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Trading name:	ALCIAN BLUE SOLUTION pH 2.5				
Product code:	AB2-OT-X**	Date of compilation:	26 June 2019	Version:	5

SECTION	ON 1: Identification of	the substance	e/mixture	and of the company/undertaking	
1.1	Product identifier				
	Trading name:	ALCIAN BLU	JE SOLUTI	ON pH 2.5	
	Chemical name:	-			
	Catalogue number:	AB2-OT-X*	AB2-OT-X**		
1.2	1.2 Relevant identified uses of the substance or mixture and uses advised against			nixture and uses advised against	
	Uses:		For stair	ing acid mucopolysaccharides of intestinal goblet cells.	
	Uses advised against:		Only the	identified uses are advised.	
	Reason why uses advi	sed against:	medical	duct is intended for use only as an <i>in vitro</i> diagnostic device, registered at the Agency for Medicinal Products and Devices and there is no reason to use it for other purposes.	
1.3	Details of the supplier	of the safety	data shee	t	
	Supplier:		BioGnos	t Ltd.	
	Address:		Medjugo	Medjugorska 59, Zagreb	
	Telephone number:	Telephone number:		+385 1 2409997	
	Telefax.:		+385 1 2	2404039	
	e-mail of competent p	person:	msds@b	oiognost.hr	
	National contact:		-		
1.4	Emergency telephone	number			
	National Protection and Rescue Directorate			112	
		rmation:			
	Medical information:			+385 1 2348 342	

SECTIO	ON 2. Hazards identification		SECTION 2. Hazards identification					
2.1	Classification of the substance or mixture							
2.1.1	Classification according to Reg	ulation (EC) No 12	772/2008 (CLP)					
	Hazard class and catego	ory code:	Hazard statements*:					
	Not identified as hazardous sul	ostance.	-					
2.1.2.	Additional information							
	-							
*For fu	ll text of Hazard- and EU Hazard-	statements: see SE	ECTION 16					
2.2	Label elements							
	Product identification:	ALCIAN BLUE SC	DLUTION pH 2.5					
	Identification number:	-						
	Authorization number:	-						
	Hazard pictograms:	-						



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	Signal word:	-
	Hazard statements:	-
	Precautionary statements:	-
	Supplemetal hazard information (EU):	-
2.3	Other hazards	
	-	

SECTION 3. Co.	ECTION 3. Composition/information on ingredients						
CAS/ EC/ Index number	REACH Registration No	Weight % content (or range)	Identification name	Classification according to Regulation (EC) No 1272/2008 (CLP)			
64-19-7/ 200-580-7/ 607-002-00-6	-	≤ 3%	Acetic acid, 99.5%	Flam. Liq. 3; H226 Skin Corr. 1 A; H314			

SECTI	TION 4. First aid measures				
4.1	Description of first aid measures				
	General notes:	If the suggested first aid measures do not prove sufficient, seek medical attention.			
	Following inhalation:	Carry the afflicted person out of the contaminated area into a well-ventilated area or out for fresh air. In case of difficult breathing, provide the afflicted person with oxygen.			
	Following skin contact:	Remove contaminated clothing. Immediately wash with plenty of water for at least 20 minutes. Seek medical assistance if the symptoms of irritation remain.			
	Following eye contact:	Rinse out with plenty of water with the eyelid held wide open for at least 20 minutes. If the symptoms remain, immediately call in ophthalmologist.			
	Following ingestion:	Rinse the mouth thoroughly with 1-2 glasses of water. Immediately consult a physician and show the container or label. In case of swallowing large quantities, transport the afflicted person to the hospital.			
	Self-protection of the first aider:	-			
4.2	Most important symptoms and eff	fects, both acute and delayed			
	Following inhalation:	According to our findings, chemical, physical and toxicological properties of the substance have not been entirely tested.			
	Following skin contact:	According to our findings, chemical, physical and toxicological properties of the substance have not been entirely tested.			
	Following eye contact:	According to our findings, chemical, physical and toxicological properties of the substance have not been entirely tested.			



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	Following ingestion:	According to our findings, chemical, physical and toxicological properties of the substance have not been entirely tested.
4.3	Indication of any immediate	medical attention and special treatment needed
	-	

SECTIO	SECTION 5. Firefighting measures				
5.1	Extinguishing media	Extinguishing media			
	Suitable extinguishing media:	water spray, dry powder, CO ₂ or alcohol resistant foam			
	Unsuitable extinguishing media:	Water with full jet			
5.2	Special hazards arising from the sul	bstance or mixture			
	Hazardous combustion products:	no information available			
5.3	Advice for firefighters				
	Use a self-contained open-circuit co	ompressed air breathing apparatus and fireproof clothing.			
5.4	Additional information				
		Cool endangered receptacles with water spray. Collect contaminated fire fighting water separately. Do not contaminate the environment with extinguishing media.			

SECTIO	SECTION 6. Accidental release measures				
6.1	Personal precautions, protective equipment and emergency procedures				
6.1.1.	1. For non-emergency personnel				
	Protective equipment:	Use personal protective equipment (see Section 8).			
	Accident prevention methods: Evacuate members of all non-essential personnel and without protective equipment. Avoid breathing vap contact with skin and eyes. Do not smoke. Keep awa sources.				
	Emergency procedures:	Mark the area using proper signs.			
6.1.2.	For emergency responders:				
	Use protective equipment; in a (see Section 8).	case of inadequate ventilation use adequate airways protective equipment			
6.2	Environmental precautions:				
	Do not dispose of in sewage, drainage system and waterways. In case of large spillage contact National Protection and Rescue Directorate (NPRD) on 112.				
6.3 Methods and material for containment and cleaning up		tainment and cleaning up			
6.3.1.	Bunding, covering of drains; capping procedures: Sand protective barrier or barriers made of similar materials.				



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6.3.2.	Cleaning up:	Where possible, the substance can be absorbed by using absorbing material. Place the waste material in tightly closed impermeable containers. Store the substance in well ventilated storage rooms until disposal. Submit for disposal to the legal persons authorized by the Ministry of Environmental and Nature Protection. After disposal of the products, wash the area and and involved materials with water.			
6.3.3.	Other information:	Secure proper ventilation. Do not use incompatible materials (see Section 10).			
6.4	Reference to other sections				
	See Section 7 for information on safe handling.				
	See Section 8 for information on personal protection equipment.				
	See Section 13 for disposal in	formation.			

SECTIO	ON 7. Handling and storage					
7.1	Precautions for safe handling					
7.1.1.	Protection measures					
	Measures to prevent fire:		Use in well ventilated storage rooms. Keep away from sources of ignition and heat. Do not use tools that cause sparks. Do not smoke.			
	Measures to prevent aerosol and dust generation	on:	Secure proper ventilation.			
	Measures to protect the environment:	leasures to protect the environment:				
	Other measures:	Protect against electrostatic charges.				
7.1.2.	Advice on general occupational hygiene:					
	Do not eat, drink or smoke in the workspace. Thoroughly wash hands after work and before eating.					
7.2	Conditions for safe storage, including any incon	npatibilities				
	Technical measures and storage conditions:	well ventila	htly closed and upright set containers in a ated storage rooms at temperatures ranging 25 °C. Protect from heat and direct sunlight.			
	Packaging materials:	Manufactu	ırer's original packaging.			
	Requirements for storage rooms and vessels:	Keep away tightly clos	r from food and drink. Keep the containers sed.			
	Advices for storage equipment:	The storage must be made of hard material; floors must be resistant to chemicals. There must be no drathat directly leads into sewage system. Secure prope ventilation.				
	Further information on storage conditions:	and do no	ice the unused material in the storage room t use empty containers for storing other Do not store with incompatible materials on 10).			



Air

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7.3	Specific end use(s)	
	Recommendations:	-
	Industrial sector specific solutions:	-

Industrial sector specific solutions: -								
SECTION 8. Expos	ure contro	ols/perso	nal protec	tion				
8.1 Control pa	arameters							
Substance CA				cupational exposure limit alues/short term values		Biological limit valu	ıes	
				p	ppm	mg/m³		
-			-		-	-	-	
Substance name:	-	CACAL				Γ		
EC No:	-	CAS No	: -					
DNEL								
			T		ustrial			
	Route of Acute Acute				Chronic	Chronic		
exposure:	effect	effect local effect systemic		stemic		effect local	effect system	IC
Oral	-		-		-		-	
Inhalation	-		-		-		-	
Dermal		1 1 111	- 1 111					
Critical physical pa	rameters: s	solubility,	Tiammabilit		-	-		
_					sumer		al .	
Route of		cute	Acut			Chronic	Chronic	
exposure:	еттес	t local	effect sys	stemic		effect local	effect system	IC
Oral	-		-		-		-	
Inhalation Dermal	-		_		-		-	
PNEC								
Environmental prof	tection tar	not			PNEC			
•	ection tar	gei						
	Fresh water				no information available			
	Freshwater sediments				no information available			
Marine water					no information available			
Marine sediments					no information available			
Food chain						nation available		
Microorganisms in	sewage tr	eatment				nation available		
Soil (agricultural)					no information available			

no information available



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8.2	Exposure controls			
8.2.1.	Appropriate engineering controls			
	Substance/mixture related measure prevent exposure during identified		Use the product in well ventilated rooms. Use personal protective equipment. Do not eat, drink or smoke in the workspace.	
	Structural measures to prevent exposure:		In accordance with Section 7.	
	Organisational measures to preve exposure:	ent	Organization of work in order to reduce other worker's influence during work process.	
	Technical measures to prevent ex	cposure:	Secure proper workspace ventilation in order to keep concentration levels in air below permitted levels. Secure stations for rinsing eyes and showering.	
8.2.2.	Personal protection equipment			
8.2.2.1.	Eye and face protection:	Safety glasses that stick to face (EN 166) or visor in case of lower levels of concentration in air; protective gas mask that covers the entire face in case of higher levels of concentration in air.		
8.2.2.2.	Skin protection			
8.2.2.2.	Hand protection:		otective gloves have to satisfy the specification of action (EU) 2016/425 and the related standard EN 374. Glove material: nitrile rubber Glove thickness: 0.40 mm Time until perforation: > 480 min	
	Other skin protection:	footwe entire imperr	everyday work use cotton clothing (EN 340) and suitable ear, such as rubber boots (EN 20345) or shoes that cover the foot. In case of spilling hazard, use clothing made of meable material suitable for protection from liquid chemicals PVC, himex) and footwear made from the same material.	
8.2.2.3.	Respiratory protection:	with a	tive full face mask (EN 136) or half mask (EN 140) equipped filter for organic vapors, type "A" (boiling point >65°C) ng to EN 14387) used when concentration levels exceed GVI.	
8.2.2.4.	Thermal hazards:	No info	ormation available	
8.2.3.	Environmental exposure controls			
	Substance/mixture related measures to prevent exposure:	See Se	ction 6	
	Structural measures to prevent exposure:	Use mo	odern equipment.	
	Organisational measures to prevent exposure:	Adapt workpl	the work process to the required working conditions of the ace.	



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Technical measures to prevent	See Section 6
exposure:	See Section 0

Information on basic physical and	chemical properties	
	Value	Method
Physical state:	liquid	No information available
Colour:	blue	No information available
Odour:	acetic acid like	No information available
Odor threshold:	No information available	No information available
pH:	2.45 -2.55	No information available
Melting point / freezing point;	No information available	No information available
Initial boiling point and boiling range:	No information available	No information available
Flash point:	No information available	No information available
Evaporation rate:	No information available	No information available
Flammability (solid, gas):	No information available	No information available
Upper/lower flammability or explosive limits:	No information available	No information available
Vapour pressure:	No information available	No information available
Vapour density:	No information available	No information available
Relative density:	No information available	No information available
Bulk density:	No information available	No information available
Solubility(ies):	No information available	No information available
Partition coefficient: n-octanol/water (log Kow):	No information available	No information available
Auto-ignition temperature:	No information available	No information available
Decomposition temperature:	No information available	No information available
Viscosity:	No information available	No information available
Explosive properties:	No information available	No information available
Oxidising properties:	No information available	No information available

SECTION 10. Stability and reactivity	
10.1 Reactivity:	See subsections 10.3 through 10.5.



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10.2	Chemical stability:	The product is chemically stable under standard ambient conditions of storing and using (room temperature).
10.3	Possibility of hazardous reactions:	No dangerous reactions known.
10.4	Conditions to avoid:	Avoid heat, sparks, open flames and other ignition sources.
10.5	Incompatible materials:	No further relevant information available.
10.6	Hazardous decomposition products:	No dangerous decompostion products known.

11.1 Information	on toxicologi	cal effects					
Acute toxic	ity:						
Route of exposure:	Method	Species	Dose	LD ₅₀ /LC ₅₀ or ATE _{mix}	Exposure ti	me	Results
Oral:	-	-	No inf availal	formation ble	_		_
Dermal:	-	_	No inf availal	formation ble	_		_
Inhalation:	-	_	No inf availal	formation ble	_		_
Specific tar	get organ toxid	city – single exp	osure (STC	OT SE):			
	Spe	ecific effects		Target o	rgan		Note
Oral:	No information	on available	No information available			_	
Dermal:	No information	on available	١	No information a	vailable	-	
Inhalation:	No information	on available	١	No information a	vailable	-	
Aspiration I	nazard:		No informa	ntion available.			
:							
Irritation ar	nd corrosion						
	Expos	ure time	Species	Evaluation	n Method		Note
Skin corrosion/irritation:	-	-	_	-	-	-	
Serious eye damage/irritation	-	-	-	-	-	-	
Sensitizatio	n					_	
Skin sensitization:	No i	nformation ava	ilable.				
Respiratory sensitiza	ition: No i	nformation ava	ilahle				



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Sympto	ms rela	ated to the ph	ysical, chemic	al and toxicolog	gical characterist	ics		
Oral exposure:		Harmful if sw	allowed.					
Dermal exposure):	Harmful if ab	bsorbed through skin. May cause skin irritation.					
Inhalation expos	ure:	Harmful if inl	naled. May cau	ıse respiratory t	ract irritation.			
Eye exposure:	Eye exposure: May cause eye irritation.							
Repeate	ed dose	e toxicity (sub	acute, subchro	onic, chronic)				
		Dose	Exposure time	Species	Method	Evaluation	Note	
Subacute oral	No information available		No information available	No information available	No information available	No information available	-	
Subacute dermal	No information available		No information available	No information available	No information available	No information available	-	
Subacute inhalation	No information available		No information available	No information available	No information available	No information available	-	
Subchronic oral	No information available		No information available	No information available	No information available	No information available	-	
Subchronic dermal	No availa	information able	No information available	No information available	No information available	No information available	-	
Subchronic inhalation	No availa	information able	No information available	No information available	No information available	No information available	-	
Chronic oral	No availa	information able	No information available	No information available	No information available	No information available	-	
Chronic dermal	No availa	information able	No information available	No information available	No information available	No information available	-	
Chronic No information inhalation available		No information available	No information available	No information available	No information available	-		
1								
Specific	target	organ toxicit	y – repeated e	xposure (STOT	RE):	1		
			Specific effec	ets	Target o	rgan	Note	
Subacute oral		No informa	tion available		No information	n available	-	
Subacute dermal		No informa	tion available		No information	n available	-	



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11.3	General notes:						
	Other observa	tions:	No information available				
	Classification observations:		No information available				
11.2	Practical exper						
	Summary of properties:	evaluation of the CM	R Based on available data, the classif met.	ication criteria are not			
	Reproductive t	OXICITY:	Based on available data, the classification criteria are not met. Based on available data, the classification criteria are not met. Based on available data, the classification criteria are not met.				
	Germ cell muta						
	Mutagenicity i						
	Mutagenicity <i>in vitro</i> : Genotoxicity:		Based on available data, the classification criteria are not met. Based on available data, the classification criteria are not met.				
	Carcinogenicity:		Based on available data, the classification criteria are not met.				
	CMR effects (c	arcinogenicity; mutagenicity;	reproductive toxicity)				
Chroni	c inhalation	No information available	No information available	-			
	c dermal	No information available	No information available				
Chroni		No information available	No information available				
Subchr	Subchronic inhalation No information available		No information available	-			
Subchr	Subchronic dermal No information available		No information available	-			
Subchr	onic oral	No information available	No information available	· -			
Subacı	ubacute inhalation No information available		No information available	-			

SECTION 12. Ecological information									
12.1 Toxicity									
Acute (short-term) toxicity	Dose	Exposure time	Species	Method	Evaluation	Note			
Fish	LC ₅₀	96 hours	No information available	No information available	No information available	-			
Crustacea:	EC ₅₀	48 hours	No information available	No information available	No information available	-			



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Algae/aquatic plants	IC ₅₀	4 days	No information available	No information available	No information available	-
Other organisms	-	-	-	-	-	-
Chronic (long-term) toxicity	Dose	Exposure time	Species	Method	Evaluation	Note
Fish	LC ₅₀	96 hours	No information available	No information available	No information available	-
Crustacea:	EC ₅₀	48 hours	No information available	No information available	No information available	-
Algae/aquatic plants	IC ₅₀	72 hours	No information available	No information available	No information available	-
	_	_	_	_	_	_

		1		
	Degradation half-lives	Method	Evaluation	Note
Marine water	No information available	No information available	No information available	-
Fresh water	No information available	No information available	No information available	-
Air	No information available	No information available	No information available	-
Soil	No information available	No information available	No information available	-

Biodegradation

% Degradation	Time (days)	Method	Evaluation	Note
No information available				

12.3 Bioaccumulative potential

Octanol-water partition coefficient (log Kow)

Octanor-water partition coefficient (log kow)								
Value	Concentration	рН	°C	Method	Evaluation	Note		
-	-	-	-	-	-	-		



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Trading n	name:				ALC	IAN E	BLUE S	OLUTIC	N pH 2	2.5			
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В	ioconcen	tration	factor (BCF)										
Valu	ıe		Species		Ν	1ethoc	l	E۱	/aluation			Note	
No inform available	ation	No availab	inform ole	No information available			nation No inforr available						
С	Chronic ec	otoxicit	:y										
	Value		Dose		osure me	Spe	ecies	Meth	nod	Evaluatio	n	Note	
Chronic to	oxicity on	fish	LC ₅₀	information in		No inforr availa	nation ible	No inform availab	ation i	No nformatio available	n	-	
Chronic to crustacea	-		EC ₅₀	No infori availa	mation able	No inforr availa	nation ible	No inform availab	ation i	No nformatio available	n	-	
12.4 M	Nobility in	soil											
K	nown or p	oredicte	ed distributi	on in e	nvironme	ental c	ompart	ments:					
N'	lo informa	ation av	vailable										
S	urface ter	nsion:											
	Value		°C	C	oncentrat	tion		Metho	od		١	Note	
ir			ormation ailable		informat ilable	ion	No inf availal	ormation ole	1	-			
		<u> </u>											
А	dsorption	ı / deso	orption										
Transport	A	/D coef	·	lc	g Kow	Εν	/aporati	on rate	M	ethod		Note	
Soil-water	No	ir	nformation	No ir	nformatio Ible		o inform ailable	nation	No info	ormation le	-		
Water-air	No information No information No information		-										



