

Version	
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:

DNeasy Blood & Tissue Kit (50)

Catalog number:	69504
Document ID:	80000000562
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



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SECTION 1. IDENTIFICATION

Product name Manufacturer or supplier's o	: Buffer AW2 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	: 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.



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In case of skin contact		ly with soap and plenty of water while inated clothes and shoes.
In case of eye contact	: Remove contact len Protect unharmed e	ses. ye. th plenty of water for at least 15 minutes
If swallowed	: If accidentally swalld Rinse mouth with wa	owed obtain immediate medical attention
Most important symptoms and effects, both acute and delayed	: No information avail	
Notes to physician	: No information avail	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
ECTION 6. ACCIDENTAL RELE	EASE MEASURES	
Personal precautions, protective equipment and	: Use personal protec Avoid breathing dus	tive equipment. t/ fume/ gas/ mist/ vapors/ spray.

emergency procedures		5	5		•	,	
Methods and materials for containment and cleaning up	:	Keep in suitable, closed	containers	for dispos	al.		

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.
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.



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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



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Partition coefficient: n- octanol/water Autoignition temperature	: No data available : 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.



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Respirato	ry or skin sensitization	
Skin sens i Not classifi	itization ed based on available information.	
-	ry sensitization ed based on available information.	
<u>Product:</u> Remarks	: No data available	
	mutagenicity ed based on available information.	
Carcinoge Not classifi IARC	ed based on available information.	t levels greater than or equal to 0.1% is firmed human carcinogen by IARC.
OSHA	No component of this product present on OSHA's list of regulated carcinoger	at levels greater than or equal to 0.1% ns.
NTP	No ingredient of this product present a identified as a known or anticipated ca	it levels greater than or equal to 0.1% is incinogen by NTP.
-	tive toxicity ed based on available information.	
-	gle exposure ed based on available information.	
-	eated exposure led based on available information.	
Aspiration Not classifi	toxicity ed based on available information.	
Further in	formation	

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 0	Revision Date: 09/04/2021	Date of last issue: - Date of first issue: 09/04/2021
Persistence and degra No data available	dability	
Bioaccumulative poten	tial	
Product:		
Bioaccumulation	: Remarks: No data av	vailable
Mobility in soil		
No data available		
Other adverse effects		
Product:		
Ozone-Depletion Potenti	Protection of Stratos Substances Remarks: This produ manufactured with a	Protection of Environment; Part 82 oheric Ozone - CAA Section 602 Class I ict 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
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		(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



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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.

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SECTION 1. IDENTIFICATION

Product name Manufacturer or supplier's o	: Proteinase K etails	
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	Ą
E-mail addressResponsible/issuing person	: cpc@qiagen.com	
Emergency telephone	: CHEMTREC USA & Canada 1-800-424-930	00

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.



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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	S	Move out of dangerous area. Show this material safety data sheet to the doctor in attendance.
If inhaled	a K	f unconscious, place in recovery position and seek medical advice. Keep respiratory tract clear. f symptoms persist, call a physician.
In case of skin contact	: V re	Wash off immediately with soap and plenty of water while emoving all contaminated clothes and shoes. f symptoms persist, call a physician.
In case of eye contact	: R P R	Remove contact lenses. Protect unharmed eye. Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.
If swallowed	R	f 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 Notes to physician	: N d N	May cause allergy or asthma symptoms or breathing 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.



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Hazardous combustion products	: No data available	
Further information Special protective equipment for fire-fighters		/or explosion do not breathe fumes. reathing apparatus for firefighting if
SECTION 6. ACCIDENTAL RELE	EASE MEASURES	
Personal precautions,	: Use personal protective	• •

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 Hand protection	:	In the case of vapor formation use a respirator with an approved filter.
Material	:	Protective gloves



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Remarks	its material but also on oth from one producer to the o	•
Eye protection	: Tightly fitting safety goggle Do not wear contact lense	
Skin and body protection		ccording to the amount and erous substance at the work place. ist chemicals
Hygiene measures		s and at the end of workday. on, especially in confined areas. n 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



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Solubility in other solvents	s : soluble	
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	: 7.741 mm2/s (68 °F / 2 Method: DIN 51562	20 °C)
Explosive properties	: Not applicable	

SECTION 10. STABILITY AND REACTIVITY

Oxidizing properties

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.

