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A Geno Technology, Inc. (USA) brand name

Safety Data Sheet

Cat. # 786-344

XIT[™] Genomic DNA from Buccal Cells with collection brushes

Size: 50 Samples





Safety Data Sheet according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations Date of issue: 04/22/2016 Revision date: 05/11/2017 Version: 7.1

SECTION 1: Identification		
1.1. Identification		
	: Mixture	
	: TE Buffer	
	: 036T_T041	
1.2. Recommended use and restrictions of		
No additional information available		
1.3. Supplier		
Geno Technology, Inc./ G-Biosciences		
9800 Page Avenue		
Saint Louis, 63132-1429 - United States T 800-628-7730 - F 314-991-1504		
technical@GBiosciences.com - www.GBioscience	s.com	
1.4. Emergency telephone number		
	: Chemtrec 1-800-424-9300 (USA/Canada), +1-703-527-3887 (Intl)	
	· · · · · · · · · · · · · · · · · · ·	
SECTION 2: Hazard(s) identification		
2.1. Classification of the substance or mix	(ture	
GHS US classification		
Not classified		
2.2. GHS Label elements, including preca	utionary statements	
GHS US labeling		
No labeling applicable		
2.3. Other hazards which do not result in	classification	
No additional information available		
2.4. Unknown acute toxicity (GHS US)		
Not applicable		
SECTION 3: Composition/Information	on ingredients	
3.1. Substances		
Not applicable		
3.2. Mixtures		
This mixture does not contain any substances to h	e mentioned according to the criteria of section 3.2 of HazCom 2012	
SECTION 4: First-aid measures		
4.1. Description of first aid measures	Demonstration to force all and the second state by feedback to be addition	
	: Remove person to fresh air and keep comfortable for breathing.	
	: Wash skin with plenty of water. : Rinse eyes with water as a precaution.	
-	: Call a poison center/doctor/physician if you feel unwell.	
-		
4.2. Most important symptoms and effects No additional information available	s (acute and delayed)	
4.3. Immediate medical attention and spec	cial treatment, if necessary	
Treat symptomatically.		
SECTION 5: Fire-fighting measures		
5.1. Suitable (and unsuitable) extinguishir		
Suitable extinguishing media	: Water spray. Dry powder. Foam. Carbon dioxide.	
5.2. Specific hazards arising from the che	mical	
No additional information available		
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5.3. Special protective equipment and precautions for fire-fighters				
Protectio	on during firefighting	Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.		
SECT	ON 6: Accidental release measu	ires		
6.1.	Personal precautions, protective equipment and emergency procedures			
6.1.1.	For non-emergency personnel			
Emerge	ncy procedures :	Ventilate spillage area.		
6.1.2.	For emergency responders			
Protectiv		Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".		
6.2.	Environmental precautions			
Avoid re	lease to the environment.			
6.3.	Methods and material for containment	t and cleaning up		
	•	Take up liquid spill into absorbent material.		
Other in	formation	Dispose of materials or solid residues at an authorized site.		
6.4.	Reference to other sections			
	ner information refer to section 13.			
SECT	ON 7: Handling and storage			
7.1.	Precautions for safe handling			
	5	Ensure good ventilation of the work station. Wear personal protective equipment.		
		Do not eat, drink or smoke when using this product. Always wash hands after handling the product.		
7.2.	Conditions for safe storage, including			
Storage	conditions :	Store in a well-ventilated place. Keep cool.		
0				
	ON 8: Exposure controls/persor	nal protection		
	ON 8: Exposure controls/person Control parameters	nal protection		
SECT	Control parameters	nal protection		
SECTI 8.1. TE Bu	Control parameters	nal protection		
SECTI 8.1. TE Bu	Control parameters ffer	nal protection		
SECTI 8.1. TE Bu	Control parameters ffer	nal protection		
SECTI 8.1. TE Bu No add	Control parameters ffer ditional information available Appropriate engineering controls	Ensure good ventilation of the work station.		
SECT 8.1. TE Bu No add 8.2. Appropr	Control parameters ffer ditional information available Appropriate engineering controls iate engineering controls			
SECT 8.1. TE Bu No add 8.2. Appropr	Control parameters ffer ditional information available Appropriate engineering controls iate engineering controls	Ensure good ventilation of the work station. Avoid release to the environment.		
SECTI 8.1. TE Bu No add 8.2. Appropr Environr 8.3.	Control parameters ffer ditional information available Appropriate engineering controls iate engineering controls mental exposure controls	Ensure good ventilation of the work station. Avoid release to the environment.		
SECTI 8.1. TE Bu No add 8.2. Appropr Environr 8.3. Hand	Control parameters ffer ditional information available Appropriate engineering controls iate engineering controls mental exposure controls Individual protection measures/Person protection:	Ensure good ventilation of the work station. Avoid release to the environment.		
SECT 8.1. TE Bu No add 8.2. Appropr Environr 8.3. Hand Protect	Control parameters ffer ditional information available Appropriate engineering controls iate engineering controls mental exposure controls Individual protection measures/Person protection: tive gloves	Ensure good ventilation of the work station. Avoid release to the environment.		
SECTI 8.1. TE Bu No add 8.2. Appropr Environr 8.3. Hand Protect Eye pr	Control parameters ffer ditional information available Appropriate engineering controls iate engineering controls mental exposure controls Individual protection measures/Person protection: tive gloves rotection:	Ensure good ventilation of the work station. Avoid release to the environment.		
SECT 8.1. TE Bu No add 8.2. Appropr Environr 8.3. Hand Protect Eye pr Safety	Control parameters ffer ditional information available Appropriate engineering controls iate engineering controls mental exposure controls Individual protection measures/Person protection: tive gloves rotection: glasses	Ensure good ventilation of the work station. Avoid release to the environment.		
SECT 8.1. TE Bu No add 8.2. Appropr Environr 8.3. Hand Protect Eye pr Safety Skin a	Control parameters ffer ditional information available Appropriate engineering controls iate engineering controls inental exposure controls Individual protection measures/Person protection: glasses nd body protection:	Ensure good ventilation of the work station. Avoid release to the environment.		
SECT 8.1. TE Bu No add 8.2. Appropr Environr 8.3. Hand Protect Eye pr Safety Skin a	Control parameters ffer ditional information available Appropriate engineering controls iate engineering controls mental exposure controls Individual protection measures/Person protection: tive gloves rotection: glasses	Ensure good ventilation of the work station. Avoid release to the environment.		
SECT 8.1. TE Bu No add 8.2. Appropr Environr 8.3. Hand Protect Eye pr Safety Skin a Wear s	Control parameters ffer ditional information available Appropriate engineering controls iate engineering controls inental exposure controls Individual protection measures/Person protection: glasses nd body protection:	Ensure good ventilation of the work station. Avoid release to the environment.		
SECT 8.1. TE Bu No add 8.2. Appropr Environr 8.3. Hand Protect Eye pr Safety Skin a Wear s Respin	Control parameters ffer ditional information available Appropriate engineering controls iate engineering controls iate engineering controls mental exposure controls Individual protection measures/Perso protection: glasses nd body protection: suitable protective clothing	Ensure good ventilation of the work station. Avoid release to the environment. nal protective equipment		
SECT 8.1. TE Bu No add 8.2. Appropr Environr 8.3. Hand Protec Eye pr Safety Skin a Wear s Respin In case	Control parameters ffer ditional information available Appropriate engineering controls iate engineering controls iate engineering controls mental exposure controls Individual protection measures/Person protection: glasses nd body protection: suitable protective clothing ratory protection:	Ensure good ventilation of the work station. Avoid release to the environment. nal protective equipment spiratory equipment		
SECT 8.1. TE Bu No add 8.2. Appropr Environr 8.3. Hand Protec Eye pr Safety Skin a Wear s Respin In case	Control parameters ffer ditional information available Appropriate engineering controls iate engineering controls iate engineering controls mental exposure controls Individual protection measures/Perso protection: glasses nd body protection: suitable protective clothing ratory protection: e of insufficient ventilation, wear suitable re	 Ensure good ventilation of the work station. Avoid release to the environment. nal protective equipment spiratory equipment 		
SECTI 8.1. TE Bu No add 8.2. Appropr Environr 8.3. Hand Protect Eye pr Safety Skin a Wear s Respin In case	Control parameters ffer ditional information available Appropriate engineering controls iate engineering controls iate engineering controls inental exposure controls Individual protection measures/Perso protection: tive gloves rotection: glasses nd body protection: suitable protective clothing ratory protection: e of insufficient ventilation, wear suitable re ON 9: Physical and chemical pr Information on basic physical and chemical pr	 Ensure good ventilation of the work station. Avoid release to the environment. nal protective equipment spiratory equipment 		