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Soil-air	No avail	information able	No information available	No information available	No information available	-			
125	Doculto of	DDT and vDvD asse	vecamont.						
12.5		PBT and vPvB asse	essment						
	Not applic	Lable.							
12.6	Other adv	erse effects							
	No furthe	r relevant informat	ion available.						
SECTIO	N 13. Disp	osal consideration	าร						
13.1	Waste ti	reatment methods							
13.1.1.		/Packaging disposa							
	Protection	•	legal person autho	rized by the Minis	try of Environmental	and Nature			
	,								
13.1.2.	Waste c	odes/waste design	ations according to	c Law:					
	15 01 10 substan		contains residual h	azardous substanc	es or is contaminate	ed with hazardo	ous		
13.1.3.	Waste ti	reatment – relevan	t information:						
13.1.3.		mation available	t imormation.						
13.1.4.	Sewage	disposal – relevant	information:						
	Waste n	nust not be dispose	ed of into the sewa	ge system.					
	,								
13.1.5.	Other di	isposal recommend	dations:						
	Do not dispose of the product's remains into the sewage system. Submit the remains to the collectors authorized by the ministry in charge. Do not dispose of the packaging into the sewage system. Submit the packaging to the collectors authorized by the ministry in charge.								
13.1.6.	Relevan	t Community provi	sions:						
	Disposa	l must be made ac	cording to official r	egulations.					
SECTIO		ISPORT INFORMA							
	<u>.</u>	ing/shipment by ro							
UN nun	nber: per shippin		Not subject t	o transport regula	tions				



Environmentally hazardous: Special precautions for user:

Further information:

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Transport hazard	class(es):	-						
Packing group:		-						
Environmentally h	nazardous:	_						
Special precaution		_						
	rting/shipment by rail (R	ID)						
UN number:		Not subject to transport regu	lations					
UN proper shippi	ng name:	-						
Transport hazard	class(es):	-						
Packing group:		-						
Environmentally h	nazardous:	-						
Special precaution	ns for user:	-						
Inland w	aterway transport (ADN)							
UN number:		Not subject to transport regu	llations					
UN proper shippi	ng name:	-						
Transport hazard	class(es):	-						
Packing group:		-						
Environmentally h	nazardous:	-						
Special precaution	ns for user:	-						
Transpor	rting/shipment by sea (I l	MDG)						
UN number:		Not subject to transport regu	lations					
UN proper shippi	ng name:	-						
Transport hazard	class(es):	-						
Packing group:		-						
Environmentally h	nazardous:	-						
Special precaution	ns for user:	-						
•	according to Annex II and the IBC code:	-						
Transpor	rting/shipment by air (IC	AO-TI/IATA-DGR)						
UN number:		Not subject to transport regu	llations					
UN proper shippi	ng name:	-						
Transport hazard class(es):		-						
Packing group:		-						

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15.1	Safety, health and environmental regulations/legislation specific for the substance or mixture					
	EU regulations					
	Authorization and/or rest	rictions of use				
	Authorizations:	-				
	Restrictions:	-				
	Other EU regulations:	EC Regulation No. 1906/2007 and EC Regulation No. 1272/2008 of the European Parliament and the European Council; Regulation (EC) No. 1907/2006 of the European Parliament and Council on registration, evaluation, authorization and restriction of chemical substances (REACH); EC Regulation No. 2037/200 of the European Parliament and Council from 29 June 2000 on substances that damage the ozone layer; EC Regulation No. 689/2008 of the European Parliament and Council from 17 June 2008 concerning the export and import of dangerous chemicals; EC Regulation No. 850/2004 of the European Parliament and Council from 29 April 2004 about persistent organic pollutants; Directive 2008/98/EC of the European Parliament and Council of 19				
		November 2008 on waste and repealing certain Directives				
	Information according 19 guideline)	Information according 1999/13/EC about limitation of emissions of volatile organic compounds (VOC-guideline)				
	National legislation:	Chemicals Act, Regulation on classification, packaging and labeling of dangerous substances, Ordinance on occupational exposure limit values and on biological limit values, Regulation on categories, types and classification of waste with a waste catalog and list of hazardous waste, Ordinance on writing Material safety data sheet, Transport of Hazardous Substances Act				
15.2	Chemical safety assessme	ent				
	None					

SECTIO	SECTION 16. Other information				
16.1	Indication of changes:	-			
		PBT	Stable, bioaccumulative and toxic		
		vPvB	Strongly stable and strongly bioaccumulative.		
16.2	Abbreviations and acronyms:	LD ₅₀	Lethal dose, 50%		
		LC ₅₀	Lethal concentration, 50%		
		TCOJ	Specific target organ toxicity - single exposure		
16.3.	Key literature references and source of data:	-			



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Trading name:		ALCIAN BLUE SOLUT	ALCIAN BLUE SOLUTION pH 2.5				
Product code:	AB2-OT-X**	Date of compilation:	26 June 2019	Version:	5		

16.4.	Classification and procedure used to derive the classification for mixture according to Regulation (EC) 1272/2008 (CLP)				
Classifi	cation	Classification procedure			
_		-			
16.5.	Relevant H statements (num	ber and full text)			
	H: H226	Flamamble liwuid and vapour.			
	H314	Causes severe skin burns and eye damage.			
16.6.	Training advice:	-			
		** "X" in the product code marks different volumes (different packagings of the product)			
16.7.	Further information:	We are not responsible for consequences in case of failure to comply with instructions for use or improper use of the product described in this material safety data sheet.			

ANNEX: Exposure scenario resulting to chemical safety assessment
-



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Trading name:		SODIUM TETRABO	SODIUM TETRABORATE, SOLUTION			
Product code:	NTB-OT-X**	Revision date:	27 August 2019	Version:	4	

SECTI	ON 1: Identification of	the substance	e/mixture	and of the company/undertaking		
1.1	Product identifier	Product identifier				
	Trading name:	SODIUM TE	TRABORA	TRABORATE, SOLUTION		
	Chemical name:	-				
	Catalogue number:	NTB-OT-X*	*			
1.2	Relevant identified us	es of the subs	tance or m	nixture and uses advised against		
	Uses:		For use	with special staining kits.		
	Uses advised against:		Only the	e identified uses are advised.		
	Reason why uses advised against:		The product is intended for use only as an <i>in vitro</i> diagnostic medical device, registered at the Agency for Medicinal Products and Medical Devices and there is no reason to use it for other purposes.			
1.3	Details of the supplier of the safety data sheet					
	Supplier:		BioGnost Ltd.			
	Address:		Medjugorska 59, Zagreb			
	Telephone number:		+385 1 2409997			
	Telefax.:		+385 1 2	2404039		
	e-mail of competent p	person:	msds@biognost.hr			
	National contact:		-			
1.4	Emergency telephone	number				
	National Protection a	nd Rescue Dire	ectorate:	112		
	Medical information:			+385 1 2348 342		
	Other information:			-		

SECTIO	CTION 2. Hazards identification				
2.1	Classification of the substance or mixture				
2.1.1	Classification according to Regulation (EC) No 1272/2008 (CLP)				
	Hazard class and category code: Hazard statements*:				
	Flam. Liq. 2		H225		
	Eye Irrit. 2		H319		
	STOT SE 3		H336		
2.1.2.	Additional information				
	-				
*For ful	ll text of Hazard- and EU Hazard-	statements: see S	ECTION 16		
2.2	Label elements				
	Product identification:	SODIUM TETRA	BORATE, SOLUTION		
	Identification number:	-			
	Authorization number:	-			



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Trading name:		SODIUM TETRABO	ORATE, SOLUTION	<u>_</u>	
Product code:	NTB-OT-X**	Revision date:	27 August 2019	Version:	4

	Hazard pictograms:	GHS02 GHS07
	Signal word:	Danger
	Hazard statements:	H225 Highly flammable liquid and vapor.H319 Causes serious eye irritation.H336 May cause drowsiness or dizziness
	Precautionary statements:	P210 Keep away from heat/sparks/open flames/hot surfaces. Do not smoke. P280 Wear protective gloves/protective clothing/eye/protection/face protection. P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing. P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
	Supplemetal hazard information (EU):	-
2.3	Other hazards	
	-	

SECTION 3. Co	SECTION 3. Composition/information on ingredients				
CAS/ EC/ Index number	REACH Registration No	Weight % content (or range)	Identification name	Classification according to Regulation (EC) No 1272/2008 (CLP)	
64-17-5/ 200-578-6/ 603-002-00-5	-	≤ 50 %	ethanol	Flam. Liq. 2; H225	
67-63-0/ 200-661-7/ 603-117-00-0	-	≥ 20 %	propan-2-ol	Flam. Liq. 2; H225 Eye Irrit. 2; H319 STOT SE 3; H336	
1330-43-4/ 215-540-4/ 005-011-00-4	-	< 0.5 %	sodium tetraborate	Repr. 1B; H360 FD	

SECTIO	SECTION 4. First aid measures		
4.1	Description of first aid measures		
	General notes:	If the suggested first aid measures do not prove sufficient, seek medical attention.	



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Trading name:		SODIUM TETRABO	ORATE, SOLUTION	<u> </u>	
Product code:	NTB-OT-X**	Revision date:	27 August 2019	Version:	4

	Following inhalation:	Carry the afflicted person out of the contaminated area into a well-ventilated area or out for fresh air. In case of difficult breathing, provide the afflicted person with oxygen.
	Following skin contact:	Remove contaminated clothing. Immediately wash with plenty of water for at least 20 minutes. Seek medical assistance if the symptoms of irritation remain.
	Following eye contact:	Rinse out with plenty of water with the eyelid held wide open for at least 20 minutes. If the symptoms remain, immediately call in ophthalmologist.
	Following ingestion:	Do not induce vomiting. Do not insert any object into the unconscious person's mouth. Immediately consult a physician and show the container or label. In case of swallowing large quantities, transport the afflicted person to the hospital.
	Self-protection of the first aider:	-
4.2	Most important symptoms and ef	fects, both acute and delayed
	Following inhalation:	Depending on concentration and exposure time, it may lead to mucosa irritation, cough, and dyspnea.
	Following skin contact:	Defatting, dry skin.
	Following skin contact: Following eye contact:	Defatting, dry skin. Depending on concentration and exposure time, it may lead to irritation, tearing, redness and pain.
		Depending on concentration and exposure time, it may lead to
4.3	Following eye contact: Following ingestion:	Depending on concentration and exposure time, it may lead to irritation, tearing, redness and pain. Depending on concentration and exposure time, it may lead to stinging and digestive mucus damage, abdominal pain, nausea,

SECTIO	ION 5. Firefighting measures		
5.1	Extinguishing media		
	Suitable extinguishing media:	Small fire - water spray, dry powder, CO ₂ Large fire - water spray or alcohol resistant foam	
	Unsuitable extinguishing media:	Water with full jet	
5.2	Special hazards arising from the su	ubstance or mixture	
	Hazardous combustion products:	Formation of toxic gases is possible during heating or in case of fire.	
5.3	Advice for firefighters		
	Use a self-contained open-circuit of	compressed air breathing apparatus and fireproof clothing.	
5.4	Additional information		
	Collect contaminated fire fighting water separately. Do not contaminate the environment with extinguishing media.		

SECTION 6. Accidental release measures



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Trading name:		SODIUM TETRABO	ORATE, SOLUTION	<u> </u>	
Product code:	NTB-OT-X**	Revision date:	27 August 2019	Version:	4

6.1	Personal precautions, protecti	Personal precautions, protective equipment and emergency procedures	
6.1.1.	For non-emergency personne	1	
	Protective equipment:	Use personal protective equipment (see Section 8).	
	Accident prevention methods	Evacuate members of all non-essential personnel and those members without protective equipment. Avoid breathing vapors and avoid contact with skin and eyes. Do not smoke. Keep away from ignition sources.	
	Emergency procedures:	Mark the area using proper signs.	
6.1.2.	For emergency responders:		
	Use protective equipment; in (see Section 8).	case of inadequate ventilation use adequate airways protective equipment	
6.2	Environmental precautions:		
	Do not dispose of in sewage, Protection and Rescue Directo	drainage system and waterways. In case of large spillage contact National orate (NPRD) on 112.	
6.3	Methods and material for con	tainment and cleaning up	
6.3.1.	Bunding, covering of drains; capping procedures:	Sand protective barrier or barriers made of similar materials.	
6.3.2.	Cleaning up:	Where possible, the substance can be absorbed by using absorbing material. Place the waste material in tightly closed impermeable containers. Store the substance in well ventilated storage rooms until disposal. Submit for disposal to the legal persons authorized by the Ministry of Environmental and Nature Protection. After disposal of the products, wash the area and and involved materials with water.	
6.3.3.	Other information:	Secure proper ventilation. Do not use incompatible materials (see Section 10).	
6.4	Reference to other sections		
	See Section 7 for information	on safe handling.	
	See Section 8 for information on personal protection equipment.		
	See Section 13 for disposal information.		

SECTIO	SECTION 7. Handling and storage		
7.1	Precautions for safe handling		
7.1.1.	Protection measures		
	Measures to prevent fire:	Use in well ventilated storage rooms. Keep away from sources of ignition and heat. Do not use tools that cause sparks. Do not smoke.	
	Measures to prevent aerosol and dust generation:	Secure proper ventilation.	
	Measures to protect the environment:	Prevent spilling into the sewage system and waterways.	
	Other measures:	Protect against electrostatic charges.	



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Trading name:		SODIUM TETRABO	ORATE, SOLUTION	<u> </u>	
Product code:	NTB-OT-X**	Revision date:	27 August 2019	Version:	4

7.1.2.	Advice on general occupational hygiene:		
	Do not eat, drink or smoke in the workspace. Thoroughly wash hands after work and before eating.		
7.2	7.2 Conditions for safe storage, including any incompatibilities		
	Technical measures and storage conditions:	Keep in tightly closed and upright set containers in a well ventilated storage rooms at temperatures ranging from 15 to 25 °C. Protect from heat and direct sunlight.	
	Packaging materials:	Manufacturer's original packaging. Unsuitable material for receptacle: aluminium.	
	Requirements for storage rooms and vessels:	Keep away from food and drink. Keep the containers tightly closed.	
	Advices for storage equipment:	The storage must be made of hard material; floors must be resistant to chemicals. There must be no drain that directly leads into sewage system. Secure proper ventilation.	
	Further information on storage conditions:	Do not place the unused material in the storage room and do not use empty containers for storing other chemicals. Do not store with incompatible materials (see Section 10).	
7.3	Specific end use(s)		
	Recommendations:	-	
	Industrial sector specific solutions:	-	

SECTION 8. Expo	osure	contro	ols/perso	nal pı	otection					
8.1 Control	parar	ameters								
Substance			CAS No				exposure limit t term values	Biological limit values		
					pp	m	mg/m³	J		
Ethanol			64-	17-5	100	00/-	1900/-	-		
Propan-2-ol			67-	63-0	400,	/500 900/1250		-		
Substance name:		-								
EC No:		-	CAS No		-					
DNEL										
					Indu	strial				
Route of		Acu	te		Acute		Chronic	Chronic		
exposure:		effect	local	effe	ct systemic		effect local	effect systemic		
Oral	-			-		-		26 mg/kg (propan-2-ol)		
Inhalation	-			-		-		500 mg/m³ (propan-2-ol) 950 mg/m³ (ethanol)		



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Trading	name:		SODIU	M TETRAB	ORATE, SOLUTI	ON			
Product	code:	NTB-OT-X**	Revis	ion date:	27 August 20)19	Version:	4	
Dermal		-	-	-		_	ŋ/kg (propan-2- ŋ/kg (ethanol)	-ol)	
Critical pl	nysical pa	rameters: solubility,	flammability, co	orrosivity:	_				
			Co	onsumer	i				
Route of exposure		Acute effect local	Acute effect system	ic e	Chronic effect local	6	Chronic effect systemic		
Oral		-	-	-		-			
Inhalatior	า	-	-	-		114 mg	m³ (propan-2- y/m³ (ethanol)		
Dermal		-	-	-		_	g/kg (propan-2- g/kg (ethanol)	-ol)	
PNEC				•		•			
Environm	ental pro	tection target		PNEC					
Fresh wat	er			0.96 mg/l (ethanol)					
Freshwate	er sedime	ents		3.6 mg/kg (ethanol)					
Marine w	ater			0.79 mg/l (ethanol)				
Marine se	ediments			no informa	tion available				
Food cha	in			no informa	tion available				
Microorg	anisms in	sewage treatment		no informa	tion available				
Soil (agrio	cultural)			0.63 mg/kg (ethanol)					
Air				no informa	tion available				
	ŝ								
8.2	•	ure controls							
8.2.1.	Appro	priate engineering	controls	_					
		ance/mixture related nt exposure during i		Use the product in well ventilated rooms. Use personal protective equipment. Do not eat, drink or smoke in the workspace.					
	Struct expos	cural measures to pre cure:	event	In accordance with Section 7.					
		Organisational measures to prevent exposure:			Organization of work in order to reduce other worker's influence during work process.				
	Techn	iical measures to pre	event exposure:	concentrati	per workspace ver ion levels in air be rrinsing eyes and	low perm	itted levels. See		
8.2.2.	Perso	nal protection equip	ment						
8.2.2.1.	Eye and face protection: Safety levels			y glasses that stick to face (EN 166) or visor in case of lowers of concentration in air; protective gas mask that covers the face in case of higher levels of concentration in air.					



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Trading name:		SODIUM TETRAB	ORATE, SOLUTION		
Product code:	NTB-OT-X**	Revision date:	27 August 2019	Version:	4

8.2.2.2.	Skin protection	
	Hand protection:	The protective gloves have to satisfy the specification of Regulation (EU) 2016/425 and the related standard EN 374. Full contact: Glove material: butyl rubber Glove thickness: ≥ 0.50 mm Time until perforation: > 480 min Splash contact: Glove material: nitrile rubber Glove thickness: 0.4 mm Break through time: 35 min
	Other skin protection:	During everyday work use antistatic clothing (EN 13688) and suitable footwear, such as rubber boots (EN 20345) or shoes that cover the entire foot. In case of spilling hazard, use clothing made of impermeable material suitable for protection from liquid chemicals (Viton, PVC, himex) and footwear made from the same material.
8.2.2.3.	Respiratory protection:	If the concentration level exceeds the GVI values (or because of inadequate ventilation), use a filter for organic vapors, type "A" (boiling point >65°C) according to EN 14387.
8.2.2.4.	Thermal hazards:	No information available
8.2.3.	Environmental exposure controls	
	Substance/mixture related measures to prevent exposure:	See Section 6
	Structural measures to prevent exposure:	Use modern equipment.
	Organisational measures to prevent exposure:	Adapt the work process to the required working conditions of the workplace.
	Technical measures to prevent exposure:	See Section 6

SECT	SECTION 9. Physical and chemical properties								
9.1	Information on basic physical and	Information on basic physical and chemical properties							
	Value Method								
	Physical state:	liquid	No information available						
	Colour:	colourless	No information available						
	Odour:	alchohol like	No information available						
	Odor threshold:	No information available	No information available						
	рН:	No information available	No information available						
	Melting point / freezing point;	No information available	No information available						



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Trading name:		SODIUM TETRAB	ORATE, SOLUTION	<u> </u>	
Product code:	NTB-OT-X**	Revision date:	27 August 2019	Version:	4

	Initial boiling point and boiling range:	No information available	No information available
	Flash point:	25 °C	No information available
	Evaporation rate:	No information available	No information available
	Flammability (solid, gas):	No information available	No information available
	Upper/lower flammability or explosive limits:	No information available	No information available
	Vapour pressure:	No information available	No information available
	Vapour density:	No information available	No information available
	Relative density:	No information available	No information available
	Bulk density:	No information available	No information available
	Solubility(ies):	No information available	No information available
	Partition coefficient: n- octanol/water (log Kow):	No information available	No information available
	Auto-ignition temperature:	No information available	No information available
	Decomposition temperature:	No information available	No information available
	Viscosity:	No information available	No information available
	Explosive properties:	No information available	No information available
	Oxidising properties:	No information available	No information available
9.2	Other information		
	-		

SECTIO	SECTION 10. Stability and reactivity					
10.1	Reactivity:	See subsections 10.3 through 10.5.				
10.2	Chemical stability:	The product is chemically stable under standard ambient conditions of storing and using (room temperature).				
10.3	Possibility of hazardous reactions:	No dangerous reactions known.				
10.4	Conditions to avoid:	Avoid heat, sparks, open flames and other ignition sources.				
10.5	Incompatible materials:	No further relevant information available.				
10.6	Hazardous decomposition products:	Carbon monoxide.				