: No data available

SECTION 11. TOXICOLOGICAL INFORMATION

Acute toxicity

Not classified based on available information.

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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.
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Serious eye damage/eye irritation

Not classified based on available information.



		QIAGE
DNeasy Bloc	od & Tissue Kit (50)	
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Product: Remarks	: The product causes membranes.	s irritation of eyes, skin and mucous
Respiratory of	or skin sensitization	
Skin sensitiz Not classified	ation based on available information.	
Respiratory s May cause all	sensitization ergy or asthma symptoms or breathing c	difficulties if inhaled.
Product: Remarks	May cause sensitiz	ation by inhalation and skin contact.
	·	
Germ cell mu Not classified	itagenicity based on available information.	
Carcinogenic	bity	
Not classified IARC	based on available information. No ingredient of this product present a identified as probable, possible or con	at levels greater than or equal to 0.1% is firmed human carcinogen by IARC.
OSHA	No component of this product present on OSHA's list of regulated carcinoge	at levels greater than or equal to 0.1% is ns.
NTP	No ingredient of this product present a identified as a known or anticipated ca	at levels greater than or equal to 0.1% is arcinogen by NTP.
Reproductive Not classified	e toxicity based on available information.	
STOT-single Not classified	exposure based on available information.	
STOT-repeate Not classified	ed exposure based on available information.	
Aspiration to Not classified	xicity based on available information.	
Further infor	mation	
Product:		
Remarks	: No data available	
SECTION 12. ECC	DLOGICAL INFORMATION	
Ecotoxicity		
Product:		
Toxicity to fish	1 : Remarks: No data a	available

Remarks: No data available



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Toxicity to algae/aquatic plants	: Remarks: No data a	available
Toxicity to microorganisms	: Remarks: No data a	available
Persistence and degradab No data available	ility	
Bioaccumulative potential		
Product:		
Bioaccumulation	: Remarks: No data a	available
Mobility in soil		
No data available		
Other adverse effects		
Product:		
Ozone-Depletion Potential	Protection of Stratos Substances Remarks: This prod manufactured with a	Protection of Environment; Part 82 spheric Ozone - CAA Section 602 Class luct 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	:	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



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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 cher known CAS numbers that exceed the th reporting levels established by SARA T	reshold (De Minimis)

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.



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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.

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SECTION 1. IDENTIFICATION

Product name	:	Buffer ATL
Manufacturer or supplier's o	deta	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
	: Eaboratory chomicale

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.



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If inhaled	: Move to fresh air. If symptoms pers	ist, call a physician.
In case of skin contact	: Wash off immedia removing all cont	ately with soap and plenty of water while aminated clothes and shoes. ist, call a physician.
In case of eye contact	: Remove contact Protect unharmed Rinse thoroughly and consult a phy	d eye. with plenty of water for at least 15 minutes
If swallowed	Rinse mouth with	allowed obtain immediate medical attention water. ing by mouth to an unconscious person.
Most important symptoms and effects, both acute and delayed	: No information av	
Notes to physician	: No information av	/ailable.
SECTION 5. FIRE-FIGHTING ME	ASURES	
Suitable extinguishing media		g measures that are appropriate to local ad the surrounding environment.
Specific hazards during fire fighting		omposition products may be a hazard to
Hazardous combustion products	: Carbon oxides Nitrogen oxides (Sulfur oxides	NOx)

Further information	:	In the event of fire and/or explosion do not breathe fumes.
Special protective equipment for fire-fighters	:	Wear self-contained breathing apparatus for firefighting if necessary.