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Odor	: None
Odor threshold	: No data available
рН	: No data available
Melting point	: Not applicable
Freezing point	: No data available
Boiling point	: No data available
Flash point	: No data available
Relative evaporation rate (butyl acetate=1)	: No data available
Flammability (solid, gas)	: Not applicable.
Vapor pressure	: No data available
Relative vapor density at 20 °C	: No data available
Relative density	: No data available
Solubility	: No data available
Log Pow	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosion limits	: No data available
Explosive properties	: No data available
Oxidizing properties	: No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity		
10.1. Reactivity		
The product is non-reactive under normal condit	tions of use, storage and transport.	
10.2. Chemical stability		
Stable under normal conditions.		
10.3. Possibility of hazardous reactions		
No dangerous reactions known under normal co	onditions of use.	
10.4. Conditions to avoid		
None under recommended storage and handling	g conditions (see section 7).	
10.5. Incompatible materials		
No additional information available		
10.6. Hazardous decomposition products		
Hazardous decomposition products.		
SECTION 11: Toxicological information		
11.1. Information on toxicological effects	3	
Acute toxicity (oral)	: Not classified	
Acute toxicity (dermal)	: Not classified	
Acute toxicity (inhalation)	: Not classified	
Skin corrosion/irritation	: Not classified	
Serious eye damage/irritation	: Not classified	
Respiratory or skin sensitization	: Not classified	
Germ cell mutagenicity	: Not classified	
Carcinogenicity	: Not classified	
Reproductive toxicity	: Not classified	

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Specific target organ toxicity – repeated exposure	: Not classified
Aspiration hazard	: Not classified
Viscosity, kinematic	: No data available

SECT	ON 12: Ecological information	
12.1.	Toxicity	
Ecology	- general :	The product is not considered harmful to aquatic organisms or to cause long-term adverse effects in the environment.
12.2.	Persistence and degradability	
No addi	ional information available	
12.3.	Bioaccumulative potential	
No addi	ional information available	
12.4.	Mobility in soil	
No addi	ional information available	
12.5.	Other adverse effects	
No addit	ional information available	

SECTION 13: Disposal consideration	ns
13.1. Disposal methods	
Waste treatment methods	: Waste treatment methods.
SECTION 14: Transport information	
Department of Transportation (DOT)	
In accordance with DOT	
Other information	: No supplementary information available.
Transportation of Dangerous Goods	
Transport by sea	
Air transport	
SECTION 15: Regulatory information	n
15.1. US Federal regulations	
No additional information available	
15.2. International regulations	
CANADA	
EU-Regulations	

National regulations No additional information available

15.3. US State regulations

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SECTION 16: Other information

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: 05/11/2017

SDS US (GHS HazCom 2012)

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.



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SECTION 1: Identification				
1.1. Identification				
Product form	: Mixture			
Product name	: Longlife Proteinase K (5n	ng/ml)		
Product code	: 073L			
Synonyms	: proteinase K / proteinase tritirachium album serine			tritirachium album serine /
BIG No	: 37946			
1.2. Recommended use and restric	ctions on use			
Use of the substance/mixture	: Chemical substance for r Enzyme	esearch		
1.3. Supplier				
Geno Technology, Inc./ G-Biosciences 9800 Page Avenue Saint Louis, 63132-1429 - United States T 800-628-7730 - F 314-991-1504 technical@GBiosciences.com - www.GBio	osciences.com			
1.4. Emergency telephone number	r			
Emergency number	: Chemtrec 1-800-424-930	0 (USA/Canada), +1-703	3-527-3887 (Ir	ntl)
SECTION 2: Hazard(s) identifica	ation			
2.1. Classification of the substanc	e or mixture			
GHS US classification				
Not classified				
2.2. GHS Label elements, includin	a precautionary statements			
GHS US labeling	g precationary statements			
No labeling applicable				
2.3. Other hazards which do not re				
No additional information available	116)			
2.4. Unknown acute toxicity (GHS	05)			
Not applicable				
SECTION 3: Composition/Inform	nation on ingredients			
3.1. Substances				
Not applicable				
3.2. Mixtures				
Name	Common Name (Synonyms)	Product identifier	%	GHS US classification
Proteinase K, Lyophilized	proteinase K / proteinase K, Glyc, PCR-Grade SL / proteinase, tritirachium album serine /	(CAS-No.) 39450-01-6	0.05 - 0.5	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Resp. Sens. 1, H334

SECTION 4: First-aid measures	
4.1. Description of first aid measures	
First-aid measures general	: Check the vital functions. Unconscious: maintain adequate airway and respiration. Respiratory arrest: artificial respiration or oxygen. Cardiac arrest: perform resuscitation. Victim conscious with laboured breathing: half-seated. Victim in shock: on his back with legs slightly raised. Vomiting: prevent asphyxia/aspiration pneumonia. Prevent cooling by covering the victim (no warming up). Keep watching the victim. Give psychological aid. Keep the victim calm, avoid physical strain. Depending on the victim's condition: doctor/hospital.
First-aid measures after inhalation	: Remove the victim into fresh air. Respiratory problems: consult a doctor/medical service.