SECTIO	SECTION 11. Toxicological information								
11.1	Informatio	Information on toxicological effects							
	Acute toxic	Acute toxicity:							
Route of exposure: Dose LD ₅₀ /LC ₅₀ Exposure Results									



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Trading name:			SODIUM	1 TETRA	BORATE, SO	LUTION			
Product code:	NTB-O	Γ-X**	Revisio	n date:	27 Augu	August 2019 V		rsion:	4
Oral: - rat		LD ₅₀		-	-		>2,000 mg/kg (2-propanol) 060 mg/kg (ethanol)		
Dermal:	-	rabbit	LD	50	-	>2,000 mg/kg (2-propanol)		ng/kg	
Inhalation:	-	rat	LC	50	4 h			oropanol) (ethanol)	
Specific to	arget orga	n toxicity – singl	e exposure	(STOT SE	i):				
<u> </u>	3 3	Specific effect	•			n		Note	
Oral:	No info	rmation available		No in	formation avail		-		
Dermal:	No info	rmation available	e	No in	formation avail	able	-		
Inhalation:	No info	rmation availabl	e	No information available may cause dro or dizziness				iness	
Aspiration	n hazard:		No info	ormation	available.				
Irritation	and corros	ion							
1111011011		Exposure time	Spe	ecies	Evaluation	Method		Note	
Skin corrosion/irritation	_		-		-	-			
Serious eye damage/irritation	-		-		-	-	caus irrita	es serious tion	eye
Sensitizat	ion								
Skin sensitization:		No information	n available.						
Respiratory sensiti	zation:	No information	n available.						
Symptom	s related t	o the physical, c	nemical and	d toxicolo	ogical character	ristics			
Oral exposure:		nformation availa			<u> </u>				
Dermal exposure:		nformation availa							
Inhalation exposu		nformation availa							
Eye exposure:		nformation availa	ble.						
Reneated	dose toxic	city (subacute, su	ıbchronic c	hronic)					
	Dose	Fxnosu			Method	Evalua	ation	Note	



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Trading name:		SODIUM TETRAB	ORATE, SOLUTION	<u> </u>	
Product code:	NTB-OT-X**	Revision date:	27 August 2019	Version:	4

Subacute oral	No information available	No information available	No information available	No information available	No information available	-
Subacute dermal	No information available	No information available	No information available	No information available	No information available	-
Subacute inhalation	No information available	No information available	No information available	No information available	No information available	-
Subchronic oral	No information available	No information available	No information available	No information available	No information available	-
Subchronic dermal	No information available	No information available	No information available	No information available	No information available	-
Subchronic inhalation	No information available	No information available	No information available	No information available	No information available	-
Chronic oral	No information available	No information available	No information available	No information available	No information available	-
Chronic dermal	No information available	No information available	No information available	No information available	No information available	-
Chronic inhalation	No information available	No information available	No information available	No information available	No information available	-

Specific target	organ tovicity	ropostod (ovnocuro	(CTOT DE)
Specific target (ordan toxicity –	repeated (exposure	(STOLKE).

	Specific effects	Target organ	Note
Subacute oral	No information available	No information available	-
Subacute dermal	No information available	No information available	-
Subacute inhalation	No information available	No information available	-
Subchronic oral	No information available	No information available	-
Subchronic dermal	No information available	No information available	-
Subchronic inhalation	No information available	No information available	-
Chronic oral	No information available	No information available	-
Chronic dermal	No information available	No information available	-
Chronic inhalation	No information available	No information available	-

CMR effects (carcinogenicity; mutagenicity; reproductive toxicity)



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Trading name:		SODIUM TETRAB	ORATE, SOLUTION		
Product code:	NTB-OT-X**	Revision date:	27 August 2019	Version:	4

	Carcinogenicity:	Bas	ed on available data, the classification criteria are not met.			
	Mutagenicity in vitro:	Based on available data, the classification criteria are not met.				
	Genotoxicity:	Bas	ed on available data, the classification criteria are not met.			
	Mutagenicity in vivo:	Bas	ed on available data, the classification criteria are not met.			
	Germ cell mutagenicity:	Based on available data, the classification criteria are not met.				
	Reproductive toxicity:		ed on available data, the classification criteria are not met.			
	Summary of evaluation of the CN properties:		Based on available data, the classification criteria are not met.			
11.2	Practical experiences:					
	Classification observations:	No information available				
	Other observations:		No information available			
11.3	General notes:					
	-					

SECTION 12. Ecologic	SECTION 12. Ecological information						
12.1 Toxicity							
Acute (short-term) toxicity	Dose	Exposure time	Species	Method	Evaluation	Note	
Fish	LC ₅₀	96 hours	fish	No information available	100-1,000 mg/l (2-propanol)	-	
Crustacea:	EC ₅₀	48 hours	Daphnia magna	No information available	>1,000 mg/l (2-propanol)	-	
Algae/aquatic plants	IC ₅₀	4 days	algae	No information available	>1,000 mg/l (2-propanol)	-	
Other organisms	-	-	-	-	-	-	
Chronic (long-term) toxicity	Dose	Exposure time	Species	Method	Evaluation	Note	
Fish	LC ₅₀	96 hours	No information available	No information available	No information available	-	
Crustacea:	EC ₅₀	48 hours	No information available	No information available	No information available	_	



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Trading name	•			SC	DDIUM TETRAE	BORATE, SOLU	ITION			
Product code:	Ν	ITB-OT-X**		R	Revision date:	27 August	2019	Versi	ion:	4
Algae/aquatic p	lants	IC ₅₀	72 hours		No information available	No information available	No info availabl	rmation e	_	
Other organism	ıs				-	-	-		-	
)		1					i		i	
12.2 Persist	ence a	nd degradab	ility							
Abiotic	degra	dation								
:	De	gradation ha	lf-lives		Method	Evaluation	n	N	lote	
Marine water No information available		No information available		No information available	1 -	_				
Fresh water	Fresh water No information available			information ailable	No information available	1	-			
Air	Air No information available			information ailable	No information available	1 -	_			
Soil	No ir	nformation av	ailable/	No information available		No information available		-		
Biodeg	radatio	on				,				
% Degradation	on	Time (d	ays)		Method	Evaluation	ı	N	lote	
No information available		No inf available	ormation		information ailable	No information available		No informa available	ation	
12.3 Bioacc	umulat	tive potential								
Octano	ol-wate	er partition co	efficient (log k	(ow)					
Value	Conce	entration	рН	°C	Method	Evalua	ation		Note	
-			-	-	-	-		_		
Biocor	centra	tion factor (B	CF)							
Value		Specie	s		Method	Evaluatio	on	N	Note	
No information available		o info vailable	ormation		information iilable	No information	on	-		



13.1

Waste treatment methods

SAFETY DATA SHEET BIOGNOST® According to Regulation (EC) No. 1907/2006

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Trading name:		SODIUM TETRAB	ORATE, SOLUTION		
Product code:	NTB-OT-X**	Revision date:	27 August 2019	Version:	4

	Value	Dose	Exposure time	Species	Metho	od E	valuation	Note
Chronic	c toxicity on fis	h LC ₅₀	information	No information available	No informa available	1	ormation ailable	-
	toxicity on ea (<i>Daphnia</i>)	EC ₅₀	information	No information available	No informa available		ormation ailable	-
12.4	Mobility in s	oil						
	Known or pr	edicted distributi	on in environme	ntal compart	ments:			
	No informat	on available						
	Surface tens	on:						
	Value	°C	Concentrati	on Method		b	Note	
No information available		No information available	No information	on No information available			-	
	Adsorption /	desorption						
Transp	ort í	ocoefficient ry's constant	log Kow	Evaporati	on rate	Meth	nod	Note
Soil-wa	iter No availabl	information e	No information available	No inform available			mation	-
Water-	air No availabl	information e	No information available	No inform available	nation	No information available		-
Soil-air	No availabl	information e	No information available	No inform available	nation	No inforr available		-
	Results of PE	BT and vPvB asses	ssment					
12.5	Not applicab	le.						
12.5								
12.5 12.6	Other advers	se effects						



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Trading name:		SODIUM TETRABO	RATE, SOLUTION		
Product code:	NTB-OT-X**	Revision date:	27 August 2019	Version:	4

13.1.1.	Product/Packaging dispo	osal:		
_	Submit for disposal to the Protection.	e legal person authorized by the Ministry of Environmental and Nature		
13.1.2.	Waste codes/waste design	gnations according to Law:		
13.1.2.		residual hazardous substances or is contaminated with hazardous substances		
	r deliaging that contains	i conduit nazaradas sassarrees or is contaminated with nazaradas sassarrees		
13.1.3.	Waste treatment – releva	ant information:		
	No information available			
12.1.1				
13.1.4.	Sewage disposal – releva			
	Waste must not be dispo	osed of into the sewage system.		
13.1.5.	Other disposal recomme	ndations:		
20,2,0	Do not dispose of the prauthorized by the minist	oduct's remains into the sewage system. Submit the remains to the collectors ry in charge. Do not dispose of the packaging into the sewage system. Submit lectors authorized by the ministry in charge.		
13.1.6.	Relevant Community provisions:			
	Disposal must be made a	according to official regulations.		
SECTIO	N 14 TRANSPORT INFORM	MATION		
<u> </u>	Transporting/shipment by	road (ADR)		
UN num	nber:	1993		
UN prop	per shipping name:	Flammable liquid, n.o.s. (ethanol, isopropanol)		
Transpo	rt hazard class(es):	3		
Packing	group:	П		
Environmentally hazardous:		-		
Environr				
	precautions for user:	-		
	precautions for user: Transporting/shipment by			
	Transporting/shipment by			
Special p	Transporting/shipment by	rail (RID)		
Special p UN num UN prop	Transporting/shipment by	rail (RID) 1993		
Special p UN num UN prop	Transporting/shipment by hber: Der shipping name: ort hazard class(es):	rail (RID) 1993 Flammable liquid, n.o.s. (ethanol, isopropanol)		
UN num UN prop Transpo Packing	Transporting/shipment by hber: Der shipping name: ort hazard class(es):	rail (RID) 1993 Flammable liquid, n.o.s. (ethanol, isopropanol) 3		



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					$\overline{}$
Trading name:		SODIUM TETRABO	RATE, SOLUTION		
Product code:	NTB-OT-X**	Revision date:	27 August 2019	Version:	4

UN number:	1993
UN proper shipping name:	Flammable liquid, n.o.s. (ethanol, isopropanol)
Transport hazard class(es):	3
Packing group:	П
Environmentally hazardous:	-
Special precautions for user:	-
Transporting/shipment by sea (IN	MDG)
UN number:	1993
UN proper shipping name:	Flammable liquid, n.o.s. (ethanol, isopropanol)
Transport hazard class(es):	3
Packing group:	П
Environmentally hazardous:	-
Special precautions for user:	-
Transport in bulk according to Annex II of MARPOL 73/78 and the IBC code:	-
Transporting/shipment by air (IC	AO-TI/IATA-DGR)
UN number:	1993
UN proper shipping name:	Flammable liquid, n.o.s. (ethanol, isopropanol)
Transport hazard class(es):	3
Packing group:	П
Environmentally hazardous:	-
Special precautions for user:	-

SECTION	SECTION 15. Regulatory information					
15.1	Safety, health and envi	Safety, health and environmental regulations/legislation specific for the substance or mixture				
	EU regulations					
	Authorization and/or restrictions of use Authorizations: -					
	Restrictions:	-				



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Trading name:	name: SODIUM TETRABORATE, SOLUTION				
Product code:	NTB-OT-X**	Revision date:	27 August 2019	Version:	4

	Other EU regulations:	EC Regulation No. 1906/2007 and EC Regulation No. 1272/2008 of the European Parliament and the European Council; Regulation (EC) No. 1907/2006 of the European Parliament and Council on registration, evaluation, authorization and restriction of chemical substances (REACH); EC Regulation No. 2037/200 of the European Parliament and Council from 29 June 2000 on substances that damage the ozone layer; EC Regulation No. 689/2008 of the European Parliament and Council from 17 June 2008 concerning the export and import of dangerous chemicals; EC Regulation No. 850/2004 of the European Parliament and Council from 29 April 2004 about persistent organic pollutants; Directive 2008/98/EC of the European Parliament and Council of 19 November 2008 on waste and repealing certain Directives
	Information according 199 guideline)	99/13/EC about limitation of emissions of volatile organic compounds (VOC-
	National legislation:	Chemicals Act, Regulation on classification, packaging and labeling of dangerous substances, Ordinance on occupational exposure limit values and on biological limit values, Regulation on categories, types and classification of waste with a waste catalog and list of hazardous waste, Ordinance on writing Material safety data sheet, Transport of Hazardous Substances Act
15.2	Chemical safety assessme	nt
	None	

SECTIO	ECTION 16. Other information				
16.1	Indi	cation of changes:	-		
16.2	Λbb	previations and acronyms:	PBT vPvB LD ₅₀	Stable, bioaccumulative and toxic Strongly stable and strongly bioaccumulative. Lethal dose, 50%	
10.2	AUL	neviations and actoriyins.	LC ₅₀ TCOJ	Lethal concentration, 50% Specific target organ toxicity - single exposure	
16.3.	Key literature references and source of data:		Manufacturer's MSDS file.		
16.4.	Classification and procedure us 1272/2008 (CLP)			ve the classification for mixture according to Regulation (EC)	
Classific	cation		Classificatio	n procedure	
_	-		_		
16.5.	Rele	evant H statements (numb	er and full to	ext)	
	H:	H225	Highly flam	mable liquid and vapor.	
		H319	Causes serio	ous eye irritation.	
		H336	May cause of	drowsiness or dizziness.	



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Trading name:		SODIUM TETRABO	DRATE, SOLUTION		
Product code:	NTB-OT-X**	Revision date:	27 August 2019	Version:	4

16.6.	Training advice:	-
		** "X" in the product code marks different volumes (different packagings of the product)
16.7.	Further information:	We are not responsible for consequences in case of failure to comply with instructions for use or improper use of the product described in this material safety data sheet.

	ANNEX: Exposure scenario resulting to chemical safety assessment
ľ	-



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Trading name:			
Product code:	PK08-OT-X**	Date of compilation: 03 July 2019	Version: 3

SECTI	ON 1 IDENTIFICATION	OF THE SUE	STANCE/MI	XTURE AND OF THE COMPANY/UNDERTAKING		
1.1.	Product identifier					
	Trading name:	PERIODIC	ACID, 0.8 %	SOLUTION		
	Chemical name:	-				
	Catalogue number:	PK08-OT-	X**			
1.2.	Relevant identified us	es of the sub	ostance or mi	xture and uses advised against		
	Uses:		For use w	ith special staining kits.		
	Uses advised against:		Only the i	dentified uses are advised.		
	Reason why uses advised against:		The product is intended for use only as an <i>in vitro</i> diagnostic medical device, registered at the Agency for Medicinal Products and Medical Devices and there is no reason to use it for other purposes			
1.3.	Details of the supplier	of the safet	y data sheet			
	Supplier:		BioGnost Ltd.			
	Address:		Medjugorska 59, Zagreb +385 1 2409997			
	Telephone number:					
	Fax no.:		+385 1 2404039 msds@biognost.hr			
	e-mail of competent p	person:				
	National contact:	-				
1.4.	Emergency telephone	number				
_	National Protection a	nd Rescue D	irectorate:	112		
	Medical information:			+385 1 2348 342		
	Other information:			-		

SECTIO	SECTION 2 HAZARDS INFORMATION					
2.1.	Classification of the substance or mixture					
2.1.1.	Classification (REGULATION (EC) N	No. 1272/2008	(CLP)			
	Hazard class and category	code:	Hazard statements*:			
	Not identified as hazardous subst	ance.	-			
2.1.2.	Additional information					
	-					
*For fu	ll text of Hazard- and EU Hazard-sta	tements: see S	ection 16			
2.2.	Classification according to EC Dire	ective Nr. 1272/	(2008 CLP)			
	Product identification:	PERIODIC AC	ID, 0.8 % SOLUTION			
	Identification number:	-				
	Authorization no.:	-				
	Hazard pictograms:	-				
	Signal word:	-				



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Trading name:	PERIODIC ACID, 0.8 % SOLUTION			
Product code:	PK08-OT-X**	Date of compilation:	03 July 2019	Version: 3

	Hazard statements:	-
	Precautionary statements:	-
	Further information:	-
2.3.	Other hazards	
	-	

SECTION 3 COMPOSITION/INFORMATION ON INGREDIENTS						
CAS/ EC/ Index no.	REACH Registration No	Weight % content (or range)	Identification name	Classification according to Regulation (EC) No 1272/2008 (CLP)		
-	_	-	-	-		

SECTI	SECTION 4 FIRST AID MEASURES					
4.1.	Description of first aid measures					
	General notes:	-				
	Following inhalation:	Carry the afflicted person out of the contaminated area into a well-ventilated area or out for fresh air. If breathing becomes erratic or it stops, immediately apply artificial respiration (other than mouth-to-mouth) and contact a physician.				
	Following skin contact:	Remove contaminated clothing. Immediately wash with plenty of water and soap. Seek medical assistance if the symptoms of irritation remain.				
	Following eye contact:	Rinse out with plenty of water with the eyelid held wide open using clean fingers. If the symptoms remain, immediately call a physician.				
	Following ingestion:	Do not induce vomiting. Make the afflicted person drink a glass of water. If spontaneous vomiting occurs, wash the mouth with water, then make the person drink 100-200 ml of water and seek medical attention.				
	Self-protection of the first aid	ler: Treat symptomatically.				
4.2.	Most important symptoms and effects, both acute and delayed					
	Following inhalation:	Inhalation of large amounts of vapors in inadequately ventilated perimeter may cause coughing, sneezing, headache and nausea.				
	Following skin contact:	Slight irritation. After short exposure, resorption effects are not likely. Long-term exposure may cause drying, cracking and tingling sensation of skin.				
	Following eye contact:	Direct eye contact may cause slight to moderate irritation, lacrimation and burning sensation.				