SECTION 6. ACCIDENTAL RELEASE MEASURES

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



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Materials to avoid Further information on storage stability	place. : Do not store near acids. : No decomposition if store	d 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



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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 solve	ents : No data available	
Partition coefficient: n- octanol/water	: No data available	
Autoignition temperature	: not determined	
Decomposition temperatu	re : 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



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Acute dermal toxicity	: Remarks: No data a	vailable
Components:		
sodium dodecyl sulphate:		
Acute oral toxicity	: LD50 Oral (Rat): 977	7 mg/kg
Acute dermal toxicity	: LD50 Dermal (Rabb	it): 580 mg/kg
Skin corrosion/irritation Not classified based on avai	lable information.	
Product:		
Remarks	: May cause skin irrita	ation and/or dermatitis.
Components:		
sodium dodecyl sulphate:		
Species	: Rabbit	
Exposure time Result	: 24 h : Irritating to skin.	
<u>Product:</u> Remarks	: The product causes membranes.	irritation of eyes, skin and mucous
Components:		
sodium dodecyl sulphate:		
Species	: Rabbit	
Result	: Risk of serious dama	
Method	: OECD Test Guidelin	ne 405
Respiratory or skin sensiti	zation	
Skin sensitization Not classified based on avai	lable information.	
Respiratory sensitization Not classified based on avai	lable information.	
<u>Product:</u> Remarks	: No data available	
Germ cell mutagenicity Not classified based on avai	lable information	
Carcinogenicity		

No ingredient of this product present at levels greater than or equal to 0.1% is

Not classified based on available information.

IARC



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i	dentified as pro	bable, possible or confi	rmed human 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 to Not classified ba	-	e information.		
STOT-single ex Not classified ba	-	e information.		
<u>Components:</u>				
sodium dodecy Routes of expos Assessment	-	Inhalation May cause respirator	ry irritation.	
STOT-repeated Not classified ba	-	e information.		
Aspiration toxic Not classified ba	•	e information.		
Further informa	tion			
<u>Product:</u> Remarks	:	No data available		
SECTION 12. ECOLO	OGICAL INFOR	MATION		
Ecotoxicity				
<u>Product:</u> Toxicity to fish	:	Remarks: No data av	vailable	
Toxicity to algae, plants	/aquatic :	Remarks: No data av	vailable	
Toxicity to micro	organisms :	Remarks: No data av	vailable	
Components:				
sodium dodecy Toxicity to fish	I sulphate:	NOEC (Oncorhynchu Exposure time: 96 h	us mykiss (rainbow trout)): 19.5 mg/l	
		LC50 (Oncorhynchus Exposure time: 96 h	s mykiss (rainbow trout)): 3.6 mg/l	
Toxicity to algae	/aquatic :	(Pseudokirchneriella	a subcapitata (green algae)): 2.68 mg/l	



DNeasy Blood & Tissue Kit (50) Version **Revision Date:** Date of last issue: -1.0 09/04/2021 Date of first issue: 09/04/2021 Exposure time: 150 h plants Test Type: Growth inhibition Persistence and degradability No data available **Bioaccumulative potential** Product: Bioaccumulation Remarks: No data available 5 **Components:** sodium dodecyl sulphate: Partition coefficient: n-: log Pow: 1.6 octanol/water Mobility in soil No data available Other adverse effects Product: **Ozone-Depletion Potential** Regulation: 40 CFR Protection of Environment; Part 82 5 Protection of Stratospheric Ozone - CAA Section 602 Class I Substances Remarks: 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). Additional ecological No data available ÷ information

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



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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	: 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



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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



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specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

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SECTION 1. IDENTIFICATION

Product name Manufacturer or supplier's o	-	Buffer AE iils
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.



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In case of skin contact		ly with soap and plenty of water while inated clothes and shoes.	
In case of eye contact	: Remove contact len Protect unharmed e	Remove contact lenses. Protect unharmed eye. Rinse thoroughly with plenty of water for at least 15 minutes	
If swallowed	: If accidentally swalle Rinse mouth with wa	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 avail		
Notes to physician	: No information avail	able.	
CTION 5. FIRE-FIGHTING ME	ASURES		
Suitable extinguishing media		neasures that are appropriate to local the surrounding environment.	
Specific hazards during fire fighting	: Exposure to decomp health.	position products may be a hazard to	
Hazardous combustion products	: No hazardous comb	oustion products are known	
Further information Special protective equipment for fire-fighters		nd/or explosion do not breathe fumes. I breathing apparatus for firefighting if	

Personal precautions, protective equipment and emergency procedures	:	Use personal protective equipment. Avoid breathing dust/ fume/ gas/ mist/ vapors/ spray.
Methods and materials for containment and cleaning up	:	Keep in suitable, closed containers for disposal.