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First-aid measures after skin contact :	Wash immediately with lots of water. Soap may be used. Take victim to a doctor if irritation persists.
First-aid measures after eye contact	Rinse immediately with plenty of water. Remove contact lenses, if present and easy to do. Continue rinsing. Do not apply neutralizing agents. Take victim to an ophthalmologist if irritation persists.
First-aid measures after ingestion	Rinse mouth with water. Do not induce vomiting. Call Poison Information Centre (www.big.be/antigif.htm). Consult a doctor/medical service if you feel unwell. Ingestion of large quantities: immediately to hospital.
4.2. Most important symptoms and effects	(acute and delayed)
Potential Adverse human health effects and symptoms	Causes skin irritation. May cause respiratory irritation. Causes serious eye irritation.
Symptoms/effects after inhalation	AFTER INHALATION OF DUST/MIST: Irritation of the respiratory tract. Irritation of the nasal mucous membranes.
Symptoms/effects after skin contact :	Tingling/irritation of the skin.
Symptoms/effects after eye contact :	Irritation of the eye tissue.
Symptoms/effects after ingestion :	No effects known.
Chronic symptoms :	Respiratory difficulties.
4.3. Immediate medical attention and spec	ial treatment, if necessary
Treat symptomatically.	
SECTION 5: Fire-fighting measures	
5.1. Suitable (and unsuitable) extinguishin	g media
Suitable extinguishing media	Quick-acting ABC powder extinguisher. Class A foam extinguisher. Water (quick-acting extinguisher, reel). Water. Class A foam.
Unsuitable extinguishing media	Quick-acting BC powder extinguisher. Quick-acting CO2 extinguisher.
5.2. Specific hazards arising from the cher	nical
Fire hazard :	DIRECT FIRE HAZARD: Non-flammable. Most organic solids may burn if strongly heated.
Explosion hazard :	DIRECT EXPLOSION HAZARD: Most organic solids are liable to dust explosion hazard.
5.3. Special protective equipment and pre-	cautions for fire-fighters
Precautionary measures fire :	Exposure to fire/heat: keep upwind. Exposure to fire/heat: consider evacuation. Exposure to fire/heat: have neighbourhood close doors and windows.
Firefighting instructions :	Dilute toxic gases with water spray. Take account of toxic/corrosive precipitation water.
Protection during firefighting	Heat/fire exposure: compressed air/oxygen apparatus.
SECTION 6: Accidental release measu	Ires
6.1. Personal precautions, protective equi	pment and emergency procedures
6.1.1. For non-emergency personnel	
Protective equipment :	Gloves. Face-shield. Protective clothing. Dust cloud production: compressed air/oxygen apparatus. Dust cloud production: dust-tight suit.
Emergency procedures :	Mark the danger area. Prevent dust cloud formation, e.g. by wetting. No naked flames. Wash contaminated clothes.
Measures in case of dust release	In case of dust production: keep upwind. Dust production: have neighbourhood close doors and windows.
6.1.2. For emergency responders	
Protective equipment :	Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".
6.2. Environmental precautions	
Avoid release to the environment.	
6.3. Methods and material for containment	t and cleaning up
For containment :	Contain released product, pump into suitable containers. Plug the leak, cut off the supply. Knock down/dilute dust cloud with water spray.
Methods for cleaning up	Stop dust cloud by humidifying. Scoop solid spill into closing containers. Clean contaminated surfaces with an excess of water. Wash clothing and equipment after handling.
Other information :	Dispose of materials or solid residues at an authorized site.

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6.4. Reference to other sections For further information refer to section 13.

SECTION 7: Handling and storage Precautions for safe handling 7.1. : Avoid raising dust. Keep away from naked flames/heat. In finely divided state: use spark-Precautions for safe handling /explosionproof appliances. Finely divided: keep away from ignition sources/sparks. Carry operations in the open/under local exhaust/ventilation or with respiratory protection. Comply with the legal requirements. Remove contaminated clothing immediately. Clean contaminated clothing. Keep container tightly closed. Powdered form: no compressed air for pumping over. Hygiene measures Do not eat, drink or smoke when using this product. Always wash hands after handling the product. Conditions for safe storage, including any incompatibilities 7.2. Storage conditions : Store in a well-ventilated place. Keep cool. Storage temperature : < 0 °C : KEEP SUBSTANCE AWAY FROM: heat sources. ignition sources. Heat-ignition Information on mixed storage : KEEP SUBSTANCE AWAY FROM: oxidizing agents. Storage area : Keep container in a well-ventilated place. To be kept quick-frozen. Meet the legal requirements. Special rules on packaging SPECIAL REQUIREMENTS: closing, correctly labelled, meet the legal requirements. Secure fragile packagings in solid containers.

SECTION 8: Exposure controls/personal protection

Longlife Proteinase K (5mg/ml)		
ACGIH Ceiling (mg/m ³) 0.0006 mg/m ³		
Proteinase K, Lyophilized (39450-01-6)		
USA - ACGIH - Occupational Exposure Limits		
0.00006 mg/m ³		

8.2. Appropriate engineering controls	
Appropriate engineering controls	: Ensure good ventilation of the work station.
Environmental exposure controls	: Avoid release to the environment.

8.3. Individual protection measures/Personal protective equipment

Hand protection:

Gloves

Eye protection:

Face shield. In case of dust production: protective goggles

Skin and body protection:

Protective clothing. In case of dust production: head/neck protection. In case of dust production: dustproof clothing

Respiratory protection:

Dust production: dust mask with filter type P2

SECTION 9: Physical and o	chemical properties	
9.1. Information on basic ph	9.1. Information on basic physical and chemical properties	
Physical state	: Liquid	
Appearance	: Solid.	
Color	: No data available	
Odor	: No data available	
Odor threshold	: No data available	
рН	: No data available	
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	-
Melting point	: Not applicable
Freezing point	: No data available
Boiling point	: No data available
Flash point	: No data available
Relative evaporation rate (butyl acetate=1)	: No data available
Flammability (solid, gas)	: Not applicable.
Vapor pressure	: No data available
Relative vapor density at 20 °C	: Not applicable
Relative density	: No data available
Solubility	: No data available
Log Pow	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosion limits	: No data available
Explosive properties	: No data available
Oxidizing properties	: No data available
0.2 Other information	

Other information

VOC content	: 0%
SECTION 10: Stability and reactivity	
10.1. Reactivity	
The product is non-reactive under normal condition	ns of use, storage and transport.
10.2. Chemical stability	
Stable under normal conditions.	
10.3. Possibility of hazardous reactions	
No dangerous reactions known under normal cond	litions of use.
10.4. Conditions to avoid	
None under recommended storage and handling o	conditions (see section 7).
10.5. Incompatible materials	
No additional information available	
10.6. Hazardous decomposition products	
Hazardous decomposition products.	
SECTION 11: Toxicological informatic	on de la constante de la const
11.1. Information on toxicological effects	
Acute toxicity (oral)	: Not classified
Acute toxicity (dermal)	: Not classified
Acute toxicity (inhalation)	: Not classified
Skin corrosion/irritation	: Not classified
Serious eye damage/irritation	: Not classified
Respiratory or skin sensitization	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
Specific target organ toxicity – single exposure	: Not classified
Proteinase K, Lyophilized (39450-01-6)	
Specific target organ toxicity – single exposure	May cause respiratory irritation.