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Trading name:		PERIODIC ACID, 0.8	% SOLUTION	
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	Following ingestion:	Swallowing may cause irritation of mucosa, tingling sensation in the mouth, burning sensation; higher levels of concentration may cause nausea, abdominal pain and vomiting. In case of vomiting, aspiration causes coughing, difficult breathing. Higher levels of concentration may cause suffocation.	
4.3.	Indication of any immediate medical attention and special treatment needed		
	-		

SECTIO	SECTION 5 FIREFIGHTING MEASURES					
5.1.	Extinguishing media					
	Suitable extinguishing media: Small fire - water spray, dry powder, CO ₂ Large fire - water spray or alcohol-resistant foam					
	Unsuitable extinguishing media: water jet					
5.2.	Special hazards arising from the substance or mixture					
	Hazardous combustion products: No information available					
5.3.	Advice for firefighters					
	Use a self-contained open-circuit compressed air breathing apparatus and fireproof clothing. Cool closed containers exposed to fire with water spray or vapor.					
5.4.	Additional information					
	Remove sources of heat and ignition.					
	Do not contaminate the environment with extinguishing media.					

SECTIO	SECTION 6 ACCIDENTAL RELEASE MEASURES					
6.1.	Personal precautions, protect	Personal precautions, protective equipment and emergency procedures				
6.1.1.	For non-emergency personne	el				
	Protective equipment:	Use personal protective equipment (see Section 8).				
	Accident prevention methods	Evacuate members of all non-essential personnel and those members without protective equipment. Remove all sources of sparks and ignition. Do not smoke.				
	Emergency procedures:	Mark the area using proper signs.				
6.1.2.	For emergency responders:					
	Wear protective equipment (see Section 8).					
6.2.	Environmental precautions:					
	Do not dispose of in sewage, drainage system and waterways. In case of large spillage contact National Protection and Rescue Directorate (NPRD) on 112.					
6.3.	Methods and material for containment and cleaning up					
6.3.1.	Bunding, covering of drains; capping procedures: Sand or clay barriers.					



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Trading name:	PERIODIC ACID, 0.8 % SOLUTION				
Product code:	PK08-OT-X**	Date of compilation:	03 July 2019	Version:	3

6.3.2.	Cleaning up:	Where possible, the substance can be absorbed by using inflammable material (sand, diatomaceous earth, vermiculite). Place the waste material in tightly closed impermeable containers. Store the substance in well ventilated storage rooms until disposal. Submit for disposal to the legal persons authorized by the Ministry of Environmental and Nature Protection. After disposal of the products, wash the area and and involved materials with water.
6.3.3.	Other information:	-
6.4.	Reference to other sections	
	-	

SECTIO	ON 7 HANDLING AN STORAGE					
7.1.	Precautions for safe handling					
7.1.1.	Protection measures					
	Measures to prevent fire:	Keep away from sources of heat and ignition. Do not smoke.				
	Measures to prevent aerosol and dust generati	ion: Secure proper ventilation.				
	Measures to protect the environment:	Prevent spilling into the sewage system and waterways.				
	Other measures:	-				
7.1.2.	Advice on general occupational hygiene:					
	Do not eat, drink or smoke in the workspace. Thoroughly wash hands after work and before eating.					
7.2.	Conditions for safe storage, including any inco	ling any incompatibilities				
	Technical measures and storage conditions:	Keep in tightly closed and upright set containers in a well ventilated storage rooms, and away from sources of heat sunlight, and other incompatible substances.				
	Packaging materials:	Manufacturer's original packaging.				
	Requirements for storage rooms and vessels:	Keep away from food and drink. Keep the containers tightly closed.				
	Advices for storage equipment:	The storage must be made of hard material; floors must be resistant to chemicals. There must be no drain that directly leads into sewage system. Secure proper ventilation.				
	Further information on storage conditions:	Do not place the unused material in the storage room and do not use empty containers for storing other chemicals. Do not store with incompatible materials (see Section 9).				
7.3.	Specific end use(s)					
	Recommendations:	-				
	Industrial sector specific solutions:	-				



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Trading name:	PERIODIC ACID, 0.8 % SOLUTION				
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SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION							
8.1. Control parameters							
Substance				Occupational values/short	exposure limit term values	Biological limit values	
				ppm	mg/m ³		
-				-	-	No information available	

Substance - name:							
EC No: -		CAS No:	-				
DNEL							
				Industrial			
Route of exposure:		Acute ect local	effe	Acute ect systemic	Chron effect lo		
Oral	-		-		-	-	
Inhalation	-		-		-	-	
Dermal	-		-		-	-	
Critical physical paran	neters: s	olubility, fla	mmabilit	y, corrosivity:	-		
				Consumer	_		
Route of	A	Acute /		Acute	Chron	nic Chronic	
exposure:	effe	ct local effect		ct systemic	effect lo	ocal effect systemic	
Oral	-		-		-	-	
Inhalation	-		-		-	-	
Dermal	-		-		-	-	
PNEC							
Environmental protec	tion tar	get		PNEC			
Fresh water					No information available		
Freshwater sediments	5				No information available		
Marine water					No information available		
Marine sediments					No information available		
Food chain					No information available		
Microorganisms in sewage treatment					No information available		
Soil (agricultural)					No information available		
Air No information available						le	
8.2. Exposure	contro	ls					



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Trading name:				
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8.2.1.	Engineering measures				
	Substance/mixture related measures to prevent exposure during identified uses:		Use the product in well ventilated rooms. Use personal protective equipment. Do not eat, drink or smoke in the workspace.		
	Structural measures to pr exposure:	event	No information available		
	Organisational measures prevent exposure:	to	Organization of work in order to reduce other worker's influence during work process.		
	Technical measures to pre exposure:	event	Secure proper workspace ventilation in order to keep concentration levels in air below permitted levels.		
8.2.2.	Personal protection equip	oment			
8.2.2.1.	Eye and face protection:		Safety glasses that stick to face (preventing splashing) (EN 166) or visor.		
8.2.2.2. Skin protection					
			Protective gloves must be according to the EU Directive 2016/425/EEC and standard EN 374. Glove material: nitrile rubber Glove thickness: ≥0.50 mm Break through time: >480 min		
	Other skin protection:		antistatic clothing made of natural fibers (such as cotton) with long s (EN 13034), and shoes that cover the entire foot (EN 10335).		
8.2.2.3.	Respiratory protection:	filter fo	tive full face mask (EN 136) or half mask (EN 140) equipped with a or organic vapors, type "A" (boiling point >65°C) acording to EN) used when concentration levels exceed GVI.		
8.2.2.4.	Thermal hazards:	No inf	ormation available		
8.2.3.	Environmental exposure	controls			
	Substance/mixture related measures to prevent exposure:		See Section 6		
	Structural measures to prevent exposure:		Use modern equipment.		
	Organisational measures to prevent exposure:		Adapt the work process to the required working conditions of the workplace.		
	Technical measures to prevent exposure:		See Section 6		

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES							
9.1.	Information on basic physical and chemical properties						
		Value	Method				
	Physical state:	liquid	No information available				
	Color:	colourless	No information available				



SAFETY DATA SHEET SAFETY DATA SHEET According to Regulation (EC) No. 1907/2006

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Trading name:				
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Odor:	no odor	No information available
Odor threshold:	No information available	No information available
рН:	No information available	No information available
Melting point / freezing point;	No information available	No information available
Initial boiling point and boiling range:	No information available	No information available
Flash point:	No information available	No information available
Evaporation rate:	No information available	No information available
Flammability (solid, gas):	No information available	No information available
Upper/lower flammability or explosive limits:	No information available	No information available
Vapor pressure:	No information available	No information available
Vapor density:	No information available	No information available
Relative density:	No information available	No information available
Bulk density:	No information available	No information available
Solubility(ies):	Soluble in water (20 °C)	No information available
Partition coefficient: n-octanol/water (log Kow):	No information available	No information available
Auto-ignition temperature:	No information available	No information available
Decomposition temperature:	No information available	No information available
Viscosity:	No information available	No information available
Explosive properties:	No information available	No information available
Oxidising properties:	No information available	No information available
Other information		

SECTIO	SECTION 10 STABILITY AND REACTIVITY					
10.1.	Reactivity:	See subsections 10.3 through 10.5.				
10.2.	Chemical stability:	The product is chemically stable under standard ambient conditions of storing and using.				
10.3.	Possibility of hazardous reactions:	With strong oxidants, sodium-hydroxide, sulfuric acid, aluminum.				
10.4.	Conditions to avoid:	Sources of heat, sparks, and ignition.				
10.5.	Incompatible materials:	Aluminum.				
10.6.	Hazardous decomposition products:	No information available.				

SECTIO	SECTION 11 TOXICOLOGICAL INFORMATION				
11.1.	Information on toxicological effects				
	Acute toxicity:				



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Trading name:	PERIODIC ACID, 0.8 % SOLUTION					
Product code:	PK08-OT-X**	Date of compilation:	03 July 2019	Version:	3	

Route of exposure:	Method	Species	Effective dose LD ₅₀ /LC ₅₀ or ATE _{mixture}	Exposure	time	Results
Oral exposure:	No information available	-	LD ₅₀	-		-
Dermal exposure:	No information available	-	LD ₅₀	-		-
Inhalation exposure:	No information available	-	LC ₅₀	-		-
Specific ta	get organ toxicity – si	ngle exposure (S	TOT SE):			
: •	Specifi	c effects	Targe	t organ		Note
Oral exposure:	No information a	available	No informati	on available	_	
Dermal exposure:	No information a	available	No informati	on available	-	
Inhalation exposure	: No information a	available	No informati	on available	-	
Irritation a	nd corrosion					
Irritation a	nd corrosion					
	Exposure time	Species	Evaluation	Method		Note
Skin irritation:	-	rabbit	-		•	
Eye irritation:	-	rabbit	-		•	
Sensitizatio	on					
Dermal exposure:	No information availa	able				
Inhalation exposure:	No information availa	able				
Symptoms	related to the physica	l, chemical and t	oxicological chara	acteristics		
Oral exposure:	Swallowing may ca sensation; higher I In case of vomiting concentration may	evels of concent g, aspiration cau	ration may cause ses coughing, diff	nausea, abdo	minal p	ain and vomiting.
Dermal exposure:		Slight irritation. After short exposure, resorption effects are not likely. Long-term exposure may cause drying, cracking and tingling sensation of skin.				
Inhalation exposure	: Inhalation of large coughing, sneezin	•		ely ventilated	perimet	er may cause
Eye exposure:	Direct eye contact sensation.	may cause sligh	nt to moderate irri	tation, lacrim	ation an	nd burning



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Product code:	PK08-OT-X**	Date of compilation:	03 July 2019	Version:	3	

		Oose	Exposure time	Species		Method	Evaluatio	n Note	
Subacute oral	No ir availab	nformation ble	No information available	No informati available	on	No information available	No informati available	on -	
Subacute dermal	No ir availab	nformation ble	No information available	No informati available	on	No information available	No informati available	on -	
Subacute inhalation	No ir availab	nformation ble	No information available	No informati available	on	No information available	No informati available	on -	
Subchronic oral	No ir availab	nformation ble	No information available	No informati available	on	No information available	No informati available	on -	
Subchronic dermal	No ir availab	nformation ble	No information available	No informati available	on	No information available	No informati available	on -	
Subchronic inhalation	No ir availab	nformation ble	No information available	No informati available	on	No information available	No informati available	on -	
Chronic oral	No ir availab	nformation ble	No information available	No informati available	on	No information available	No informati available	on -	
Chronic dermal	No ir availab	nformation ble	No information available	No informati available	on	No information available	No informati available	on -	
Chronic inhalation	No ir availab	nformation ble	No information available	No informati available	on	No information available	No informati available	on -	
Specific	target o		y – repeated e	xposure (S	IOT R			N1 - 1	
•		pecific effects		No:	Target orga nformation avai		Note -	—	
		tion available			nformation avai				
		tion available			nformation avai		_		
Subchronic oral	1011		tion available		No information available				
		tion available		No information available		_			
Subchronic inhala			tion available			nformation avai		_	
Chronic oral			tion available			nformation avai		_	



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Trading name:	PERIODIC ACID, 0.8 % SOLUTION			
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Chronic dermal No informa		tion available		No information available	-			
Chron	ic inhalation	No informa	tion available		No information available	-		
	CMR effects	(carcinogenicity	, mutagenicit	y, repro	oductive toxicity)			
	Carcinogenicity: Current studies on test animals did not indicate carcinogenic effects							
	Mutagenicity	ı in-vitro:	Current	in vitro	tests did not indicate mutageni	c effects.		
	Genotoxicity	•	No inforr	mation	available			
	Mutagenicity	Current	Current in vivo tests did not indicate mutagenic effects.					
	Germ cell mu	erm cell mutagenicity: No information available						
	Reproductive toxicity: No to organ			o toxicity on reproductive organs was determined in reproductive gans.				
	Summary of	evaluation of th	ne CMR prope	rties:	-			
11.2.	Practical exp	eriences:						
	Remarks relevant for classification:			No information available				
	Other remarks:			No information available				
11.3.	General note	es:						
	-							

SECTION	12 ECOLO	GICAL INF	ORMATION:
---------	----------	-----------	-----------

Toxicity 12.1. Exposure Acute toxicity Species Method Dose Evaluation Note time No No information Fish LC_{50} 96 hours information available available No No information Crustacea: 48 hours information EC_{50} available available No No information Algae/aquatic plants 8 days information IC_{50} available available Microorganisms LC_{50} 72 hours Exposure Chronic toxicity Dose Method Note **Species Evaluation** time



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Fish	LC ₅₀	96 hours	No information available	No information available	No information available	-
Crustacea:	EC ₅₀	48 hours	No information available	No information available	No information available	-
Algae/aquatic plants	IC ₅₀	72 hours	No information available	No information available	No information available	-
Other organisms	-	-	-	-	-	-

Persistence and degradability 12.2.

Abiotic degradation

	Degradation half-lives	Method	Evaluation	Note
Marine water	No information available	No information available	No information available	-
Fresh water	No information available	No information available	No information available	-
Air	No information available	No information available	No information available	-
Soil	No information available	No information available	No information available	-

ъ.		1
RIOC	IDATA	dation
DIOU	ıcuıaı	uation

% Degradation	Time (days) Method		Evaluation	Note
No information available				

12.3. Bioaccumulative potential

Partition coefficient: n-octanol/water (log Kow):

Value	Concentration	рН	°C	Method	Evaluation	Note
-	No information available	-	-	No information available	No information available	-

Bioconcentration factor (BCF)

Value	Species	Method	Evaluation	Note	
No information available					



Trading	name:			PERI	ODIC	ACID,	0.8 %	SOLUT	TION	Page :		71 10
Produc		PK08	S-OT-X**	Date of compilation:				03 July 2019		Versio	Version:	3
				1								
	Chronic e	cotoxici	ty									
	Value		Dose	Exposure time	Sp	ecies	Met	thod	Eval	uation		Note
Chronic	toxicity on	fish	LC ₅₀	No information available	No infor availa	mation able	No inforn availa		No info	ormation le	-	
	toxicity on a (<i>Daphnic</i>		EC ₅₀	No information available	No infor availa	mation able	No inforn availa		No info	ormation le	-	
12.4.	Mobility i	n soil										
1.			ed distributi	on in environm	ental (comparti	ments:					
	No inform	···				_						
	Surface te											
	Value		°C	Concentra	tion		Meth	od		No	ote	
	No informatio available		o formation vailable	No informat available	ion	No info	ormatic ble	on	-			
	Adsorptio	n / desc	orption	i		.1						
Transpo	rt	A/D coe enry's c	fficient constant	log Kow	E	vaporatio	on rate		Method		N	ote
Soil-wat	er No avail		nformation	No informatio		No information		nation No informavailable		on -	_	
Water-a	ir No avail		nformation	No informatio available		o inform vailable	ation	No ir availa	nformation able	on -		
Soil-air	No avail		nformation	No informatio available		o inform ⁄ailable	ation	No ir availa	nformation able	on -		
12.5.	Results of	PBT an	d vPvB asses	ssment								
	No inform											
12.6.	Other adv	erse eff	fects									
	No inform	nation a	vailable									



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Trading name:		PERIODIC ACID, 0.8 % SOLUTION	
Product code:	PK08-OT-X**	Date of compilation: 03 July 2019	Version: 3

SECTION	N 13 DISPOSAL CONSIDER	ATIONS			
13.1.	Waste treatment method	s			
13.1.1.	Product/Packaging dispo	sal:			
		e legal person authorized by the Ministry of Environmental and Nature			
13.1.2.	Waste codes/waste desig	nations according to Law:			
	No information available				
13.1.3.	Waste treatment – releva	nt information:			
	No information available				
13.1.4.	Sewage disposal – releva	nt information:			
	Waste must not be dispo	sed of into the sewage system.			
13.1.5.	Other disposal recomme	ndations:			
	authorized by the ministr	oduct's remains into the sewage system. Submit the remains to the collectors y in charge. Do not dispose of the packaging into the sewage system. Submit ectors authorized by the ministry in charge. Do not dispose of in places where			
13.1.6.	Relevant Community pro	visions:			
	-				
SECTION	N 14 TRANSPORT INFORM	MATION			
	Transporting/shipment by	road (ADR)			
UN num	ber:	Not subject to transport regulations.			
UN prop	er shipping name:	-			
Transport hazard class(es):		-			
Packing group:		-			
Environmentally hazardous:		-			
Special precautions for user:		-			
	Transporting/shipment by	rail (RID)			
UN num	ber:	Not subject to transport regulations.			
UN prop	er shipping name:	-			
Transpoi	rt hazard class(es):	-			



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Trading name:		PERIODIC ACID, 0.8	% SOLUTION		
Product code:	PK08-OT-X**	Date of compilation:	03 July 2019	Version:	3

Packing group:	-
Environmentally hazardous:	-
Special precautions for user:	-
Inland waterway transport (ADN)	
UN number:	Not subject to transport regulations.
UN proper shipping name:	-
Transport hazard class(es):	-
Packing group:	-
Environmentally hazardous:	-
Special precautions for user:	-
Transporting/shipment by sea (IN	MDG)
UN number:	Not subject to transport regulations.
UN proper shipping name:	-
Transport hazard class(es):	-
Packing group:	-
Environmentally hazardous:	-
Special precautions for user:	-
Transporting/shipment by air (IC.	AO-TI/IATA-DGR)
UN number:	Not subject to transport regulations.
UN proper shipping name:	-
Transport hazard class(es):	-
Packing group:	-
Environmentally hazardous:	-
Special precautions for user:	-
Further information: -	

SECTIO	SECTION 15 REGULATORY INFORMATION					
15.1.	Safety, health and env	Safety, health and environmental regulations/legislation specific for the substance or mixture				
	EU regulations					
	Authorization and/or restrictions of use					
	Authorizations:	-				
	Restrictions:	-				



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Trading name:	PERIODIC ACID, 0.8 % SOLUTION				
Product code:	PK08-OT-X**	Date of compilation:	03 July 2019	Version:	3

	Other EU regulations:	EC Regulation No. 1906/2007 and EC Regulation No. 1272/2008 of the European Parliament and the European Council; The European Commission Regulation No. 453/2006 of 2010 on changes and amendments to the Regulation (EC) No. 1907/2006 of the European Parliament and Council on registration, evaluation, authorization and restriction of chemical substances (REACH); EC Regulation No. 2037/200 of the European Parliament and Council from 29 June 2000 on substances that damage the ozone layer; EC Regulation No. 689/2008 of the European Parliament and Council from 17 June 2008 concerning the export and import of dangerous chemicals; EC Regulation No. 850/2004 of the European Parliament and Council from 29 April 2004 about persistent organic pollutants; Directive 2008/98/EC of the European Parliament and Council of 19 November 2008 on waste and repealing certain Directives
	Information according 1999 guideline)	9/13/EC about limitation of emissions of volatile organic compounds (VOC-
	National legislation:	Chemicals Act, Regulation on classification, packaging and labeling of dangerous substances, Ordinance on occupational exposure limit values and on biological limit values, Regulation on categories, types and classification of waste with a waste catalog and list of hazardous waste, Ordinance on writing Material safety data sheet, Transport of Hazardous Substances Act
15.2.	Chemical safety assessmen	t
	None	

SECTIO	ON 16 Other information		
16.1.	Indication of changes:	-	
		PBT	Stable, bioaccumulative and toxic
		vPvB	Strongly stable and strongly bioaccumulative.
16.2.	Abbreviations and acronyms:	LD ₅₀	Lethal dose, 50%
		LC ₅₀	Lethal concentration, 50%
		STOT-SE	Specific target organ toxicity - single exposure
16.3.	Key literature references and source of data:	-	
16.4.	Classification and procedure u 1272/2008 (CLP)	sed to derive the	e classification for mixture according to Regulation (EC)
Classifi	cation	Classification pro	ocedure
-	-		
16.5.	Relevant H statements (number	nt H statements (number and full text)	
	H: -		
16.6.	Training advice:		



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Trading name:		PERIODIC ACID, 0.8	% SOLUTION	
Product code:	PK08-OT-X**	Date of compilation:	03 July 2019	Version: 3

		** "X" in the product code marks different volumes (different packagings of the product)
16.7.	Further information:	We are not responsible for consequences in case of failure to comply with
		instructions for use or improper use of the product described in this
		material safety data sheet.