SECTION 7. HANDLING AND STORAGE

Advice on 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.



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SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Ingredients with workplace control parameters

Contains no substances with occupational exposure limit values.

Personal protective equipment

Hand protection

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



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Density	: 1 g/cm3	
Solubility(ies) Water solubility	: No data available	
Solubility in other solvents	: No data available	
Partition coefficient: n-	: No data available	
octanol/water 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.
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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

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SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

Product:

Toxicity to fish



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	Remarks: No data ava	ailable
Toxicity to algae/aquatic plants	: Remarks: No data ava	ailable
Toxicity to microorganisms	: Remarks: No data ava	ailable
Persistence and degradab No data available	ility	
Bioaccumulative potential		
Product: Bioaccumulation	: Remarks: No data ava	ailable
Mobility in soil		
No data available		
Other adverse effects		
Product:		
Ozone-Depletion Potential	Protection of Stratosp Substances Remarks: This produc manufactured with a C	Protection of Environment; Part 82 heric Ozone - CAA Section 602 Class et 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	: 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.



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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.



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

Recommended use	: Laboratory chemicals
	···· , · · · · ·

SECTION 2. HAZARDS IDENTIFICATION

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



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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 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.



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Specific hazards during fire fighting	:	Exposure to decomposition products may be a hazard to health.	
Hazardous combustion products	:	Carbon oxides Nitrogen oxides (NOx)	
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 RELE	ASE	MEASURES	
Personal precautions, protective equipment and emergency procedures	:	Use personal protective Avoid breathing dust/ fu	equipment. me/ gas/ mist/ vapors/ spray.
Environmental precautions	:	Prevent product from er Prevent further leakage	ntering drains. 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 ST	ORA	GE	
Advice on protection against fire and explosion	:	Normal measures for pr	eventive 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



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Remarks	its material but also o from one producer to given by the producer	ropriate glove does not only depend on on other quality features and is different the other. Take note of the information r concerning permeability and break special workplace conditions uration of contact).
Eye protection	 Safety glasses Wear face-shield and protective suit for abnormal proce problems. Ensure that eyewash stations and safety showers are c to the workstation location. 	
Skin and body protection		
Hygiene measures	: Keep away from food Wash hands before b	l and drink. preaks and at the end of workday. ntilation, especially in confined areas. s separately. e skin and the eyes.

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



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Solubility/ico)		
Solubility(ies) Water solubility	: No data available	
Solubility in other solvents	s : No data available	
Partition coefficient: n- octanol/water	: No data available	
Autoignition temperature	: not determined	
Decomposition temperature	: No data available	
Viscosity	. No doto ovoilable	
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
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maleic acid:



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Acute oral toxicity	<i>,</i> :	LD50 Oral (Rat):	708 mg/kg
Acute inhalation t	oxicity :	(Rat): 0.72 mg/l Exposure time: 7	
Acute dermal tox	icity :	LD50 Dermal (R	abbit): 1,560 mg/kg
Skin corrosion/i Causes skin irrita			
Product:			
Remarks	:	May cause skin	irritation and/or dermatitis.
Components:			
maleic acid:			
Species	:	Rabbit	
Exposure time	:	24 h	
Result	:	Mild skin irritatio	n
Serious eye dan		ion	
Causes serious e	eye irritation.		
Product:			
Remarks	:	May cause irreve	ersible eye damage.
Components:			
maleic acid:			
Species	:	Rabbit	
Result	:	Eye irritation	
Respiratory or s	kin sensitizatio	on	
Skin sensitizatio	on		
May cause an all	ergic skin reacti	on.	
Respiratory sen	sitization		
Not classified bas		information.	
Product:			
Remarks	:	Causes sensitiza	ation.
Germ cell mutag	genicity		
Not classified bas	sed on available	information.	
Carcinogenicity			
	lo ingredient of	this product prese	nt at levels greater than or equal to 0.1% is confirmed human carcinogen by IARC.
OSHA N	lo component o	f this product pres	ent at levels greater than or equal to 0.1% is