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Specific target organ toxicity – repeated exposure	: Not classified
Aspiration hazard	: Not classified
Viscosity, kinematic	: No data available
Potential Adverse human health effects and symptoms	: Causes skin irritation. May cause respiratory irritation. Causes serious eye irritation.
Symptoms/effects after inhalation	: AFTER INHALATION OF DUST/MIST: Irritation of the respiratory tract. Irritation of the nasal mucous membranes.
Symptoms/effects after skin contact	: Tingling/irritation of the skin.
Symptoms/effects after eye contact	: Irritation of the eye tissue.
Symptoms/effects after ingestion	: No effects known.
Chronic symptoms	: Respiratory difficulties.

CECTION 12. Ecological information	
12.1. Toxicity	
Ecology - general	: The product is not considered harmful to aquatic organisms or to cause long-term adverse effects in the environment.
Ecology - air	: Not included in the list of fluorinated greenhouse gases (Regulation (EU) No 517/2014). Not classified as dangerous for the ozone layer (Regulation (EC) No 1005/2009).
Ecology - water	: Mild water pollutant (surface water). No data available on ecotoxicity.

12.2. Persistence and degradability			
Longlife Proteinase K (5mg/ml)			
Persistence and degradability Biodegradability in water: no data available.			
Proteinase K, Lyophilized (39450-01-6)			
Persistence and degradability	Biodegradability in water: no data available.		
12.3. Bioaccumulative potential			
Longlife Proteinase K (5mg/ml)			
Bioaccumulative potential No bioaccumulation data available.			
Proteinase K, Lyophilized (39450-01-6)			
Bioaccumulative potential No bioaccumulation data available.			
12.4. Mobility in soil			
Longlife Proteinase K (5mg/ml)			
Ecology - soil No (test)data on mobility of the substance available.			
Proteinase K, Lyophilized (39450-01-6)			
Ecology - soil No (test)data on mobility of the substance available.			
12.5. Other adverse effects			

No additional information available

SECTION 13: Disposal consideratio	ns
13.1. Disposal methods	
Waste treatment methods	: Waste treatment methods.
Product/Packaging disposal recommendations	: Remove waste in accordance with local and/or national regulations. Hazardous waste shall not be mixed together with other waste. Different types of hazardous waste shall not be mixed together if this may entail a risk of pollution or create problems for the further management of the waste. Hazardous waste shall be managed responsibly. All entities that store, transport or handle hazardous waste shall take the necessary measures to prevent risks of pollution or damage to people or animals. Remove to an authorized incinerator equipped with an afterburner and a flue gas scrubber with energy recovery. Dissolve or mix with a combustible solvent.
Additional information	: Hazardous waste according to Directive 2008/98/EC, as amended by Regulation (EU) No 1357/2014 and Regulation (EU) No 2017/997.
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SECTION 14: Transport information

Department of Transportation (DOT)

In accordance with DOT

Other information

: No supplementary information available.

Transportation of Dangerous Goods

Transport by sea

Air transport

SECTION 15: Regulatory information

15.1. US Federal regulations

Proteinase K, Lyophilized (39450-01-6)

Not listed on the United States TSCA (Toxic Substances Control Act) inventory

15.2. International regulations

CANADA

EU-Regulations

National regulations

No additional information available

15.3. US State regulations

SECTION 16: Other information

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: 05/11/2017

Full text of H-phrases:

H315	Causes skin irritation	
H319	Causes serious eye irritation	
H334	May cause an allergy or asthma symptoms or breathing difficulties if inhaled	
H335 May cause respiratory irritation		
NFPA health hazard	: 2 - Materials that, under emergency conditions, can cause temporary incapacitation or residual injury.	
NFPA fire hazard	: 1 - Materials that must be preheated before ignition can occur.	
NFPA reactivity	: 0 - Material that in themselves are normally stable, even under fire conditions.	

SDS US (GHS HazCom 2012)

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.



LongLifeTM RNase Safety Data Sheet according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations Date of issue: 04/22/2016 Revision date: 05/11/2017 Version: 7.1

SECTION 1: Identification		
1.1. Identification		
	: Mixture	
Product name	: LongLife™ RNase	
Product code	: 079L	
1.2. Recommended use and restrictions of	on use	
No additional information available		
1.3. Supplier		
Geno Technology, Inc./ G-Biosciences		
9800 Page Avenue Saint Louis, 63132-1429 - United States		
T 800-628-7730 - F 314-991-1504		
technical@GBiosciences.com - www.GBioscience	<u>s.com</u>	
1.4. Emergency telephone number		
Emergency number	: Chemtrec 1-800-424-9300 (USA/Canada), +1-703-527-3887 (Intl)	
SECTION 2: Hazard(s) identification		
2.1. Classification of the substance or mix	kture	
GHS US classification		
Not classified		
2.2. GHS Label elements, including preca	utionary statements	
GHS US labeling		
No labeling applicable		
2.3. Other hazards which do not result in	classification	
No additional information available	outomouton	
2.4. Unknown acute toxicity (GHS US)		
Not applicable		
SECTION 3: Composition/Information	on ingredients	
3.1. Substances		
Not applicable		
3.2. Mixtures		
This mixture does not contain any substances to b	e mentioned according to the criteria of section 3.2 of HazCom 2012	
SECTION 4: First-aid measures		
4.1. Description of first aid measures		
	: Remove person to fresh air and keep comfortable for breathing.	
First-aid measures after skin contact	: Wash skin with plenty of water.	
First-aid measures after eye contact	: Rinse eyes with water as a precaution.	
	: Call a poison center/doctor/physician if you feel unwell.	
4.2. Most important symptoms and effects	s (acute and delayed)	
No additional information available		
4.3. Immediate medical attention and spec	rial treatment if necessary	
Treat symptomatically.	cial treatment, il necessary	
SECTION 5: Fire-fighting measures		
5.1. Suitable (and unsuitable) extinguishin		
Suitable extinguishing media	: Water spray. Dry powder. Foam. Carbon dioxide.	
5.2. Specific hazards arising from the che	mical	
No additional information available		
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5.3. Special protective equipment and precautions for fire-fighters			
Protection during firefighting :	Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.		
SECTION 6: Accidental release measu	res		
6.1. Personal precautions, protective equip	oment and emergency procedures		
6.1.1. For non-emergency personnel Emergency procedures :	Ventilate spillage area.		
6.1.2. For emergency responders Protective equipment :	Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".		
6.2. Environmental precautions			
Avoid release to the environment.			
6.3. Methods and material for containment	and cleaning up		
Methods for cleaning up :	Take up liquid spill into absorbent material.		
Other information :	Dispose of materials or solid residues at an authorized site.		
6.4. Reference to other sections			
For further information refer to section 13.			
SECTION 7: Handling and storage			
7.1. Precautions for safe handling			
Precautions for safe handling :	Ensure good ventilation of the work station. Wear personal protective equipment.		
Hygiene measures :	Do not eat, drink or smoke when using this product. Always wash hands after handling the product.		
7.2. Conditions for safe storage, including	any incompatibilities		
	Store in a well-ventilated place. Keep cool.		
Storage temperature :	-20 °C		
SECTION 8: Exposure controls/persor	al protection		
8.1. Control parameters			
LongLife™ RNase			
No additional information available			
8.2. Appropriate engineering controls			
	Ensure good ventilation of the work station.		
Environmental exposure controls :	Avoid release to the environment.		
8.3. Individual protection measures/Person	nal protective equipment		
Hand protection:			
Protective gloves			
Eye protection:			
Safety glasses			
Skin and body protection:			
Wear suitable protective clothing			
Respiratory protection:			
In case of insufficient ventilation, wear suitable respiratory equipment			
SECTION 9: Physical and chemical pro	operties		
9.1. Information on basic physical and che			