Δ	N	N	J	F	X	

Exposure scenario resulting to Chemical safety assessment



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Trading name:		GENT			
Product code:	BS-OT-X**	Date of compilation:	27 June 2019	Version:	3

SECTI	ON 1: Identification of	the substance	e/mixture	and of the company/undertaking		
1.1	Product identifier					
	Trading name:	BIOSCHIFF	REAGENT			
	Chemical name:	-				
	Catalogue number:	BS-OT-X**				
1.2	Relevant identified us	es of the subs	tance or n	nixture and uses advised against		
	Uses:		For dete	ecting aldehydes and mucous substances.		
	Uses advised against:		Only the	e identified uses are advised.		
	Reason why uses advi	ised against:	The product is intended for use only as an <i>in vitro</i> diagnostic medical device, registered at the Agency for Medicinal Products and Medical Devices and there is no reason to use it for other purposes.			
1.3	Details of the supplier	r of the safety	data shee	t		
	Supplier:		BioGnost Ltd.			
	Address:		Medjugorska 59, Zagreb			
	Telephone number:		+385 1 2409997			
	Telefax.:		+385 1 2404039			
	e-mail of competent	person:	msds@b	msds@biognost.hr		
	National contact:		-			
1.4	Emergency telephone	number				
_	National Protection a	nd Rescue Dire	ectorate:	112		
	Medical information:			+385 1 2348 342		
	Other information:			-		

SECTIO	SECTION 2. Hazards identification					
2.1	Classification of the substance or mixture					
2.1.1	Classification according to Regulation (EC) No 1272/2008 (CLP)					
	Hazard class and category code: Hazard statements*:					
	- EUH031					
2.1.2.	Additional information					
	-					
*For ful	ll text of Hazard- and EU Haza	rd-statements: see	SECTION 16			
2.2	Label elements					
	Product identification:	BIOSCHIFF REA	AGENT			
	Identification number: -					
	Authorization number: -					
	Hazard pictograms:	-				
	Signal word:	-				



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Trading name:	BIOSCHIFF REAGENT				
Product code:	BS-OT-X**	Date of compilation:	27 June 2019	Version:	3

	Hazard statements:	EUH031 Contact with acids liberates toxic gas.
	Precautionary statements:	P281 Use personal protective equipment as required.
	Supplemetal hazard information (EU):	-
2.3	Other hazards	
	-	

SECTION 3. Con	SECTION 3. Composition/information on ingredients						
CAS/ EC/ Index number	REACH Registration No	Weight % content (or range)	Identification name	Classification according to Regulation (EC) No 1272/2008 (CLP)			
7681-57-4/ 231-673-0/ 016-063-00-2	-	< 3	sodium metabisulfite	Acute Tox. 4; H302 Eye Dam. 1; H318 EUH031			
7647-01-0/ 231-595-7/ 017-002-01-X	-	< 3	hydrochloric acid, 36.5%	Skin Corr. 1B; H314 Acute Tox. 3; H331			

SECTION	ON 4. First aid measures			
4.1	Description of first aid measures			
	General notes:	If the suggested first aid measures do not prove sufficient, seek medical attention.		
	Following inhalation:	Carry the afflicted person out of the contaminated area into a well-ventilated area or out for fresh air. In case of difficult breathing, provide the afflicted person with oxygen.		
	Following skin contact:	Remove contaminated clothing. Immediately wash with plenty of water for at least 20 minutes. Seek medical assistance if the symptom of irritation remain.		
	Following eye contact:	Rinse out with plenty of water with the eyelid held wide open for at least 20 minutes. If the symptoms remain, immediately call in ophthalmologist.		
	Following ingestion:	Rinse the oral cavity, drink 1-2 glasses of water. Immediately consult a physician and show the container or label. In case of swallowing large quantities, transport the afflicted person to the hospital.		
	Self-protection of the first aider:	-		
4.2	Most important symptoms and eff	fects, both acute and delayed		
	Following inhalation:	Depending on concentration and exposure time, it may lead to mucosa irritation, cough, and dyspnea.		
	Following skin contact:	Depending on concentration and exposure time, it may lead to irritation, rash, skin drying and skin cracking.		



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Trading name:		BIOSCHIFF REA	GENT	-	
Product code:	BS-OT-X**	Date of compilation:	27 June 2019	Version:	3

	Following eye contact:	Depending on concentration and exposure time, it may lead to irritation, tearing, redness and pain.
	Following ingestion:	Depending on concentration and exposure time, it may lead to stinging and digestive mucus damage, abdominal pain, nausea, vomiting.
4.3	Indication of any immediate m	nedical attention and special treatment needed
	-	

SECTI	SECTION 5. Firefighting measures				
5.1	Extinguishing media	Extinguishing media			
	Suitable extinguishing media:	Small fire - water spray, dry powder, CO ₂ Large fire - water spray or alcohol-resistant foam			
	Unsuitable extinguishing media:	Water jet			
5.2	Special hazards arising from the substance or mixture				
	Hazardous combustion products:	Sulfur oxides.			
5.3	Advice for firefighters				
	Use a self-contained open-circuit	compressed air breathing apparatus and fireproof clothing.			
5.4	Additional information	Additional information			
	Do not contaminate the environm	ent with extinguishing media.			

SECTIO	ECTION 6. Accidental release measures				
6.1	Personal precautions, protective equipment and emergency procedures				
6.1.1.	For non-emergency personnel				
	Protective equipment:	Use personal protective equipment (see Section 8).			
	Accident prevention methods: Evacuate members of all non-essential personnel and without protective equipment. Avoid breathing vaccontact with skin and eyes. Do not smoke.				
	Emergency procedures:	Mark the area using proper signs.			
6.1.2.	For emergency responders:				
	Use protective equipment; in a (see Section 8).	case of inadequate ventilation use adequate airways protective equipment			
6.2	Environmental precautions:				
	Do not dispose of in sewage, drainage system and waterways. In case of large spillage contact National Protection and Rescue Directorate (NPRD) on 112.				
6.3	Methods and material for containment and cleaning up				
6.3.1.	Bunding, covering of drains; capping procedures:	Sand or clay barriers.			



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Tra	nding name:		BIOSCHIFF REA	BIOSCHIFF REAGENT		
Pro	oduct code:	BS-OT-X**	Date of compilation:	27 June 2019	Version:	3

6.3.2.	Cleaning up:	Where possible, the substance can be absorbed by using absorbing material. Place the waste material in tightly closed impermeable containers. Store the substance in well ventilated storage rooms until disposal. Submit for disposal to the legal persons authorized by the Ministry of Environmental and Nature Protection. After disposal of the products, wash the area and and involved materials with water.
6.3.3.	Other information:	Do not use incompatible materials (see Section 10).
6.4	Reference to other sections	
	-	

SECTIO	ON 7. Handling and storage				
7.1	Precautions for safe handling				
7.1.1.	Protection measures				
	Measures to prevent fire:		Use in well ventilated storage rooms.		
	Measures to prevent aerosol and dust generation	on:	Secure proper ventilation.		
	Measures to protect the environment:		Prevent spilling into the sewage system and waterways.		
	Other measures:		-		
7.1.2.	Advice on general occupational hygiene:				
	Do not eat, drink or smoke in the workspace. Thoroughly wash hands after work and before eating.				
7.2	Conditions for safe storage, including any incon	npatibilities			
	Technical measures and storage conditions:		ghtly closed and upright set containers in a ated storage roomsat temperatures ranging 25 °C.		
	Packaging materials:	Manufacturer's original packaging. Avoid metal containers. Keep away from food and drink. Keep the containers tightly closed.			
	Requirements for storage rooms and vessels:				
	Advices for storage equipment:	must be re	ge must be made of hard material; floors esistant to chemicals. There must be no drain ly leads into sewage system. Secure proper i.		
	Further information on storage conditions:	and do no	ace the unused material in the storage room t use empty containers for storing other Do not store with incompatible materials on 10).		
7.3	Specific end use(s)				
	Recommendations:	-			
	Industrial sector specific solutions:	-			



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Trading name:		BIOSCHIFF REA	BIOSCHIFF REAGENT			
Product code:	BS-OT-X**	Date of compilation:	27 June 2019	Version:	3	

SECTION 8. Exposure controls/personal protection							
8.1 Control pa	arameters						
Substance		CA	CAS No		Occupational exposure limit values/short term values		Biological limit values
				р	pm	mg/m ³	
sodium metabisulfi	te	7681-57	7-4		-/-	5/-	No information available
Substance name:	-	1				T	
EC No:	-	CAS No	: -				
DNEL							
			<u> </u>	Ind	ustrial		
Route of	Acı		_	ute		Chronic	Chronic
exposure:	effect	local	effect s	ystemi	С	effect local	effect systemic
Oral	-		-		-		-
Inhalation	-		-		-		-
Dermal	-		-		-	;	-
Critical physical parameters: solubility, flammability, corrosivity:							
				Con	sumer		
Route of	Acı	ute	Ac	ute	Chronic		Chronic
exposure:	effect	local	effect s	systemi	ic	effect local	effect systemic
Oral	-		-		-		-
Inhalation	-		-		-		-
Dermal	-		-		-		-
PNEC							
Environmental prot	ection tar	get		ı	PNEC		
Fresh water				١	No information available		
Freshwater sedime	nts			I	No inforr	nation available	
Marine water				I	No inforn	nation available	
Marine sediments				ı	No information available		
Food chain				ı	No inforr	nation available	
Microorganisms in sewage treatment				ı	No information available		
Soil (agricultural)				1	No inforr	nation available	
Air No information available							
8.2 Exposure controls							
8.2.1. Appropriate engineering controls							



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Trading name:		BIOSCHIFF REA	GENT		
Product code:	BS-OT-X**	Date of compilation:	27 June 2019	Version:	3

	Substance/mixture related measu prevent exposure during identified		Use the product in well ventilated rooms. Use personal protective equipment. Do not eat, drink or smoke in the workspace.	
	Structural measures to prevent exposure:		In accordance with Section 7.	
	Organisational measures to preve exposure:	nt	Organization of work in order to reduce other worker's influence during work process.	
	Technical measures to prevent exposure:		Secure proper workspace ventilation in order to keep concentration levels in air below permitted levels. Secure stations for rinsing eyes and showering.	
8.2.2.	Personal protection equipment			
8.2.2.1.	Eye and face protection:	levels o	glasses that stick to face (EN 166) or visor in case of lower of concentration in air; protective gas mask that covers the face in case of higher levels of concentration in air.	
8.2.2.2.	Skin protection			
	Hand protection:	Protec	tive nitrile gloves, 0.11 mm thick (EN 374).	
	Other skin protection:		antistatic clothing made of natural fibers (such as cotton) ang sleeves (EN 340) and shoes that cover the entire foot.	
8.2.2.3.	Respiratory protection:	combii	le mask (EN 136) or half mask (EN 140) equipped with a ned "A1 + Form" filter (EN 143) used when concentration exceed GVI.	
8.2.2.4.	Thermal hazards:	No info	ormation available	
8.2.3.	Environmental exposure controls			
	Substance/mixture related measures to prevent exposure:	See Se	ction 6	
	Structural measures to prevent exposure:	Use mo	odern equipment.	
	Organisational measures to prevent exposure:	Adapt workpl	the work process to the required working conditions of the ace.	
Technical measures to preve exposure:		See Section 6		

SECT	SECTION 9. Physical and chemical properties						
9.1	Information on basic phys	Information on basic physical and chemical properties					
		Value	Method				
	Physical state:	liquid	No information available				
	Colour:	colourless	No information available				
	Odour:	sharp	No information available				
	Odor threshold:	No information available	No information available				
	pH:	<2	No information available				



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Trading name:	ne: BIOSCHIFF REAGENT				
Product code:	BS-OT-X**	Date of compilation:	27 June 2019	Version:	3

	Melting point / freezing point;	No information available	No information available
	Initial boiling point and boiling range:	No information available	No information available
	Flash point:	No information available	No information available
	Evaporation rate:	No information available	No information available
	Flammability (solid, gas):	No information available	No information available
	Upper/lower flammability or explosive limits:	No information available	No information available
	Vapour pressure:	No information available	No information available
	Vapour density:	No information available	No information available
	Relative density:	No information available	No information available
	Bulk density:	No information available	No information available
	Solubility(ies):	No information available	No information available
	Partition coefficient: n-octanol/water (log Kow):	No information available	No information available
	Auto-ignition temperature:	No information available	No information available
	Decomposition temperature:	No information available	No information available
	Viscosity:	No information available	No information available
	Explosive properties:	No information available	No information available
	Oxidising properties:	No information available	No information available
9.2	Other information		
	-		

SECTIO	SECTION 10. Stability and reactivity				
10.1	Reactivity:	No information available			
10.2	Chemical stability:	The product is chemically stable under standard ambient conditions of storing and using.			
10.3	Possibility of hazardous reactions:	No information available			
10.4	Conditions to avoid:	No information available			
10.5	Incompatible materials:	Strong oxidants (acids).			
10.6	Hazardous decomposition products:	Sulfur dioxide, sodium oxide.			

SECTION	SECTION 11. Toxicological information						
11.1	Information on toxicological effects						
	Acute toxicity:						
Route of exposure:		Method	Species	Dose LD ₅₀ /LC ₅₀ or ATE _{mix}	Exposure time	Results	



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Trading name:	BIOSCHIFF REAGENT									
Product code:	BS-OT-X** Date of			ompilati	on:	27 Jun	e 2019	Ve	rsion:	3
Oral:	-	_		informati lable	on	-			_	
Dermal:	-	_		informati lable	on	-			_	
Inhalation:	-	-		informati lable	on	-			-	
Specific tar	get organ toxici	ty – single expo	sure (S	TOT SE):						
		ific effects		, , , , , , , , , , , , , , , , , , ,	Target c	rgan			Note	
Oral:	No information			No info	rmation a		e -			
Dermal:	No information	available		No info	rmation a	availabl	e -			
Inhalation:	No information	ı available		No info	rmation a	availabl	e -			
Aspiration	hazard:	No	o inforr	nation av	/ailable.					
; '		<u> </u>								
Irritation ar	nd corrosion									
	Exposu	e time	Speci	es	Evaluation	on	Method		Note	
Skin corrosion/irritation:	-	-			-	-		-		
Serious eye damage/irritation	-	-			-	-		-		
	l .	i		:		:				
Sensitizatio	on									
Skin sensitization:	No in	formation availa	able							
Respiratory sensitiza	ation: No in	formation availa	able							
Symptoms	related to the pl	nysical, chemica	al and t	oxicolog	ical chara	cteristi	cs			
Oral exposure:	, ,	astrointestinal centration may				•	minal pain	s and o	cramps; hig	her
Dermal exposure:	May cause s	kin irritation.								
Inhalation exposure	: exposure an	espiratory syste d when used by astrointestinal i	/ sensit	ive persc	_			•	_	nma
Eye exposure:	May cause e	ye irritation.								
Repeated o	lose toxicity (sub	acute, subchro	nic, chr	onic)						
	Dose	Exposure time	Specie	es	Method		Evaluation	on	Note	



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Trading name:		BIOSCHIFF REA			
Product code:	BS-OT-X**	Date of compilation:	27 June 2019	Version:	3

Subacute oral	No information available	No information available	No information available	No information available	No information available	-
Subacute dermal	No information available	No information available	No information available	No information available	No information available	-
Subacute inhalation	No information available	No information available	No information available	No information available	No information available	-
Subchronic oral	No information available	No information available	No information available	No information available	No information available	-
Subchronic dermal	No information available	No information available	No information available	No information available	No information available	-
Subchronic inhalation	No information available	No information available	No information available	No information available	No information available	-
Chronic oral	No information available	No information available	No information available	No information available	No information available	-
Chronic dermal	No information available	No information available	No information available	No information available	No information available	-
Chronic inhalation	No information available	No information available	No information available	No information available	No information available	-

Specific target	organ toxicity – rei	neated exposu	re (STOT RF)·

	Specific effects	Target organ	Note
Subacute oral	No information available	No information available	-
Subacute dermal	No information available	No information available	-
Subacute inhalation	No information available	No information available	-
Subchronic oral	No information available	No information available	-
Subchronic dermal	No information available	No information available	-
Subchronic inhalation	No information available	No information available	-
Chronic oral	No information available	No information available	-
Chronic dermal	No information available	No information available	-
Chronic inhalation	No information available	No information available	-

CMR effects (carcinogenicity; mutagenicity; reproductive toxicity)



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Trading name:		BIOSCHIFF REAGENT			
Product code:	BS-OT-X**	Date of compilation:	27 June 2019	Version:	3

	Carcinogenicity:	No information available
	Mutagenicity in vitro:	No information available
	Genotoxicity:	No information available
	Mutagenicity in vivo:	No information available
	Germ cell mutagenicity:	No information available
	Reproductive toxicity:	No information available
	Summary of evaluation of the CMR properties:	No information available
11.2	Practical experiences:	
	Classification observations:	No information available
	Other observations:	No information available
11.3	General notes:	
	-	

