protection. |
|---|---|
| : | 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. |
| : | Keep container tightly closed in a dry and well-ventilated place. |
| : | No decomposition if stored and applied as directed. |
| | |

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Ingredients with workplace control parameters

Contains no substances with occupational exposure limit values.

Personal protective equipment

Hand protection

| Material | : | Protective gloves |
|---------------------------|---|--|
| Remarks Eye protection | : | 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). Safety glasses |
| | | |



| Version 1.0 | Revision Date: 09/04/2021 | Date of last issue: - Date of first issue: 09/04/2021 |
|--------------------------|---|---|
| | problems. | ctive suit for abnormal processing |
| Skin and body protection | : Choose body protection ac | rous substance at the work place. |
| Hygiene measures | : Keep away from food and o Wash hands before breaks | drink. and at the end of workday. n, especially in confined areas. and the eyes. |

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

| Appearance | : | liquid |
|---|---|-------------------|
| Color | : | No data available |
| Odor | : | No data available |
| Odor Threshold | : | No data available |
| рН | : | No data available |
| 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 / Upper flammability limit | : | No data available |
| Lower explosion limit / Lower flammability limit | : | No data available |
| Vapor pressure | : | No data available |
| Relative vapor density | | No data available |
| Relative density | | No data available |
| Density | : | No data available |
| Solubility(ies) Water solubility | : | No data available |
| Solubility in other solvents | : | No data available |
| Partition coefficient: n- octanol/water | : | No data available |



| Version 1.0 | Revision Date: 09/04/2021 | Date of last issue: - Date of first issue: 09/04/2021 |
|---------------------------------|------------------------------|--|
| Autoignition temperature | : No data available | |
| Decomposition temperature | : 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 Chemical stability Possibility of hazardous reactions | No decomposition if stored and applied as directed. No decomposition if stored and applied as directed. Stable under recommended storage conditions. Hazardous decomposition products formed under fire conditions. Keep away from oxidizing agents, and acidic or alkaline products. |
|--|---|
| Conditions to avoid Incompatible materials Hazardous decomposition products | No data available No data available No decomposition if stored and applied as directed. |

SECTION 11. TOXICOLOGICAL INFORMATION

Acute toxicity

Harmful if swallowed or if inhaled.

Product:

| Acute oral toxicity | : | Remarks: No data available |
|---------------------------|---|----------------------------|
| Acute inhalation toxicity | : | Remarks: No data available |
| Acute dermal toxicity | : | Remarks: No data available |

Components:

| Acute oral toxicity : | : | LD50 Oral (Rat): 1,120 mg/kg |
|-----------------------|---|------------------------------|
|-----------------------|---|------------------------------|

Skin corrosion/irritation

Causes skin irritation.

Product:

| Remarks | : May irritate skin. |
|---------|----------------------|
|---------|----------------------|

Serious eye damage/eye irritation

Causes serious eye irritation.



| Version | | |
|---------|--|--|
| 1.0 | | |

Revision Date: 09/04/2021

5

Date of last issue: -Date of first issue: 09/04/2021

Product:

Remarks

May cause irreversible eye damage.

Respiratory or skin sensitization

Skin sensitization

Not classified based on available information.

Respiratory sensitization

Not classified based on available information.

Product:

Remarks : No data available

Germ cell mutagenicity

Not classified based on available information.

Carcinogenicity

Not classified based on available information.

- **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.
- **OSHA** No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens.
- **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.

Reproductive toxicity

Not classified based on available information.

STOT-single exposure

Not classified based on available information.

STOT-repeated exposure

Not classified based on available information.

Aspiration toxicity

Not classified based on available information.