9.1.	Information on basic physical and che	mical properties
Physical		: Liquid

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Color	: No data available
Odor	: No data available
Odor threshold	: No data available
pH	: No data available
Melting point	: Not applicable
Freezing point	: No data available
Boiling point	: No data available
Flash point	: No data available
Relative evaporation rate (butyl acetate=1)	: No data available
Flammability (solid, gas)	: Not applicable.
Vapor pressure	: No data available
Relative vapor density at 20 °C	: No data available
Relative density	: No data available
Solubility	: No data available
Log Pow	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosion limits	: No data available
Explosive properties	: No data available
Oxidizing properties	: No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity	у
10.1. Reactivity	
The product is non-reactive under normal cond	itions of use, storage and transport.
10.2. Chemical stability	
Stable under normal conditions.	
10.3. Possibility of hazardous reactions	
No dangerous reactions known under normal c	onditions of use.
10.4. Conditions to avoid	
None under recommended storage and handlin	ng conditions (see section 7).
10.5. Incompatible materials	
No additional information available	
10.6. Hazardous decomposition product	ts
Hazardous decomposition products.	
SECTION 11: Toxicological informa	ition
11.1. Information on toxicological effect	S
Acute toxicity (oral)	: Not classified
Acute toxicity (dermal)	: Not classified
Acute toxicity (inhalation)	: Not classified
Skin corrosion/irritation	: Not classified
Serious eye damage/irritation	: Not classified
Respiratory or skin sensitization	: Not classified
Germ cell mutagenicity Carcinogenicity	: Not classified : Not classified
o <i>i</i>	
Reproductive toxicity	: Not classified

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Specific target organ toxicity – single exposure	: Not classified
Specific target organ toxicity – repeated exposure	: Not classified
Aspiration hazard Viscosity, kinematic	: Not classified : No data available
viscosity, kinematic	

SECT	ON 12: Ecological information	
12.1.	Toxicity	
Ecology	- general	The product is not considered harmful to aquatic organisms or to cause long-term adverse effects in the environment.
12.2.	Persistence and degradability	
No addi	tional information available	
12.3.	Bioaccumulative potential	
No addi	tional information available	
12.4.	Mobility in soil	
No addi	tional information available	
12.5.	Other adverse effects	
No addi	tional information available	

SECTION 13: Disposal considerations	5
13.1. Disposal methods	
Waste treatment methods	: Waste treatment methods.
SECTION 14: Transport information	
Department of Transportation (DOT) In accordance with DOT	
Other information	: No supplementary information available.
Transportation of Dangerous Goods	
Transport by sea	
Air transport	
SECTION 15: Regulatory information	
15.1. US Federal regulations	
No additional information available	
15.2. International regulations	
CANADA	
EU-Regulations	
National regulations No additional information available	
15.3. US State regulations	

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SECTION 16: Other information

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Revision date

: 05/11/2017

SDS US (GHS HazCom 2012)

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.



XIT™ Lysis Buffer

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SECTION 1: Identification	
1.1. Identification	
Product form	: Mixture
Product name	: XIT™ Lysis Buffer
Product code	: 136X
1.2. Recommended use and restrictions	on use
No additional information available	
1.3. Supplier	
Geno Technology, Inc./ G-Biosciences 9800 Page Avenue Saint Louis, 63132-1429 - United States T 800-628-7730 - F 314-991-1504	
technical@GBiosciences.com - www.GBioscience	<u>bes.com</u>
1.4. Emergency telephone number	
Emergency number	: Chemtrec 1-800-424-9300 (USA/Canada), +1-703-527-3887 (Intl)
SECTION 2: Hazard(s) identification	
2.1. Classification of the substance or m	lixture
GHS US classification	
Not classified	
2.2. GHS Label elements, including prec	autionary statements
GHS US labeling	
No labeling applicable	
2.3. Other hazards which do not result in	n classification
No additional information available	
2.4. Unknown acute toxicity (GHS US)	
Not applicable	
SECTION 3: Composition/Informatio	n on ingredients
3.1. Substances	
Not applicable	
3.2. Mixtures	