			GIA
Neasy Blo	ood & Tis	sue Kit (50)	
ersion)		Revision Date: 09/04/2021	Date of last issue: - Date of first issue: 09/04/202 ⁻
NTP		lient of this product prese as a known or anticipate	ent at levels greater than or equal to 0.1% is d carcinogen by NTP.
Reproducti Not classifie	•	vailable information.	
STOT-singl Not classifie	•	vailable information.	
Component	<u>ts:</u>		
maleic acid Routes of ex Assessment	xposure	: Inhalation : May cause resp	iratory irritation.
•	ated exposur d based on a	e vailable information.	
Aspiration to Not classifie	•	vailable information.	
Further info	ormation		
<u>Product:</u> Remarks		: No data availab	le

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



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		EC100 (Daphnia n 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	oility		
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 (68 °F / 20 °C)
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 t Section 602 (40 CFR 82, Subpt. A, App./
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.



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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:



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	maleic acid	110-16-7	>= 0.1 - < 1 %
	kaustiskā soda	1310-73-2	>= 0.1 - < 1 %
The follov	ving Hazardous Che	micals are listed under the L	J.S. CleanWater Act, Section 311, Table
117.3:	U		
	maleic acid	110-16-7	>= 0.1 - < 1 %
	kaustiskā soda	1310-73-2	>= 0.1 - < 1 %
This prod 307	uct does not contain	any toxic pollutants listed u	nder the U.S. Clean Water Act Section
This prod	uct does not contain	any priority pollutants relate	ed to the U.S. Clean Water Act
Maine Ch	nemicals of High Co	oncern	
	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 -



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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.

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SECTION 1. IDENTIFICATION

Product name Manufacturer or supplier's of	•	Buffer AW1
	ucta	
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	Recommended use	: Laboratory chemicals
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SECTION 2. HAZARDS IDENTIFICATION

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

1910.1200)	
Acute toxicity (Oral)	: Category 4
Acute toxicity (Inhalation)	: Category 4
Skin irritation	: Category 2
Eye irritation	: Category 2A
GHS label elements Hazard pictograms	
Signal Word	: Warning
Hazard Statements	 H302 + H332 Harmful if swallowed or if inhaled. H315 Causes skin irritation. H319 Causes serious eye irritation.



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Precautionary Statements	Prevention: P280 Wear protective 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

None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture	:	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.
In case of skin contact	:	If symptoms persist, call a physician. 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.



ersion .0		ision Date:)4/2021	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			xplosion do not breathe fumes. ing apparatus for firefighting if
ECTION 6. ACCIDENTAL RELE	EAS	E MEASURES	
Personal precautions,	:	Use personal protective eq	

protective equipment and emergency procedures	•	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



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	problems.	d protective suit for abnormal processing h stations and safety showers are close cation.		
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 foo Wash hands before Ensure adequate ve	d and drink. breaks and at the end of workday. entilation, especially in confined areas. ne skin 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



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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:

guanidine	hydrochloride:
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Acute oral toxicity :	LD50 Oral (Rat): 1,120 mg/kg
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Skin corrosion/irritation

Causes skin irritation.

Product:

Remarks : May irritate skin.

Serious eye damage/eye irritation

Causes serious eye irritation.



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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.

- No ingredient of this product present at levels greater than or equal to 0.1% is IARC 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

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SECTION 12. ECOLOGICAL INFORMATION

Product:

Toxicity to fish

Remarks: No data available

Toxicity to algae/aquatic



DNeasy Blood & Tissue Kit (50)

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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 this product is not readily bi	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	Ozone - CAA Section 602 Class
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



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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.



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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

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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



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guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

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