Further information

Product:

Remarks

: No data available

t

÷

SECTION 12. ECOLOGICAL INFORMATION

| Ecotoxicit | y |
|------------|---|
| | |

Product:

Toxicity to fish

Remarks: No data available

Toxicity to algae/aquatic



QIAamp DNA Mini Kit (50)

| /ersion .0 | - | vision Date: 04/2021 | Date of last issue: - Date of first issue: 09/04/2021 |
|--|-------|--|--|
| plants | | Remarks: No data available | |
| Toxicity to microorganisms | : | Remarks: No data available | |
| Persistence and degradab | ility | | |
| Components: | | | |
| guanidine hydrochloride: Biodegradability | : | Method: OECD Test Guidel Remarks: According to the r this product is not readily bio | results of tests of biodegradability |
| Bioaccumulative potential | | | |
| Product: | | | |
| Bioaccumulation | : | Remarks: No data available | |
| Components: | | | |
| guanidine hydrochloride: Partition coefficient: n- octanol/water | : | log Pow: ca1.7 (68 °F / 20 |) °C) |
| Mobility in soil No data available | | | |
| Other adverse effects | | | |
| Product: | | | |
| Ozone-Depletion Potential | : | Substances Remarks: This product neith manufactured with a Class I | Ozone - CAA Section 602 Class I |
| Additional ecological information | : | 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

International Regulations

UNRTDG



Version 1.0

Revision Date: 09/04/2021

Date of last issue: -Date of first issue: 09/04/2021

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

Not applicable for product as supplied.

Domestic regulation

49 CFR

Not regulated as a dangerous good

SECTION 15. REGULATORY INFORMATION

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 302 Extremely Hazardous Substances Threshold Planning Quantity

This material does not contain any components with a section 302 EHS TPQ.

| SARA 311/312 Hazards | : | Acute toxicity (any route of exposure) Skin corrosion or irritation Serious eye damage or eye irritation |
|----------------------|---|---|
| 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. |

Clean Air Act

This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B).

This product does not contain any hazardous air pollutants (HAP), as defined by the U.S. Clean Air Act Section 112 (40 CFR 61).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 112(r) for Accidental Release Prevention (40 CFR 68.130, Subpart F).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 111 SOCMI Intermediate or Final VOC's (40 CFR 60.489).

Clean Water Act

This product does not contain any Hazardous Substances listed under the U.S. CleanWater Act, Section 311, Table 116.4A.

This product does not contain any Hazardous Chemicals listed under the U.S. CleanWater Act, Section 311, Table 117.3.

This product does not contain any toxic pollutants listed under the U.S. Clean Water Act Section 307

This product does not contain any priority pollutants related to the U.S. Clean Water Act

Maine Chemicals of High Concern

This product does not contain any chemicals that are listed as Maine Chemicals of High Concern.



Version 1.0

Revision Date: 09/04/2021

Date of last issue: -Date of first issue: 09/04/2021

Maine Chemicals of High Concern

Product does not contain any listed chemicals

TSCA list

No substances are subject to a Significant New Use Rule.

No substances are subject to TSCA 12(b) export notification requirements.

SECTION 16. OTHER INFORMATION

Full text of other abbreviations

AICS - Australian Inventory of Chemical Substances; AIIC - Australian Inventory of Industrial Chemicals; ASTM - American Society for the Testing of Materials; bw - Body weight; CERCLA -Comprehensive Environmental Response, Compensation, and Liability Act; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DOT - Department of Transportation; DSL - Domestic Substances List (Canada); ECx -Concentration associated with x% response; EHS - Extremely Hazardous Substance; ELx -Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; HMIS - Hazardous Materials Identification System; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC -International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk: IC50 - Half maximal inhibitory concentration: ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China: IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; MSHA - Mine Safety and Health Administration; n.o.s. -Not Otherwise Specified; NFPA - National Fire Protection Association; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; RCRA - Resource Conservation and Recovery Act; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RQ -Reportable Quantity; SADT - Self-Accelerating Decomposition Temperature; SARA - Superfund Amendments and Reauthorization Act; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB -Very Persistent and Very Bioaccumulative

SDS Number : 60000009757

Revision Date : 09/04/2021

The information provided in this 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



| Version | Revision Date: | Date of last issue: - |
|---------|----------------|---------------------------------|
| 1.0 | 09/04/2021 | Date of first issue: 09/04/2021 |

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.

US / Z8