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Name

Common Name (Synonyms) Product identifier

GHS US classification

%

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ame	Common Name (Synonyms)	Product identifier	%	GHS US classification
odium dodecyl sulphate	Al3-00356 / akyposal SDS /	(CAS-No.) 151-21-3	2 - 5	Acute Tox. 4 (Oral), H302
	aquarex ME / aquarex methyl /			Acute Tox. 4 (Dermal), H312
	avirol 101 / avirol 118 conc / berol			Skin Irrit. 2, H315
	452 / carsonol SLS / carsonol SLS			Eye Irrit. 2, H319
	paste B / carsonol SLS special /			
	casonol SLS pasta B / conco			
	sulfate WA / conco sulfate			
	WA1200 / conco sulfate WA-1200 /			
	conco sulfate WA1245 / conco			
	sulfate WA-1295 / conco sulfate			
	WAG / conco sulfate WAN / conco			
	sulfate WAS / conco sulfate WN /			
	cycloryl 21 / cycloryl 31 / cycloryl			
	580 / cycloryl 585N / dehydag			
	sulfate GL emulsion / dehydag			
	sulphate GL emulsion / detergent			
	66 / dodecyl alcohol,hydrogen			
	sulfate, sodium salt / dodecyl			
	sodium sulfate / dodecyl sulfate			
	sodium / dodecyl sulfate sodium			
	salt / dodecylhydrogensulfate			
	sodium salt / dreft / duponal /			
	duponal WAQE / duponol /			
	duponol C / duponol ME / duponol			
	METHYL / duponol QX / duponol			
	WA / duponol WA dry / duponol			
	WAQ / duponol WAQA / duponol			
	WAQE / duponol WAQM / EMAL 0			
	/ EMAL 10 / emersal 6400 /			
	empicol LPZ / empicol LS 30 /			
	empicol LX / emulsifier n° 104 /			
	finasol osr(sub 2) / gaedinol /			
	hexamol SLS / incronol SLS / irium			
	/ jordanol SL-300 / lanette wax S /			
	lauryl sodium sulfate / lauryl sulfate			
	sodium / lauryl sulfate sodium salt /			
	maprobix neu / maprofix 563 /			
	maprofix LK / maprofix WAC /			
	maprofix wac LA / melanol CL /			
	melanol CL 30 / monododecyl			
	sodium sulfate / monogen Y 100 /			
	montopol la paste / n-dodecyl			
	sulfate sodium / neutrazyme /			
	nikkol SLS / odoripon AL 95 / orvus			
	WA paste / P and G emulsifier 104			
	/ perklankrol ESD 60 / perlandrol L			
	/ perlankrol L / product n° 161 /			
	product n° 75 / quolac EX-UB /			
	rewopol NLS 30 / richonol A /			
	richonol AF / richonol C / SDS (=			
	sodium dodecyl sulphate) / silfopon			
	WA 1 special / silfopon WA 2 /			
	sinnopon LS 100 / sinnopon LS 95			
	/ sintapon L / sipex OP / sipex SB /			
	sipex SD / sipex SP / sipex 3B /			
	sipon LS / sipon LS 100 / sipon			
	LSB / sipon PD / sipon WD / SLS			
	(= sodium lauryl sulfate) / sodium			
	dodecyl sulphate / sodium lauryl			
	sulfate / sodium lauryl sulfate, powder / sodium lauryl sulphate /			
	sodium monododecyl sulfate /			
	sodium monolauryl sulfate /			
	sodium N-dodecyl sulfate / solsol			
	needles / standapol 112 conc /			
	standapol NLS 90 / standapol WA-			
	AC / standapol WAQ / standapol			
	WAQ special / standapol WAS100			
	/ steinapol NLS 90 / stepanol ME /			
	stepanol ME DRY / stepanol ME			
	DRY AW / stepanol methyl /			
	stepanol METHYL DRY AW /			
	stepanol T28 / stepanol WA /			
	stepanol WA paste / stepanol WA-			
	100 / stepanol WAC / stepanol			
	WAQ / sterling WA paste / sterling			
	WAQ-CH / sterling waq-cosmetic /			
	sulfetal L 95 / sulfopon WA3 /			
	sulfopon WAL / sulfotex WA /			
	sulfotex WALA / sulfuric acid			
8/2019	monodENdeEyngeisserUSS)dium salt /			:
	sulfuric acid, monododecyl ester,			
	sodium salt / swascol 1P / swascol			
	3L / swascol 4L / syntapon L /			
	syntapon L pasta / tarapon K12 /			

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Full text of hazard classes and H-statements : see section 16

SECTI	ON 4: First-aid measures		
4.1.	Description of first aid measures		
	measures after inhalation	: Remove person to fresh air and keep comfortable for breathing.	
	measures after skin contact	: Wash skin with plenty of water.	
	measures after eye contact	: Rinse eyes with water as a precaution.	
	measures after ingestion	: Call a poison center/doctor/physician if you feel unwell.	
4.2.	Most important symptoms and effect		
	ional information available	s (acute and delayed)	
4.3.	Immediate medical attention and spe	cial treatment, if necessary	
I reat sy	mptomatically.		
SECTI	ON 5: Fire-fighting measures		
5.1.	Suitable (and unsuitable) extinguishi	ng media	
Suitable	extinguishing media	: Water spray. Dry powder. Foam. Carbon dioxide.	
5.2.	Specific hazards arising from the che	emical	
No addit	ional information available		
5.3.	Special protective equipment and pro	ecautions for fire-fighters	
	on during firefighting	: Do not attempt to take action without suitable protective equipment. Self-contained breathing	
1 rotootic		apparatus. Complete protective clothing.	
OF OTI			
	ON 6: Accidental release meas		
6.1.	Personal precautions, protective equ	ipment and emergency procedures	
6.1.1.	For non-emergency personnel		
Emerger	ncy procedures	: Ventilate spillage area.	
6.1.2.	For emergency responders		
Protectiv	ve equipment	: Do not attempt to take action without suitable protective equipment. For further information	
		refer to section 8: "Exposure controls/personal protection".	
6.2.	Environmental precautions		
Avoid re	lease to the environment.		
6.3.	Methods and material for containme	nt and cleaning up	
	for cleaning up	: Take up liquid spill into absorbent material.	
	formation	: Dispose of materials or solid residues at an authorized site.	
C 4	Reference to other sections	·	
6.4.			
	er information refer to section 13.		
SECTI	ON 7: Handling and storage		
7.1.	Precautions for safe handling		
Precauti	ons for safe handling	: Ensure good ventilation of the work station. Wear personal protective equipment.	
Hygiene	measures	: Do not eat, drink or smoke when using this product. Always wash hands after handling the	
		product.	
7.2.	Conditions for safe storage, includin		
Storage	conditions	: Store in a well-ventilated place. Keep cool.	
SECTI		nal protoction	
	ON 8: Exposure controls/perso		
8.1.	Control parameters		
	Lysis Buffer		
No add	litional information available		
	n dodecyl sulphate (151-21-3)		
No add	litional information available		

XIT[™] Lysis Buffer

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8.2. Appropriate engineering controls

Appropriate engineering controls Environmental exposure controls Ensure good ventilation of the work station.Avoid release to the environment.

8.3. Individual protection measures/Personal protective equipment

Hand protection:

Protective gloves

Eye protection:

Safety glasses

Skin and body protection:

Wear suitable protective clothing

Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment

SECTION 9: Physical and chemica	I properties
9.1. Information on basic physical and	d chemical properties
Physical state	: Liquid
Color	: No data available
Odor	: No data available
Odor threshold	: No data available
рН	: No data available
Melting point	: Not applicable
Freezing point	: No data available
Boiling point	: No data available
Flash point	: No data available
Relative evaporation rate (butyl acetate=1)	: No data available
Flammability (solid, gas)	: Not applicable.
Vapor pressure	: No data available
Relative vapor density at 20 °C	: No data available
Relative density	: No data available
Solubility	: No data available
Log Pow	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosion limits	: No data available
Explosive properties	: No data available
Oxidizing properties	: No data available
9.2. Other information	
No additional information available	

SECTION	10: Stability and reactivity	

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

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10.4. Conditions to avoid	
None under recommended storage and handling	conditions (see section 7).
10.5. Incompatible materials	
No additional information available	
10.6. Hazardous decomposition products	
Hazardous decomposition products.	
SECTION 11: Toxicological informati	on
11.1. Information on toxicological effects	
Acute toxicity (oral)	: Not classified
Acute toxicity (dermal)	: Not classified
Acute toxicity (inhalation)	: Not classified
sodium dodecyl sulphate (151-21-3)	
LD50 oral rat	1200 mg/kg body weight (OECD 401: Acute Oral Toxicity, Rat, Male / female, Experimental value, Oral, 14 day(s))
LD50 dermal rat	< 2000 mg/kg (Rat; Literature study)
LD50 dermal rabbit	> 2000 mg/kg body weight (Equivalent or similar to OECD 402, 24 h, Rabbit, Male / female, Read-across, Dermal, 14 day(s))
ATE US (oral)	1200 mg/kg body weight
ATE US (dermal)	1100 mg/kg body weight
Skin corrosion/irritation	: Not classified
Serious eye damage/irritation	: Not classified
Respiratory or skin sensitization	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
Specific target organ toxicity – single exposure	: Not classified
Specific target organ toxicity – repeated exposure	: Not classified
Aspiration hazard	: Not classified
Viscosity, kinematic	: No data available

SECTION 12: Ecological information	
12.1. Toxicity	
Ecology - general	: The product is not considered harmful to aquatic organisms or to cause long-term adverse effects in the environment.