SECTION 12. Ecologic	SECTION 12. Ecological information					
12.1 Toxicity						
Acute (short-term) toxicity	Dose	Exposure time	Species	Method	Evaluation	Note
Fish	LC ₅₀	96 hours	No information available	No information available	No information available	-
Crustacea:	EC ₅₀	48 hours	No information available	No information available	No information available	-
Algae/aquatic plants	IC ₅₀	4 days	No information available	No information available	No information available	_
Other organisms	-	-	-	-	-	-
Chronic (long-term) toxicity	Dose	Exposure time	Species	Method	Evaluation	Note
Fish	LC ₅₀	96 hours	No information available	No information available	No information available	-
Crustacea:	EC ₅₀	48 hours	No information available	No information available	No information available	_



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Trading	g name	ne: BIOSCHIFF REAGENT										
Produc	t code:	В	S-OT-X**			Date of compilat	tion:	27 Jun	e 2019	Vei	rsion:	3
Algae/a	nquatic p	lants	nts IC ₅₀ 72 hours			No information available	No inform availa		No informatio	on	_	
Other o	rganism	S	-	-		-	-		_		-	
					<u> </u>			<u> </u>			<u>i</u>	
12.2	Persistence and degradability											
	Abiotio	degra	dation									
		De	gradation ha	lf-lives		Method	E	Evaluation)		Note	
Marine	water	No ir	nformation av	/ailable		o information ailable	No int	formation ble	_			
Fresh w	ater	No ir	nformation av	/ailable		o information ailable	No int	formation ble	- -			
Air		No ir	nformation av	/ailable		o information ailable	No int	formation ble	-			
Soil		No information available			No information No info available available		formation ble	-				
	Biodeg	radatio	on		,				,			
% De	gradatio	on	Time (d	ays)		Method Evaluation		1		Note		
No info availabl	rmation le		No inf available	ormation	No information available					No information available		
	1											
12.3			ive potential									
			er partition co									
Valu	e	Conce	ntration	рН	°C			Evalua			Note	
-	-				-	-	-			-		
							8 8 9 9 9 9					
	Riocon	centra	tion factor (B	CE)								
\/	'alue	Centra	Specie			Method		Evaluatio	n l		Note	
	rmation			ormation		information ailable	No information available				Note	
		<u> </u>		i			<u> </u>		l l			



13.1

Waste treatment methods

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Trading name:		BIOSCHIFF REA	AGENT		
Product code:	BS-OT-X**	Date of compilation:	27 June 2019	Version:	3

	Value	Dose	Exposure time	Species	Metho	od E	Evaluation	Note
Chronic	c toxicity on fis	sh LC ₅₀	information	No information available	No informa	1	o Formation ailable	-
	c toxicity on ea (<i>Daphnia</i>)	EC ₅₀	information	No information available	No informa available		o Formation ailable	-
12.4	Mobility in s	oil						
	Known or pr	edicted distribut	ion in environme	ntal compart	ments:			
	No informat	ion available						
	Surface tens	ion:						
	Value	°C	Concentrati	on	Method		Note	
	No information available	No information available	No information		n No information - available		-	
	Adsorption /	· · · · · · · · · · · · · · · · · · ·						
Transpo	ort :	O coefficient ry's constant	log Kow	Evaporati	on rate	Met	hod	Note
Soil-wa	iter No availab	information le	No information available	n No inform available		No infor		-
Water-	air No availab	information le	No informatior available	No inform available		No infor		-
	OII-air		No information available	No information available		No information available		-
Soil-air								
	Results of PE	BT and vPvB asse	ssment					
Soil-air	Results of PE		ssment					
			ssment					
		ion available	ssment					



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Trading name:	BIOSCHIFF REAGENT					
Product code:	BS-OT-X**	Date of compilation:	27 June 2019	Version:	3	

	Product/Packaging disposal:					
	Submit for disposal to the Protection.	ne legal person authorized by the Ministry of Environmental and Nature				
13.1.2.	Waste codes/waste designations according to Law:					
	Packaging that contains	residual hazardous substances or is contaminated with hazardous substances				
13.1.3.	Waste treatment – releva	ant information:				
	No information available					
13.1.4.	Sewage disposal – relevant information:					
	Waste must not be dispo	osed of into the sewage system.				
13.1.5.	Other disposal recommendations:					
	Do not dispose of the product's remains into the sewage system. Submit the remains to the collector authorized by the ministry in charge. Do not dispose of the packaging into the sewage system. Submit the packaging to the collectors authorized by the ministry in charge.					
13.1.6.	Relevant Community pro	ovisions:				
	-					
SECTION	N 14 TRANSPORT INFORM	MATION				
SECTIO	N 14 TRANSPORT INFORM					
	Transporting/shipment by					
UN num	Transporting/shipment by	road (ADR)				
UN num UN prop	Transporting/shipment by ber:	road (ADR)				
UN num UN prop Transpoi	Transporting/shipment by ber: per shipping name: rt hazard class(es):	road (ADR)				
UN num UN prop Transpor Packing	Transporting/shipment by ber: per shipping name: rt hazard class(es):	road (ADR) Not subject to transport regulations				
UN num UN prop Transpoi Packing Environn	Transporting/shipment by ber: per shipping name: rt hazard class(es): group:	road (ADR) Not subject to transport regulations				
UN num UN prop Transpoi Packing Environn	Transporting/shipment by ber: per shipping name: rt hazard class(es): group: mentally hazardous:	road (ADR) Not subject to transport regulations				
UN num UN prop Transpor Packing Environr Special p	Transporting/shipment by ber: per shipping name: rt hazard class(es): group: mentally hazardous: precautions for user: Transporting/shipment by	road (ADR) Not subject to transport regulations				
UN num UN prop Transpor Packing Environn Special p	Transporting/shipment by ber: per shipping name: rt hazard class(es): group: mentally hazardous: precautions for user: Transporting/shipment by	road (ADR) Not subject to transport regulations rail (RID)				
UN num UN prop Transpor Packing Environn Special p UN num UN prop	Transporting/shipment by ber: per shipping name: rt hazard class(es): group: mentally hazardous: precautions for user: Transporting/shipment by ber:	road (ADR) Not subject to transport regulations rail (RID) Not subject to transport regulations				
UN num UN prop Transpor Packing Environn Special p UN num UN prop Transpor	Transporting/shipment by ber: per shipping name: rt hazard class(es): group: mentally hazardous: precautions for user: Transporting/shipment by ber: per shipping name: rt hazard class(es):	road (ADR) Not subject to transport regulations rail (RID) Not subject to transport regulations -				
UN num UN prop Transpor Packing Environn Special p UN num UN prop Transpor Packing	Transporting/shipment by ber: per shipping name: rt hazard class(es): group: mentally hazardous: precautions for user: Transporting/shipment by ber: per shipping name: rt hazard class(es):	road (ADR) Not subject to transport regulations rail (RID) Not subject to transport regulations				



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Trading name:					
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UN number:	Not subject to transport regulations
UN proper shipping name:	-
Transport hazard class(es):	-
Packing group:	-
Environmentally hazardous:	-
Special precautions for user:	-
Transporting/shipment by sea (IN	MDG)
UN number:	Not subject to transport regulations
UN proper shipping name:	-
Transport hazard class(es):	-
Packing group:	-
Environmentally hazardous:	-
Special precautions for user:	-
Transport in bulk according to Annex II of MARPOL 73/78 and the IBC code:	-
Transporting/shipment by air (ICA	AO-TI/IATA-DGR)
UN number:	Not subject to transport regulations
UN proper shipping name:	-
Transport hazard class(es):	-
Packing group:	-
Environmentally hazardous:	-
Special precautions for user:	-
Further information: -	

SECTIO	CTION 15. Regulatory information				
15.1	Safety, health and environmental regulations/legislation specific for the substance or mixture				
	EU regulations				
	Authorization and/or restrictions of use				
	Authorizations:	-			
	Restrictions:	-			



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Trading name:					
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	None	
15.2	Chemical safety assessment	
	National legislation:	Chemicals Act, Regulation on classification, packaging and labeling of dangerous substances, Ordinance on occupational exposure limit values and on biological limit values, Regulation on categories, types and classification of waste with a waste catalog and list of hazardous waste, Ordinance on writing Material safety data sheet, Transport of Hazardous Substances Act
	Information according 1999 guideline)	/13/EC about limitation of emissions of volatile organic compounds (VOC-
	Other EU regulations:	EC Regulation No. 1906/2007 and EC Regulation No. 1272/2008 of the European Parliament and the European Council; The European Commission Regulation No. 453/2006 of 2010 on changes and amendments to the Regulation (EC) No. 1907/2006 of the European Parliament and Council on registration, evaluation, authorization and restriction of chemical substances (REACH); EC Regulation No. 2037/200 of the European Parliament and Council from 29 June 2000 on substances that damage the ozone layer; EC Regulation No. 689/2008 of the European Parliament and Council from 17 June 2008 concerning the export and import of dangerous chemicals; EC Regulation No. 850/2004 of the European Parliament and Council from 29 April 2004 about persistent organic pollutants; Directive 2008/98/EC of the European Parliament and Council of 19 November 2008 on waste and repealing certain Directives

SECTIO	N 16. Other information			
16.1	Indication of changes:	-		
		PBT	Stable, bioaccumulative and toxic	
		vPvB	Strongly stable and strongly bioaccumulative.	
16.2	Abbreviations and acronyms:	LD ₅₀	Lethal dose, 50%	
		LC ₅₀	Lethal concentration, 50%	
		TCOJ	Specific target organ toxicity - single exposure	
16.3.	Key literature references and source of data:	-		
16.4.	16.4. Classification and procedure used to derive the classification for mixture according to Regulation (EC) 1272/2008 (CLP)			
Classific	cation	Classification procedure		
_	-	•		
16.5.	Relevant H statements (numbe	r and full text)		



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Trading name:		BIOSCHIFF REA	AGENT		
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	H:	H302	Harmful if swallowed.
	H314		Causes severe skin burns and eye damage
		H318	Causes serious eye damage.
		H335	May cause respiratory irritation.
		H350	May cause cancer.
		(EUH031)	Contact with acids liberates toxic gas.
16.6.	16.6. Training advice:		-
			** "X" in the product code marks different volumes (different packagings of the product)
16.7. Further information:		her information:	We are not responsible for consequences in case of failure to comply with instructions for use or improper use of the product described in this material safety data sheet.

ANNEX: Exposure scenario resulting to chemical safety assessment
-



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Trading name:		SODIUM METABISULFI	TE, SOLUTION	<u> </u>	
Product code:	NM-OT-X**	Date of compilation:	05 July 2019	Version:	3

SECTION	ON 1: Identification of	the substance	e/mixture	and of the company/undertaking
1.1	Product identifier			
	Trading name:	SODIUM M	ETABISUL	FITE, SOLUTION
	Chemical name:	-		
	Catalogue number:	NM-OT-X**	•	
1.2	Relevant identified us	es of the subs	tance or n	nixture and uses advised against
	Uses:		For use	with special staining kits.
	Uses advised against:			identified uses are advised.
	Reason why uses advised against:		medical	duct is intended for use only as an <i>in vitro</i> diagnostic device, registered at the Agency for Medicinal Products and Devices and there is no reason to use it for other purposes.
1.3	Details of the supplier of the safety data sheet			
	Supplier:		BioGnos	t Ltd.
	Address:		Medjugorska 59, Zagreb +385 1 2409997 +385 1 2404039	
	Telephone number:			
	Telefax.:			
	e-mail of competent	person:	msds@biognost.hr	
	National contact:		-	
1.4	Emergency telephone number			
	National Protection a	nd Rescue Dire	ectorate:	112
	Medical information:			
	Medical information:			+385 1 2348 342

SECTIO	SECTION 2. Hazards identification			
2.1	Classification of the substance or mixture			
2.1.1	Classification according to Regulation (EC) No 1272/2008 (CLP)			
	Hazard class and cated	gory code:	Hazard statements*:	
	Eye Irr. 2		H319	
2.1.2.	Additional information			
	-			
*For fu	Ill text of Hazard- and EU Hazard	l-statements: see S	ECTION 16	
2.2	Label elements			
	Product identification:	SODIUM META	BISULFITE, SOLUTION	
	Identification number:	-		
	Authorization number:	-		



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Trading name:		SODIUM METABISULFI	TE, SOLUTION	<u> </u>	
Product code:	NM-OT-X**	Date of compilation:	05 July 2019	Version:	3

	Hazard pictograms:	GHS07
	Signal word:	Warning
	Hazard statements:	H319 Causes serious eye irritation.
	Precautionary statements:	P280 Wear protective gloves/protective clothing/eye protection/face protection. P305+P351+P338 IF IN EYES Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P308+P313 IF exposed or concerned: Immediately call a POISON CENTER or physician.
	Supplemetal hazard information (EU):	-
2.3	Other hazards	
	-	

SECTION 3. Co.	SECTION 3. Composition/information on ingredients					
CAS/ EC/ Index number	REACH Registration No	Weight % content (or range)	Identification name	Classification according to Regulation (EC) No 1272/2008 (CLP)		
7681-57-4/ 231-673-0/ 016-063-00-2	-	< 10 %	sodium metabisulfite	Acute Tox. 4, H302 Eye Dam. 1; H318 EUH031		

SECTI	SECTION 4. First aid measures			
4.1	Description of first aid measures			
	General notes:	If the suggested first aid measures do not prove sufficient, seek medical attention.		
	Following inhalation:	Carry the afflicted person out of the contaminated area into a well-ventilated area or out for fresh air. In case of difficult breathing, provide the afflicted person with oxygen.		
	Following skin contact:	Remove contaminated clothing. Immediately wash with plenty of water for at least 20 minutes. Seek medical assistance if the symptoms of irritation remain.		
	Following eye contact:	Rinse out with plenty of water with the eyelid held wide open for at least 20 minutes. If the symptoms remain, immediately call in ophthalmologist.		



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Trading name:		SODIUM METABISULFIT	ΓΕ, SOLUTION	<u> </u>	
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	Following ingestion:	Rinse the mouth thoroughly with 1-2 glasses of water. Immediately consult a physician and show the container or label. In case of swallowing large quantities, transport the afflicted person to the hospital.
	Self-protection of the first aider:	-
4.2	1.2 Most important symptoms and effects, both acute and delayed	
	Following inhalation:	According to our findings, chemical, physical and toxicological properties of the substance have not been entirely tested.
	Following skin contact:	According to our findings, chemical, physical and toxicological properties of the substance have not been entirely tested.
	Following eye contact:	According to our findings, chemical, physical and toxicological properties of the substance have not been entirely tested.
	Following ingestion:	According to our findings, chemical, physical and toxicological properties of the substance have not been entirely tested.
4.3	Indication of any immediate medi	cal attention and special treatment needed
	-	

SECTIO	SECTION 5. Firefighting measures					
5.1	Extinguishing media					
	Suitable extinguishing media: water	spray, dry powder, CO ₂ or alcohol resistant foam				
	Unsuitable extinguishing media: Water	with full jet				
5.2	Special hazards arising from the substance or mixture					
	Hazardous combustion products: no information available					
5.3	Advice for firefighters					
	Use a self-contained open-circuit compressed air breathing apparatus and fireproof clothing.					
5.4	Additional information					
	Cool endangered receptacles with water spray. Collect contaminated fire fighting water separately. Do not contaminate the environment with extinguishing media.					

SECTIO	SECTION 6. Accidental release measures				
6.1	Personal precautions, protective equipment and emergency procedures				
6.1.1.	For non-emergency personnel				
	Protective equipment: Use personal protective equipment (see Section 8).				
	Accident prevention methods:	Evacuate members of all non-essential personnel and those members without protective equipment. Avoid breathing vapors and avoid contact with skin and eyes. Do not smoke. Keep away from ignition sources.			
	Mark the area using proper signs.				
6.1.2.	For emergency responders:				



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	Use protective equipment; in case of inadequate ventilation use adequate airways protective equipment (see Section 8).			
6.2	Environmental precautions:	Environmental precautions:		
	Do not dispose of in sewage, Protection and Rescue Direct	drainage system and waterways. In case of large spillage contact National orate (NPRD) on 112.		
6.3	Methods and material for cor	ntainment and cleaning up		
6.3.1.	Bunding, covering of drains; capping procedures: Sand protective barrier or barriers made of similar materials.			
6.3.2.	Cleaning up:	Where possible, the substance can be absorbed by using absorbin material. Place the waste material in tightly closed impermeab containers. Store the substance in well ventilated storage rooms undisposal. Submit for disposal to the legal persons authorized by the Ministry of Environmental and Nature Protection. After disposal of the products, wash the area and and involved materials with water.		
6.3.3.	Other information:	Secure proper ventilation. Do not use incompatible materials (see Section 10).		
6.4	Reference to other sections			
	See Section 7 for information on safe handling.			
	See Section 8 for information on personal protection equipment.			
	See Section 13 for disposal information.			

SECTIO	SECTION 7. Handling and storage						
7.1	Precautions for safe handling						
7.1.1.	Protection measures						
	Measures to prevent fire:	asures to prevent fire:					
	Measures to prevent aerosol and dust generation	leasures to prevent aerosol and dust generation:					
	Measures to protect the environment:		Prevent spilling into the sewage system and waterways.				
	Other measures:		Protect against electrostatic charges.				
7.1.2.	Advice on general occupational hygiene:	Advice on general occupational hygiene:					
	Do not eat, drink or smoke in the workspace. Th	noroughly was	h hands after work and before eating.				
7.2	Conditions for safe storage, including any incompatibilities						
	Technical measures and storage conditions:	chnical measures and storage conditions: Keep in tig well ventila from 15 to					
	Packaging materials:	rer's original packaging.					



Environmental protection target

Requirements for storage rooms and vessels:

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tightly closed.