2.2. Persistence and degradability	
sodium dodecyl sulphate (151-21-3)	
Persistence and degradability	Readily biodegradable in water.
2.3. Bioaccumulative potential	
sodium dodecyl sulphate (151-21-3)	
BCF fish 1	3.9 - 5.3 (72 h, Cyprinus carpio)
BCF fish 2	7.15 (Pisces, Chronic)
Log Pow	<= -2.03 (Calculated, OECD 107: Partition Coefficient (n-octanol/water): Shake Flask Method, 20 °C)
Bioaccumulative potential	Not bioaccumulative.
12.4. Mobility in soil	
sodium dodecyl sulphate (151-21-3)	
Surface tension	0.0252 N/m (23 °C, 1 g/l, EU Method A.5: Surface tension)

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sodium dodecyl sulphate (151-21-3)	
Log Koc	1.545 (log Koc, SRC PCKOCWIN v2.0, Experimental value)
Ecology - soil	Highly mobile in soil.

12.5. Other adverse effects

No additional information available

SECTION 13: Disposal consideration 13.1. Disposal methods	IS
Waste treatment methods	: Waste treatment methods.
SECTION 14: Transport information	
Department of Transportation (DOT) In accordance with DOT	
Not applicable	
Transportation of Dangerous Goods	
Not applicable	
Transport by sea	
Not applicable	
Air transport	
Not applicable	
SECTION 15: Regulatory information	
15.1. US Federal regulations	
sodium dodecyl sulphate (151-21-3) Not listed on the United States TSCA (Toxic Su	betances Control Act) inventory
· · · · · ·	
15.2. International regulations	
CANADA	
EU-Regulations	
National regulations No additional information available	
15.3. US State regulations	

SECTION 16: Other information

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

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Full text of H-phrases:

Harmful in contact with skin
Causes skin irritation
Causes serious eye irritation

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SDS US (GHS HazCom 2012)

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.



Safety Data Sheet according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations Date of issue: 09/07/2016 Revision date: 05/11/2017 Version: 7.1

SECTION 1: Identification	
1.1. Identification	
Product form	: Mixture
Product name	: XIT™ Protein Precipitation Buffer
CAS-No.	: 7647-14-5
Product code	: 139X
Formula	: NaCl
Synonyms	: sodium chloride (NaCl)
BIG No	: 21627
1.2. Recommended use and restriction	s on use
No additional information available	
1.3. Supplier	
Geno Technology, Inc./ G-Biosciences	
9800 Page Avenue Saint Louis, 63132-1429 - United States	
T 800-628-7730 - F 314-991-1504	
technical@GBiosciences.com - www.GBioscien	nces.com
1.4. Emergency telephone number	
Emergency number	: Chemtrec 1-800-424-9300 (USA/Canada), +1-703-527-3887 (Intl)
SECTION 2: Hazard(s) identification	
SECTION 2: Hazard(s) identification	
2.1. Classification of the substance or I	
2.1. Classification of the substance or I GHS US classification	
2.1. Classification of the substance or I	
2.1. Classification of the substance or I GHS US classification	mixture
2.1. Classification of the substance or I GHS US classification Not classified	mixture
 2.1. Classification of the substance or 1 GHS US classification Not classified 2.2. GHS Label elements, including press 	mixture
 2.1. Classification of the substance or in GHS US classification Not classified 2.2. GHS Label elements, including pred GHS US labeling 	mixture ecautionary statements
 2.1. Classification of the substance or in GHS US classification Not classified 2.2. GHS Label elements, including prediction GHS US labeling No labeling applicable 	mixture ecautionary statements
 2.1. Classification of the substance or in GHS US classification Not classified 2.2. GHS Label elements, including pree GHS US labeling No labeling applicable 2.3. Other hazards which do not result 	mixture ecautionary statements
 2.1. Classification of the substance or in GHS US classification Not classified 2.2. GHS Label elements, including present of GHS US labeling No labeling applicable 2.3. Other hazards which do not result No additional information available 	mixture ecautionary statements
 2.1. Classification of the substance or 1 GHS US classification Not classified 2.2. GHS Label elements, including pre GHS US labeling No labeling applicable 2.3. Other hazards which do not result No additional information available 2.4. Unknown acute toxicity (GHS US) 	mixture
 2.1. Classification of the substance or in GHS US classification Not classified 2.2. GHS Label elements, including present of GHS US labeling No labeling applicable 2.3. Other hazards which do not result No additional information available 2.4. Unknown acute toxicity (GHS US) Not applicable 	mixture
 2.1. Classification of the substance or in GHS US classification Not classified 2.2. GHS Label elements, including present of GHS US labeling No labeling applicable 2.3. Other hazards which do not result No additional information available 2.4. Unknown acute toxicity (GHS US) Not applicable SECTION 3: Composition/Information 	mixture
 2.1. Classification of the substance or 1 GHS US classification Not classified 2.2. GHS Label elements, including pre GHS US labeling No labeling applicable 2.3. Other hazards which do not result No additional information available 2.4. Unknown acute toxicity (GHS US) Not applicable SECTION 3: Composition/Information 3.1. Substances 	mixture
 2.1. Classification of the substance or in GHS US classification Not classified 2.2. GHS Label elements, including present of GHS US labeling No labeling applicable 2.3. Other hazards which do not result No additional information available 2.4. Unknown acute toxicity (GHS US) Not applicable SECTION 3: Composition/Information 3.1. Substances Not applicable 3.2. Mixtures 	mixture

SECTION 4: First-aid measures	
4.1. Description of first aid measures	
First-aid measures general	: Check the vital functions. Unconscious: maintain adequate airway and respiration. Respiratory arrest: artificial respiration or oxygen. Cardiac arrest: perform resuscitation. Victim conscious with laboured breathing: half-seated. Victim in shock: on his back with legs slightly raised. Vomiting: prevent asphyxia/aspiration pneumonia. Prevent cooling by covering the victim (no warming up). Keep watching the victim. Give psychological aid. Keep the victim calm, avoid physical strain. Depending on the victim's condition: doctor/hospital.
First-aid measures after inhalation	: Remove the victim into fresh air.
First-aid measures after skin contact	: Wash immediately with lots of water (15 minutes)/shower. Remove clothing before washing.
First-aid measures after eye contact	: Rinse immediately with plenty of water for 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Take victim to an ophthalmologist.
First-aid measures after ingestion	: Rinse mouth with water. Immediately after ingestion: give lots of water to drink.

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4.2.	Most important symptoms and effect	s (acute and delayed)
Symptor	ns/effects	: ON CONTINUOUS EXPOSURE/CONTACT: Tingling/irritation of the skin.
4.3.	Immediate medical attention and spe	cial treatment, if necessary
Treat sy	mptomatically.	
SECTI	ON 5: Fire-fighting measures	
5.1.	Suitable (and unsuitable) extinguishi	ng media
	extinguishing media	: Quick-acting ABC powder extinguisher. Quick-acting BC powder extinguisher. Quick-acting
Cultuble		class B foam extinguisher. Quick-acting CO2 extinguisher. Class B foam (alcohol-resistant). Water spray if puddle cannot expand.
Unsuitat	ble extinguishing media	: Water (quick-acting extinguisher, reel); risk of puddle expansion. Water; risk of puddle expansion.
5.2.	Specific hazards arising from the che	mical
No addit	tional information available	
5.3.	Special protective equipment and pre	acautions for fire-fighters
Protectio	on during firefighting	: Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.
SECTI	ON 6: Accidental release meas	ures
6.1.	Personal precautions, protective equ	ipment and emergency procedures
6.1.1.	For non-emergency personnel	
Protectiv	/e equipment	: Gloves. Safety glasses. Protective clothing.
Emerge	ncy procedures	: Mark the danger area.
0.4.0	For encourse and and	
6.1.2.	For emergency responders	. Do not attempt to take action without avitable protective actionment. For further information
Protectiv	ve equipment	: Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".
6.2.	Environmental precautions	
Avoid re	lease to the environment.	
6.3.	Methods and material for containmer	it and cleaning up
For cont	ainment	: Contain released product, pump into suitable containers. Plug the leak, cut off the supply.
Methods	s for cleaning up	: Liquid spill: wash down with an excess of water.
Other in	formation	: Dispose of materials or solid residues at an authorized site.
6.4.	Reference to other sections	
For furth	ner information refer to section 13.	
SECT	ON 7: Handling and storage	
7.1.	Precautions for safe handling	
	ons for safe handling	: Comply with the legal requirements. Clean contaminated clothing.
	measures	: Do not eat, drink or smoke when using this product. Always wash hands after handling the
) g.e.i.e		product.
7.2.	Conditions for safe storage, including	g any incompatibilities
Storage	conditions	: Store in a well-ventilated place. Keep cool.
Storage	area	: Meet the legal requirements.
0	rules on packaging	: SPECIAL REQUIREMENTS: correctly labelled. meet the legal requirements. Secure fragile packagings in solid containers.
Packagi	ng materials	: SUITABLE MATERIAL: polyethylene.
SECT	ON 8: Exposure controls/perso	nal protection
8.1	Control parameters	

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No additional information available

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8.2. Appropriate engineering controls

- Appropriate engineering controls
- Environmental exposure controls
- Ensure good ventilation of the work station.Avoid release to the environment.

8.3. Individual protection measures/Personal protective equipment

Hand protection:

Gloves

Eye protection:

Safety glasses

Skin and body protection:

Protective clothing

Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment

SECTION 9: Physical and chemical	properties
9.1. Information on basic physical and c	hemical properties
Physical state	: Liquid
Appearance	: Liquid.
Color	: Colourless
Odor	: No data available
Odor threshold	: No data available
рН	: 7
Melting point	: Not applicable
Freezing point	: No data available
Boiling point	: No data available
Flash point	: Not applicable
Relative evaporation rate (butyl acetate=1)	: No data available
Flammability (solid, gas)	: Not applicable.
Vapor pressure	: No data available
Relative vapor density at 20 °C	: No data available
Relative density	: 1.1
Specific gravity / density	: 1056 kg/m³
Molecular mass	: 58.44 g/mol
Solubility	: No data available
Log Pow	: -0.3
Auto-ignition temperature	: Not applicable
Decomposition temperature	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosion limits	: No data available
Explosive properties	: No data available
Oxidizing properties	: No data available
9.2. Other information	
SADT	: Not applicable
VOC content	: 0%
Other properties	: Clear. Neutral reaction.

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

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10.2. Chemical stability	
Stable under normal conditions.	
10.3. Possibility of hazardous react	ions
No dangerous reactions known under norm	nal conditions of use.
10.4. Conditions to avoid	
None under recommended storage and handling conditions (see section 7).	
10.5. Incompatible materials	
No additional information available	
10.6. Hazardous decomposition pro	ducts
Hazardous decomposition products.	
SECTION 11: Toxicological info	rmation
11.1. Information on toxicological e	ffects
Acute toxicity (oral)	: Not classified
Acute toxicity (dermal)	: Not classified
Acute toxicity (inhalation)	: Not classified
Skin corrosion/irritation	: Not classified
	pH: 7
Serious eye damage/irritation	: Not classified pH: 7
Respiratory or skin sensitization	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified

Specific target organ toxicity - single exposure	: Not classified
Specific target organ toxicity – repeated exposure	: Not classified
Aspiration hazard	: Not classified
Viscosity, kinematic	: No data available
Symptoms/effects	: ON CONTINUOUS EXPOSURE/CONTACT: Tingling/irritation of the skin.
SECTION 12: Ecological information	
12.1 Toxicity	

12.1. T	Toxicity	
Ecology - g	general	: The product is not considered harmful to aquatic organisms or to cause long-term adverse effects in the environment.
Ecology - v	water	: Slightly harmful to aquatic organisms. Not harmful to fishes. Mild water pollutant (surface water).

12.2. Persistence and degradability	
XIT [™] Protein Precipitation Buffer (7647-14-5)	
Persistence and degradability	Biodegradability in soil: not applicable.
Biochemical oxygen demand (BOD)	Not applicable
Chemical oxygen demand (COD)	Not applicable
ThOD	Not applicable
BOD (% of ThOD)	Not applicable
12.3. Bioaccumulative potential	
XIT™ Protein Precipitation Buffer (7647-14-5)	
Log Pow	-0.3
Bioaccumulative potential	Not bioaccumulative.

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12.4.	Mobility in soil	
XIT™ Protein Precipitation Buffer (7647-14-5)		
Ecolog	gy - soil	No (test)data on mobility of the components available.
12.5.	Other adverse effects	

No additional information available

SECTION 13: Disposal considerations	
13.1. Disposal methods	
Waste treatment methods	: Waste treatment methods.
Product/Packaging disposal recommendations	 Treat using the best available techniques before discharge into drains or the aquatic environment. Remove to an authorized dump (Class I). Precipitate/make insoluble. Dehydrate. Immobilize the toxic or harmful components.
Additional information	 Can be considered as non hazardous waste according to Directive 2008/98/EC, as amended by Regulation (EU) No 1357/2014 and Regulation (EU) No 2017/997.
SECTION 14: Transport information	

Department of Transportation (DOT)

In accordance with DOT

Not applicable

Transportation of Dangerous Goods

Not applicable

Transport by sea

Not applicable

Air transport

Not applicable

SECTION 15: Regulatory information

15.1. US Federal regulations

No additional information available

15.2. International regulations

CANADA

EU-Regulations

National regulations No additional information available

15.3. US State regulations

SECTION 16: Other information

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: 05/11/2017

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This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.