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Keep away from food and drink. Keep the containers

The storage must be made of hard material; floors

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	Advices for storage equipment:				must be resistant to chemicals. There must be no drain that directly leads into sewage system. Secure proper ventilation.				
	Further information on storage conditions:			ns:	Do not place the unused material in the storage room and do not use empty containers for storing other chemicals. Do not store with incompatible materials (see Section 10).				
7.3	Specific end use(s)								
	Recomme	Recommendations:							
	Industrial	sector spe	cific solu	tions:		_			
SECTIO	ON 8. Expos	ure contr	ols/perso	onal protec	tion				
8.1	Control pa	arameters							
	Substance		CAS No			Occupational exposu values/short term v		Bio	ological limit values
					ppm		mg/m³		
-	-			-				-	
Substa	ance name:	-							
EC No:	:	-	CAS No):					
DNEL									
					Indu	strial			
Route	of	Acı	ıte	Acut	te		Chronic		Chronic
expos	ure:	effect	local	effect sys	stemic		effect local		effect systemic
Oral		-		-		-		-	
Inhalat	tion	-		-		-		-	
Derma	Dermal -		-			-		-	
Critica	l physical par	rameters: s	olubility,	flammabilit	ty, corro	sivity:	-		
				,	Cons	umer			
Route expos			cute ct local		Acute ect systemic		Chronic effect local		Chronic effect systemic
Oral		-		-		-		-	
Inhalat	tion	-		-		-		-	
Derma	al	-		-		-		-	
PNEC									

PNEC



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Fresh water	no information available
Freshwater sediments	no information available
Marine water	no information available
Marine sediments	no information available
Food chain	no information available
Microorganisms in sewage treatment	no information available
Soil (agricultural)	no information available
Air	no information available

8.2	Exposure controls				
8.2.1.	Appropriate engineering contro	ols			
	prevent exposure during identified uses:		Use the product in well ventilated rooms. Use personal protective equipment. Do not eat, drink or smoke in the workspace.		
			In accordance with Section 7.		
	Organisational measures to pre exposure:	vent	Organization of work in order to reduce other worker's influence during work process.		
	Technical measures to prevent of	exposure:	Secure proper workspace ventilation in order to keep concentration levels in air below permitted levels. Secure stations for rinsing eyes and showering.		
8.2.2.	Personal protection equipment				
8.2.2.1.	Eye and face protection:	levels	glasses that stick to face (EN 166) or visor in case of lower of concentration in air; protective gas mask that covers the face in case of higher levels of concentration in air.		
8.2.2.2.	Skin protection	i			
	Hand protection:	The protective gloves have to satisfy the specification of Regulation (EU) 2016/425 and the related standard EN 374 Glove material: nitrile rubber Glove thickness: 0.40 mm Time until perforation: > 480 min During everyday work use cotton clothing (EN 340) and su footwear, such as rubber boots (EN 20345) or shoes that centire foot. In case of spilling hazard, use clothing made of impermeable material suitable for protection from liquid of (Viton, PVC, himex) and footwear made from the same material suitable for protection from the same material suitable from the same			
	Other skin protection:				
8.2.2.3.	Respiratory protection:	with a	Protective full face mask (EN 136) or half mask (EN 140) equipped with a filter for organic vapors, type "A" (boiling point >65°C) acording to EN 14387) used when concentration levels exceed GVI.		



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Trading name:	ng name: SODIUM METABISULFITE, SOLUTION				
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8.2.2.4.	Thermal hazards:	No information available				
8.2.3.	Environmental exposure controls					
	Substance/mixture related measures to prevent exposure:	See Section 6				
	Structural measures to prevent exposure:	Use modern equipment.				
	Organisational measures to prevent exposure:	Adapt the work process to the required working conditions of the workplace.				
	Technical measures to prevent exposure:	See Section 6				

Information on basic physical and chemical properties						
		Value	Method			
	Physical state:	liquid	No information available			
	Colour:	colourless	No information available			
	Odour:	No information available	No information available			
	Odor threshold:	No information available	No information available			
	рН:	No information available	No information available			
	Melting point / freezing point;	No information available	No information available			
	Initial boiling point and boiling range:	No information available	No information available			
	Flash point:	No information available	No information available			
	Evaporation rate:	No information available	No information available			
	Flammability (solid, gas):	No information available	No information available			
	Upper/lower flammability or explosive limits:	No information available	No information available			
	Vapour pressure:	No information available	No information available			
	Vapour density:	No information available	No information available			
	Relative density:	No information available	No information available			
	Bulk density:	No information available	No information available			
	Solubility(ies):	No information available	No information available			
	Partition coefficient: n-octanol/water (log Kow):	No information available	No information available			
	Auto-ignition temperature:	No information available	No information available			
	Decomposition temperature:	No information available	No information available			
	Viscosity:	No information available	No information available			
	Explosive properties:	No information available	No information available			



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	Oxidising properties:	No information available	No information available		
9.2	Other information				
	-				

SECTIO	SECTION 10. Stability and reactivity							
10.1	Reactivity:	See subsections 10.3 through 10.5.						
10.2	Chemical stability:	The product is chemically stable under standard ambient conditions of storing and using (room temperature).						
10.3	Possibility of hazardous reactions:	No information available						
10.4	Conditions to avoid:	No information available						
10.5	Incompatible materials:	No information available						
10.6	Hazardous decomposition products:	No information available						

SECTION	11. Toxicolo	gical informati	on				
11.1	Information o	n toxicological e	ffects				
4	Acute toxicity:						
Route of exposure	•	Method	Species	Dose	LD ₅₀ /LC ₅₀ or ATE _{mix}	Exposure ti	ime Results
Oral:		o information ⁄ailable	_	No inf availal	ormation ole	_	-
Dermal:		o information ⁄ailable	_	No information available		_	-
Inhalation	o·	o information ⁄ailable	-	_	No information available		-
	Specific targe	t organ toxicity - Specific		osure (STC	OT SE):	organ	Note
Oral:	N	o information av			lo information	-	
Dermal:		o information available			lo information		_
Inhalation		o information av			lo information		_
	<u> </u>						
	Aspiration haz	zard:	1	No informa			
	Irritation and	corrosion					
		Evacure t	ime	Species	Evaluati	ion Method	Note
		Exposure t					



available

available

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Trading name:	SODIUM METABISULFITE, SOLUTION							
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				ite or compile		., 2020	
Serious eye damage/irritatio	n -		-		-		
Sensitiz	ation						
Skin sensitizatior	n:	No inf	ormation avail	able.			
Respiratory sens	itization:	No inf	ormation avail	able.			
Sympto	ms related	to the pl	nysical, chemic	al and toxicolo	gical characteris	tics	
Oral exposure:	Har	mful if sv	vallowed.				
Dermal exposure	e: Har	mful if ab	sorbed throug	gh skin. May cau	use skin irritatio	n.	
Inhalation expos	ure: Har	mful if in	haled. May caւ	use respiratory t	tract irritation.		
Eye exposure:	Ma	y cause e	ye irritation.				
:							
Repeate	ed dose to	kicity (sub	acute, subchro	onic, chronic)		·	
	Do	se	Exposure time	Species	Method	Evaluation	Note
Subacute oral	No information available		No information available	No information available	No information available	No information available	۱ –
Subacute dermal	No info		No information available	No information available	No information available	No information available	1 -
Subacute inhalation	No info	ormation	No information available	No information available	No information available	No information available	۱ -
Subchronic oral	nal No informa		No information available	No information available	No information available	No information available	1 -
Subchronic dermal	nic No informat available		No information available	No information available	No information available	No information available	1 -
Subchronic inhalation	No information available		No information available	No information available	No information available	No information available	1 -
Chronic oral	No info		No information available	No information available	No information available	No information available	1 -
Chronic dermal	No info		No information	No information	No information	No informatior	1 -



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Trading name:	ing name: SODIUM METABISULFITE, SOLUTION							
Product code:	NM-OT-X**	Date of compilation:	05 July 2019	Version:	3			

Chronic inhalat		No information available		No information available	No information available	No information available	No information available	on	-	
	Specific t	target o	organ toxicit	y – repeated e	xposure (STOT	RE):				
	•			Specific effec	-	Target o	rgan		Note	
Subacu	bacute oral No information availab					No information	n available	_		
Subacu	ıte dermal		No informa	tion available		No information	n available	-		
Subacu	ıte inhalatio	on	No informa	tion available		No information	n available	-		
Subchr	onic oral		No informa	tion available		No information	n available	-		
Subchr	onic derma	al	No informa	tion available		No information	n available	-		
Subchr	onic inhala	ition	No informa	tion available		No information	n available	-		
Chronic	c oral		No informa	tion available		No information	n available	-		
Chronic	c dermal		No informa	tion available		No information	n available	-		
Chronic	c inhalatior	า	No informa	tion available		No information	n available	-		
	Carcinog Mutager Genotox Mutager	nicity <i>in</i>	vitro:		Based on avail	able data, the cla able data, the cla able data, the cla able data, the cla	ssification c	riteri riteri	a are not met. a are not met.	
	Germ cel	ll mutag	genicity:		Based on available data, the classification criteria are not met.					
	Reprodu	ctive to	xicity:		Based on avail	able data, the cla	ssification c	riteri	a are not met.	
	Summary	,	evaluation	of the CN	MR Based on met.	available data, t	he classifica	ation	criteria are not	
11.2	Practical	experie	ences:							
	Classification observations:				No inform	nation available				
	Other ob	servatio	ons:		No inform	nation available				
11.3	General i	notes:								
	_									

Toxicity 12.1



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Trading name:	SODIUM METABISULFITE, SOLUTION					
Product code:	NM-OT-X**	Date of compilation:	05 July 2019	Version:	3	

Acute (short-te toxicity	rm)	Dose	Exposure time	e Species	Method	Evaluation	Note
Fish		LC ₅₀	96 hours	No information available	No information available	No information available	-
Crustacea:		EC ₅₀	48 hours	No information available	No information available	No information available	-
Algae/aquatic μ	olants	IC ₅₀	4 days	No information available	No information available	No information available	-
Other organism	าร	-	_	-	-	-	-
Chronic (long-t toxicity	erm)	Dose	Exposure time	e Species	Method	Evaluation	Note
Fish		LC ₅₀	96 hours	No information available	No information available	No information available	-
Crustacea:		EC ₅₀	48 hours	No information available	No information available	No information available	-
Algae/aquatic p	olants	IC ₅₀	72 hours	No information available	No information available	No information available	-
Other organism	าร	-	-	-	-	-	-
12.2 Persist	ence a	nd degradab	ility				
		idation	iiity				
7101011		gradation ha	lf-lives	Method	Evaluatio	n	Note
Marine water		nformation av		No information available	No information		
Fresh water	No ir	nformation av	/ailable	No information available	No information available	n _	
Air	No ir	nformation av	/ailable	No information available	No information available	n -	
Soil	No ir	nformation av	/ailable	No information available	No information available	n -	
Riodeo	gradatio	on.					
% Degradation		Time (d	avs)	Method	Evaluatio	n	Note
No information available			ormation	No information available	No information		rmation



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Trading name: Product code: NM-OT			SODIUM METABISUL					ISULFITE, SOLUTION				
		OT-X** Date of com		mpilation: 05 July 2019			,	Version:	3			
					I			1	-			<u> </u>
12.3	Bioaccum	ulative	potential									
	Octanol-v	vater pa	artition coe	ficient	(log Kow))						
Valu	e Co	ncentra	ntion	рН	°C	Me	thod	Eval	uation		Note	
-	-		-		-	-		-		-		
	Bioconce	ntration	factor (BCI	=)								
٧	'alue		Species		N	Method		Evalua	tion		Note	
	rmation	No		mation		ormatio	n	No informa	tion			
availab	le	availa	ble		availab	le		available				
	Chronic e	cotoxici	ity	_								
	Value		Dose		osure ime	Spe	cies	Method	Evalu	ation	Note	
				No				No	No			
Chronic	toxicity or	fish	LC ₅₀		information available		nation	information available	inform availab		-	
				No	abie	availal No	bie	No	No	ile		
	toxicity or		EC ₅₀	1	mation	inform	nation	information	inform	ation	-	
crustac	ea (<i>Daphni</i> o	7)	30	avail	able	availal	ble	available	availab	le		
12.4	Mobility i	n soil										
	Known or	predict	ted distribu	tion in e	environm	nental co	ompart	ments:				
	No inforn	nation a	vailable									
	Surface to	ension:										
	Value		°C	С	oncentra	ition		Method			Note	
	No information available		o formation vailable		informa ailable	tion	No infavailab	ormation ble	-			



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Trading name:		SODIUM METABISULFITE, SOLUTION					
Product code:	NM-OT-X**	Date of compilation:	05 July 2019	Version:	3		

	Adsorption / desorption								
Transpor	t A/D coefficient Henry's constant	log Kow	Evaporation rate	Method	Note				
Soil-wate	No information available	No information available	No information available	No information available	-				
Water-ai	r No information available	No information available	No information available	No information available	-				
Soil-air	No information available	No information available	No information available	No information available	-				
12.5	Results of PBT and vPvB asset	comont							
		ssment							
	Not applicable.								
12.6	Other adverse effects								
	No further relevant information	on available.							
SECTION	I 13. Disposal consideration	ıs							
13.1	Waste treatment methods								
	f								
13.1.1.	Product/Packaging disposa	l:							
	Submit for disposal to the I Protection.	egal person autho	rized by the Ministr	y of Environmental a	and Nature				
13.1.2.	Waste codes/waste designa	ations according to	Law:						
	15 01 10*: Packaging that c substances	ontains residual h	azardous substance	s or is contaminated	l with hazardous				
13.1.3.	Waste treatment – relevant	information:							
	No information available								
13.1.4.	Sewage disposal – relevant	information:							
	Waste must not be dispose	Waste must not be disposed of into the sewage system.							
13.1.5.	Other disposal recommend	ations:							
	Other disposal recommendations: Do not dispose of the product's remains into the sewage system. Submit the remains to the collectors authorized by the ministry in charge. Do not dispose of the packaging into the sewage system. Submit the packaging to the collectors authorized by the ministry in charge.								
	the packaging to the collectors authorized by the ministry in charge. Relevant Community provisions:								



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Trading name:	SODIUM METABISULFITE, SOLUTION					
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Disposal must be made accord	ling to official regulations.
SECTION 14 TRANSPORT INFORMATION	DN
Transporting/shipment by road	(ADR)
UN number:	Not subject to transport regulations
UN proper shipping name:	-
Transport hazard class(es):	-
Packing group:	-
Environmentally hazardous:	-
Special precautions for user:	-
Transporting/shipment by rail (R	ID)
UN number:	Not subject to transport regulations
UN proper shipping name:	-
Transport hazard class(es):	-
Packing group:	-
Environmentally hazardous:	-
Special precautions for user:	-
Inland waterway transport (ADN	
UN number:	Not subject to transport regulations
UN proper shipping name:	-
Transport hazard class(es):	-
Packing group:	-
Environmentally hazardous:	-
Special precautions for user:	-
Transporting/shipment by sea (I	MDG)
UN number:	Not subject to transport regulations
UN proper shipping name:	-
Transport hazard class(es):	-
Packing group:	-
Environmentally hazardous:	-
Special precautions for user:	-
Transport in bulk according to Annex II of MARPOL 73/78 and the IBC code:	-
Transporting/shipment by air (IC	CAO-TI/IATA-DGR)
UN number:	Not subject to transport regulations
UN proper shipping name:	-



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Trading name:	SODIUM METABISULFITE, SOLUTION						
Product code:	NM-OT-X**	Date of compilation:	05 July 2019	Version:	3		

Transport hazard class(es):	-
Packing group:	-
Environmentally hazardous:	-
Special precautions for user:	-
Further information: -	

SECTIO	ION 15. Regulatory information					
15.1	Safety, health and environ	nmental regulations/legislation specific for the substance or mixture				
	EU regulations					
	Authorization and/or rest	rictions of use				
	Authorizations:	-				
	Restrictions:	-				
	Other EU regulations:	EC Regulation No. 1906/2007 and EC Regulation No. 1272/2008 of the European Parliament and the European Council; Regulation (EC) No. 1907/2006 of the European Parliament and Council on registration, evaluation, authorization and restriction of chemical substance (REACH); EC Regulation No. 2037/200 of the European Parliament and Council from 29 June 2000 on substances that damage the ozone layer; EC Regulation No. 689/2008 of the European Parliament and Council from 17 June 2008 concerning the export and import of dangerous chemicals; EC Regulation No. 850/2004 of the European Parliament and Council from 29 April 2004 about persistent organic pollutants; Directive 2008/98/EC of the European Parliament and Council of 19				
	Information according 199 guideline)	November 2008 on waste and repealing certain Directives 99/13/EC about limitation of emissions of volatile organic compounds (VOC-				
	National legislation:	Chemicals Act, Regulation on classification, packaging and labeling of dangerous substances, Ordinance on occupational exposure limit values and on biological limit values, Regulation on categories, types and classification of waste with a waste catalog and list of hazardous waste, Ordinance on writing Material safety data sheet, Transport of Hazardous Substances Act				
15.2	Chemical safety assessme	nt				
	None					

SECTI	ION 16. Other information	
16.1	Indication of changes:	-



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Trading name:		SODIUM METABISULFITE, SOLUTION			
Product code:	NM-OT-X**	Date of compilation:	05 July 2019	Version:	3

16.2	6.2 Abbreviations and acronyms:		PBT Stable, bioaccumulative and toxic vPvB Strongly stable and strongly bioaccumulative. LD ₅₀ Lethal dose, 50% LC ₅₀ Lethal concentration, 50% TCOJ Specific target organ toxicity - single exposure		
16.3.		literature references and rce of data:	-		
16.4. Classification and procedure us 1272/2008 (CLP)			used to derive the classification for mixture according to Regulation (EC)		
Classification		1	Classification procedure		
-			-		
16.5.	Rele	evant H statements (num	per and full text)		
		H302	Harmful if swallowed.		
	H:	H318	Causes serious eye damage.		
		H319	Causes serious eye irritation.		
		EUH031	Contact with acids liberates toxic gas.		
16.6.	5.6. Training advice:		-		
16.7.	16.7. Further information:		** "X" in the product code marks different volumes (different packagings of the product) We are not responsible for consequences in case of failure to comply with instructions for use or improper use of the product described in this material safety data sheet.		

ANNEX: Exposure scenario resulting to chemical safety assessment
-



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Trading name:			HCL REAGENT,	P.A.S.		
	Product code:	HCLP-OT-X**	Date of compilation:	27 June 2019	Version:	3

SECTIO	ON 1: Identification of t	he substance	e/mixture	and of the company/undertaking	
1.1	Product identifier				
	Trading name:	HCL REAGE	NT, P.A.S.		
	Chemical name:	-			
	Catalogue number:	HCLP-OT-X	**		
1.2	Relevant identified use	s of the subs	tance or m	nixture and uses advised against	
	Uses:		For use	with special staining kits in histopathology.	
	Uses advised against:		Only the	identified uses are advised.	
	Reason why uses advis	ed against:	The product is intended for use only as an <i>in vitro</i> diagragainst: medical device, registered at the Agency for Medicinal Products Medical Devices and there is no reason to use it for other purpo		
1.3	Details of the supplier	of the safety	data shee	t	
	Supplier:		BioGnos	t Ltd.	
	Address:		Medjugorska 59, Zagreb		
	Telephone number:		+385 1 2409997		
	Telefax.:		+385 1 2404039		
	e-mail of competent p	erson:	msds@biognost.hr		
	National contact:		-		
1.4	Emergency telephone	number			
	National Protection an	ection and Rescue Directo		112	
	Medical information:			+385 1 2348 342	
	Other information:			-	

SECTIO	SECTION 2. Hazards identification					
2.1	Classification of the substance	Classification of the substance or mixture				
2.1.1	Classification according to Reg	gulation (EC) No 12	272/2008 (CLP)			
	Hazard class and categ	ory code:	Hazard statements*:			
	Not identified as hazardous su	bstance.	-			
2.1.2.	Additional information					
	-	-				
*For fu	ll text of Hazard- and EU Hazard	-statements: see S	ECTION 16			
2.2	Label elements					
	Product identification:	HCL REAGENT, I	P.A.S.			
	Identification number: -					
	Authorization number:	-				
	Hazard pictograms:	-				



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Trading name:	HCL REAGENT, P.A.S.					
Product code:	HCLP-OT-X**	Date of compilation:	27 June 2019	Version:	3	

	Signal word:	-
	Hazard statements:	-
	Precautionary statements:	-
	Supplemetal hazard information (EU):	-
2.3	Other hazards	
	-	

SECTION 3. Co	SECTION 3. Composition/information on ingredients					
CAS/ EC/ Index number	REACH Registration No	Weight % content (or range)	Identification name	Classification according to Regulation (EC) No 1272/2008 (CLP)		
7647-01-0/ 231-595-7/ 017-002-00-2	_	< 5 %	hydrochloric acid	Skin Corr. 1A; H314 Acute Tox. 3; H331		

SECTI	SECTION 4. First aid measures				
4.1	Description of first aid measures				
	General notes:	If the suggested first aid measures do not prove sufficient, seek medical attention.			
	Following inhalation:	Carry the afflicted person out of the contaminated area into a well-ventilated area or out for fresh air. In case of difficult breathing, provide the afflicted person with oxygen.			
	Following skin contact:	Remove contaminated clothing. Immediately wash with plenty of water for at least 20 minutes. Seek medical assistance if the symptoms of irritation remain.			
	Following eye contact:	Rinse out with plenty of water with the eyelid held wide open for at least 20 minutes. If the symptoms remain, immediately call in ophthalmologist.			
	Following ingestion:	Rinse the mouth thoroughly with 1-2 glasses of water. Immediately consult a physician and show the container or label. In case of swallowing large quantities, transport the afflicted person to the hospital.			
	Self-protection of the first aider:	-			
4.2	Most important symptoms and effects, both acute and delayed				
	Following inhalation:	According to our findings, chemical, physical and toxicological properties of the substance have not been entirely tested.			
	Following skin contact:	According to our findings, chemical, physical and toxicological properties of the substance have not been entirely tested.			



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Trading name:	HCL REAGENT, P.A.S.					
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Following eye contact:		According to our findings, chemical, physical and toxicological properties of the substance have not been entirely tested.	
	Following ingestion:	According to our findings, chemical, physical and toxicological properties of the substance have not been entirely tested.	
4.3	Indication of any immediate medical attention and special treatment needed		
	-		

SECTIO	SECTION 5. Firefighting measures				
5.1	Extinguishing media				
	Suitable extinguishing media: water spray, dry powder, CO ₂ or alcohol resistant foam				
	Unsuitable extinguishing media: Water with full jet				
5.2	Special hazards arising from the substance or mixture				
	Hazardous combustion products: no information available				
5.3	Advice for firefighters				
	Use a self-contained open-circuit compressed air breathing apparatus and fireproof clothing.				
5.4	Additional information				
	Cool endangered receptacles with water spray. Collect contaminated fire fighting water separately. Do not contaminate the environment with extinguishing media.				

SECTIO	ON 6. Accidental release meas	ıres	
6.1	Personal precautions, protective equipment and emergency procedures		
6.1.1.	For non-emergency personnel		
	Protective equipment:	Use personal protective equipment (see Section 8).	
	Accident prevention methods:	Evacuate members of all non-essential personnel and those members without protective equipment. Avoid breathing vapors and avoid contact with skin and eyes. Do not smoke. Keep away from ignition sources.	
	Emergency procedures:	Mark the area using proper signs.	
6.1.2.	For emergency responders:		
	Use protective equipment; in c (see Section 8).	ase of inadequate ventilation use adequate airways protective equipment	
6.2	Environmental precautions:		
	Do not dispose of in sewage, drainage system and waterways. In case of large spillage contact Nation Protection and Rescue Directorate (NPRD) on 112. 6.3 Methods and material for containment and cleaning up		
6.3			
6.3.1.	Bunding, covering of drains; capping procedures:	Sand protective barrier or barriers made of similar materials.	



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Trading name:		HCL REAGENT,	P.A.S.		
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6.3.2.	Cleaning up:	Where possible, the substance can be absorbed by using absorbing material. Place the waste material in tightly closed impermeable containers. Store the substance in well ventilated storage rooms until disposal. Submit for disposal to the legal persons authorized by the Ministry of Environmental and Nature Protection. After disposal of the products, wash the area and and involved materials with water.
6.3.3.	Other information:	Secure proper ventilation. Do not use incompatible materials (see Section 10).
6.4	Reference to other sections	
	See Section 7 for information on safe handling. See Section 8 for information on personal protection equipment. See Section 13 for disposal information.	

SECTION	ON 7. Handling and storage	N 7. Handling and storage				
7.1	Precautions for safe handling					
7.1.1.	Protection measures					
	Measures to prevent fire:		Use in well ventilated storage rooms. Keep away from sources of ignition and heat. Do not use tools that cause sparks. Do not smoke.			
	Measures to prevent aerosol and dust generation	on:	Secure proper ventilation.			
	Measures to protect the environment:	Prevent spilling into the sewage system and waterways.				
	Other measures:	Protect against electrostatic charges.				
7.1.2.	Advice on general occupational hygiene:					
	Do not eat, drink or smoke in the workspace. Thoroughly wash hands after work and before eating.					
7.2	Conditions for safe storage, including any incompatibilities					
	Technical measures and storage conditions:	ghtly closed and upright set containers in a ated storage rooms at temperatures ranging 25 °C. Protect from heat and direct sunlight.				
	Packaging materials:	Manufactu	urer's original packaging.			
	Requirements for storage rooms and vessels:	Keep away	y from food and drink. Keep the containers sed.			
	Advices for storage equipment:	The storage must be made of hard material; floors must be resistant to chemicals. There must be no drain that directly leads into sewage system. Secure proper ventilation.				
	Further information on storage conditions:	and do no	ace the unused material in the storage room of use empty containers for storing other Do not store with incompatible materials on 10).			



Microorganisms in sewage treatment

Soil (agricultural)

Air

SAFETY DATA SHEET BIOGNOST® According to Regulation (EC) No. 1907/2006

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7.3	Specific end use(s)	
	Recommendations:	-
	Industrial sector specific solutions:	-

Industrial	sector sp	ecific solu	tions:		_			
SECTION 8. Expo	sure cont	rols/perso	onal protect	tion				
8.1 Control p	arameters	i						
Cubatana		C.A	C No.			exposure limit term values		Diological limit values
Substance CAS No			pm	mg/m ³		Biological limit values		
Hydrogen chloride	9	764	7-01-0	5,	/10	8/15	-	
Substance name:	-							
EC No: - CAS No: -								
DNEL								
				Indu	ustrial			
Route of	Ac	cute	Acut	te		Chronic		Chronic
exposure:	effec	t local	effect sys	stemic		effect local		effect systemic
Oral	-		-		-			-
Inhalation	-		-		-			-
Dermal	-		-		_			-
Critical physical pa	arameters:	solubility,	flammabilit	ty, corre	osivity:	-		
				Con	sumer			
Route of	A	Acute	Acut	te		Chronic		Chronic
exposure:	effe	ect local	effect sys	stemic		effect local		effect systemic
Oral	-		-		-			-
Inhalation	-		-		-			-
Dermal	-		-					-
PNEC								
Environmental pro	tection ta	rget			PNEC			
Fresh water			r	no information available				
Freshwater sediments			r	no inform	nation available			
Marine water				r	no inform	nation available		
Marine sediments				r	no inform	nation available		
Food chain				r	no information available			

no information available

no information available

no information available



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Trading nar	ne:		HCL REAGENT,	P.A.S.		
Product cod	de:	HCLP-OT-X**	Date of compilation:	27 June 2019	Version:	3

8.2	Exposure controls				
8.2.1.	Appropriate engineering controls				
	Substance/mixture related measu prevent exposure during identifie		Use the product in well ventilated rooms. Use personal protective equipment. Do not eat, drink or smoke in the workspace.		
	Structural measures to prevent exposure:		In accordance with Section 7.		
	Organisational measures to preve exposure:	ent	Organization of work in order to reduce other worker's influence during work process.		
	Technical measures to prevent exposure:		Secure proper workspace ventilation in order to keep concentration levels in air below permitted levels. Secure stations for rinsing eyes and showering.		
8.2.2.	Personal protection equipment	nent			
8.2.2.1.	Eye and face protection:	levels	glasses that stick to face (EN 166) or visor in case of lower of concentration in air; protective gas mask that covers the face in case of higher levels of concentration in air.		
8.2.2.2.	Skin protection				
	Hand protection:		otective gloves have to satisfy the specification of ation (EU) 2016/425 and the related standard EN 374. Glove material: nitrile rubber Glove thickness: 0.40 mm Time until perforation: > 480 min		
	Other skin protection:	footwe entire imperr	everyday work use cotton clothing (EN 340) and suitable ear, such as rubber boots (EN 20345) or shoes that cover the foot. In case of spilling hazard, use clothing made of meable material suitable for protection from liquid chemicals PVC, himex) and footwear made from the same material.		
8.2.2.3.	Respiratory protection:	with a	tive full face mask (EN 136) or half mask (EN 140) equipped filter for organic vapors, type "A" (boiling point >65°C) ng to EN 14387) used when concentration levels exceed GVI.		
8.2.2.4.	Thermal hazards:	No info	ormation available		
8.2.3.	Environmental exposure controls				
	Substance/mixture related measures to prevent exposure:	See Se	ction 6		
	Structural measures to prevent exposure:	Use mo	odern equipment.		
	Organisational measures to prevent exposure:	Adapt the work process to the required working conditions of the workplace.			



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Trading name:		HCL REAGENT,	P.A.S.		
Product code:	HCLP-OT-X**	Date of compilation:	27 June 2019	Version:	3

Technical measures to prevent	See Section 6
exposure:	See Section 0

Information on basic physical and	chemical properties	
	Value	Method
Physical state:	liquid	No information available
Colour:	colourless	No information available
Odour:	hydrochloric acid	No information available
Odor threshold:	No information available	No information available
pH:	No information available	No information available
Melting point / freezing point;	No information available	No information available
Initial boiling point and boiling range:	No information available	No information available
Flash point:	No information available	No information available
Evaporation rate:	No information available	No information available
Flammability (solid, gas):	No information available	No information available
Upper/lower flammability or explosive limits:	No information available	No information available
Vapour pressure:	No information available	No information available
Vapour density:	No information available	No information available
Relative density:	No information available	No information available
Bulk density:	No information available	No information available
Solubility(ies):	No information available	No information available
Partition coefficient: n-octanol/water (log Kow):	No information available	No information available
Auto-ignition temperature:	No information available	No information available
Decomposition temperature:	No information available	No information available
Viscosity:	No information available	No information available
Explosive properties:	No information available	No information available
Oxidising properties:	No information available	No information available

SECTION 10. Stability and reactivity	
10.1 Reactivity:	See subsections 10.3 through 10.5.



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Trading	ı name:		HCL REAGENT,	P.A.S.	HCL REAGENT, P.A.S.				
Produc	t code:	HCLP-OT-X**	Date of compilation:	27 June 2019	Version:	3			

10.2	Chemical stability:	The product is chemically stable under standard ambient conditions of storing and using (room temperature).
10.3	Possibility of hazardous reactions:	No information available
10.4	Conditions to avoid:	No information available
10.5	Incompatible materials:	No information available
10.6	Hazardous decomposition products:	No information available

	exicological informati etion on toxicological e						
Acute to							
Route of exposure:	Method	Species	Do	se LD ₅₀ /LC ₅₀ or ATE _{mix}	Exposure t	ime	Results
Oral:	No information available	-		nformation lable	_		_
Dermal:	No information available	_		nformation lable	_		_
Inhalation:	No information available	-		nformation lable	_		_
:							
Specific	target organ toxicity -	- single exp	osure (S	TOT SE):		i	
	Specific	effects		Target org		rgan	
Oral:	No information a	vailable	No information available		vailable	-	
Dermal:	No information a	vailable	No information available		-		
Inhalation:	No information a	vailable	No information available -				
Aspirati	on hazard:		No inforn	nation available.			
Irritatio	n and corrosion						
	Exposure t	ime	Speci	es Evaluatio	on Method		Note
Skin corrosion/irritati	on:	-	-	-	-	-	
Serious eye damage/irritatio	n -	-	-	-	-	-	
Sensitiz	ation						
Skin sensitization	n: No infor	mation ava	ilable.				
Respiratory sensitization: No information as		mation ava	ilable.				



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Trading name	:	HCL REAGENT, P.A.S.				
Product code:	HCLP-OT-X**	Date of compilation:	27 June 2019	Version:	3	

Sympto	ms rel	ated to the ph	nysical, chemic	al and toxicolog	gical characterist	ics	
Oral exposure: Harmful if swa		vallowed.					
Dermal exposure	:	Harmful if ab	osorbed through skin. May cause skin irritation.				
Inhalation expos	ure:	Harmful if inl	naled. May cau	ıse respiratory t	ract irritation.		
Eye exposure:		May cause ey	ye irritation.				
Repeate	ed dos	e toxicity (sub	acute, subchro	onic, chronic)			
		Dose	Exposure time	Species	Method	Evaluation	Note
Subacute oral	No avail	information able	No information available	No information available	No information available	No information available	า -
Subacute dermal	No avail	information able	No information available	No information available	No information available	No information available	า -
Subacute inhalation	No avail	information able	No information available	No information available	No information available	No information available	า -
Subchronic oral	No avail	information able	No information available	No information available	No information available	No information available	า -
Subchronic dermal	No avail	information able	No information available	No information available	No information available	No information available	า -
Subchronic inhalation	No avail	information able	No information available	No information available	No information available	No information available	า -
Chronic oral	No avail	information able	No information available	No information available	No information available	No information available	า -
Chronic dermal	No avail	information able	No information available	No information available	No information available	No information available	า -
Chronic inhalation	No avail	information able	No information available	No information available	No information available	No information available	า -
İ							
Specific	target	organ toxicit	y – repeated e	xposure (STOT	RE):		
			Specific effec	ts	Target o		Note
Subacute oral		No informa	tion available		No information	n available	-
Subacute derma	l	No informa	tion available		No information	n available	-



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Trading name:					
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11.3	General notes:						
	Other observa	tions:	No information available				
	Classification c		No information available				
11.2	Practical exper	iences:					
	Summary of properties:	evaluation of the CM	R Based on available data, the classificamet.	ntion criteria are no			
	Reproductive t	oxicity.	based on available data, the classification c	interia are not met.			
	Reproductive t	<u> </u>	Based on available data, the classification criteria are not met.				
	Mutagenicity in Germ cell muta		Based on available data, the classification criteria are not met. Based on available data, the classification criteria are not met.				
	Genotoxicity:		Based on available data, the classification criteria are not met.				
	Mutagenicity i		Based on available data, the classification criteria are not met.				
	Carcinogenicity:		Based on available data, the classification criteria are not met.				
	-	arcinogenicity; mutagenicity;					
Cnronic	c inhalation	No information available	No information available	-			
	c dermal	No information available	No information available	-			
Chroni		No information available	No information available	-			
	onic inhalation	No information available	No information available	-			
Subchr	onic dermal	No information available	No information available	-			
Subchr	onic oral	No information available	No information available	-			
Subacu	ıte inhalation	No information available	No information available	-			

SECTION 12. Ecological information								
12.1 Toxicity								
Acute (short-term) toxicity	Dose	Exposure time	Species	Method	Evaluation	Note		
Fish	LC ₅₀	96 hours	No information available	No information available	No information available	-		
Crustacea:	EC ₅₀	48 hours	No information available	No information available	No information available	-		



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Algae/aquatic plants	IC ₅₀	4 days	No information available	No information available	No information available	-
Other organisms	-	-	-	_	-	-
Chronic (long-term) toxicity	Dose	Exposure time	Species	Method	Evaluation	Note
Fish	LC ₅₀	96 hours	No information available	No information available	No information available	-
Crustacea:	EC ₅₀	48 hours	No information available	No information available	No information available	_
Algae/aquatic plants	IC ₅₀	72 hours	No information available	No information available	No information available	-
Other organisms	-	-	-	-	-	-

12.2 Persistence and degradability

Abiotic degradation

		1		
	Degradation half-lives	Method	Evaluation	Note
Marine water	No information available	No information available	No information available	-
Fresh water	No information available	No information available	No information available	-
Air	No information available	No information available	No information available	-
Soil	No information available	No information available	No information available	-

Biodegradation

% Degradation	Time (days)	Method	Evaluation	Note
No information available	No information available	No information available	No information available	No information available

12.3 Bioaccumulative potential

Octanol-water	partition	coefficient	(log	Kow)	
---------------	-----------	-------------	------	------	--

OC	tarior-water partition	COETHCIETT	t (log Ko	vv)		
Value	Concentration	рН	°C	Method	Evaluation	Note
-	-	_	_	-	-	-



											Ра	ge 12 of 16	
Trading r	name:					HCL	REAG	ENT, P.	A.S.				
Product of	code:	HCLP	-OT-X**		Date	of co	mpilati	on:	27 Jur	ne 2019	١	/ersion:	3
P	Sioconcer	ntration	factor (BCF)										
Valu		Ittation	Species		N	1ethoc	<u> </u>	E ₁	valuatio	on		Note	
No inform		No	inform	ation	No info				ormatic				
available		availal	ble		availabl	e		availab	ole		-		
	`la	4	<u> </u>										
	Chronic e	COTOXICII	ty	Evn	osure								
	Value		Dose		me	Spe	ecies	Metl	nod	Evalua	tion	Note	
				No		No		No		No			
Chronic to	oxicity on	fish	LC ₅₀	infori	mation able	inforr availa	mation able	inform availab		informat available		_	
				No		No		No		No	-		
Chronic to crustacea	-		EC ₅₀	infor	mation	inform	mation	inform		informa		-	
	(-,		availa	able	availa	able	availab	ole	available	9		
12.4 N	Лobility ir	n soil											
			ed distributi	on in e	nvironm	ental d	ompart	ments:					
	No inform			011 111 0			-ompare						
	Surface te												
	Value		°C	C	oncentra	tion		Metho	od			Note	
	No	No		No	informat	ion	No inf	ormatio	n				
	nformatic Ivailable		formation ailable		ilable	.1011	availal			-			
	ivaliable	u v	anabic										
I		<u>i</u>		<u>i</u>			<u>.i</u>			<u></u>			
Δ	Adsorptio	n / desc	orption										
Transport		A/D coe		lc	g Kow	F۱	/aporati	on rate		Method		Note	
	H	enry's c											
Soil-water	. No avail		nformation	No ir	nformatio Ible		o inform ⁄ailable	nation	No ir availa	nformatio able	n .	-	
	No		nformation		nformatio		o inform	nation		nformatio	n		
Water-air	avail			availa			ailable		availa		•	-	



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Soil-air	No availa	information able	No information available	No information available	No information available	-	
12.5	Results of	PBT and vPvB asses	ssment				
	Not applic						
12.6	Other adv	erse effects					
	No further	relevant informati	on available.				
		osal consideration	<u>s</u>				
13.1	vvaste tr	reatment methods					
13.1.1.	Product	/Packaging disposa	l:				
2012121		3 3 1		orized by the Minis	try of Environmental	l and Nature	
	Protection	•					
13.1.2.		odes/waste designa					
	15 01 10 substance		ontains residual h	azardous substanc	es or is contaminate	ed with hazardo	us
1212							
13.1.3.		reatment – relevant rmation available	information:				
	INO INIOI	mation available					
13.1.4.	Sewage	disposal – relevant	information:				
		nust not be dispose		ge system.			
	·						
13.1.5.	Other di	sposal recommend	ations:				
	authoriz		n charge. Do not	dispose of the pac	n. Submit the remair kaging into the sewa arge.		
13.1.6.	Relevant	t Community provis	ions:				
	Disposa	must be made acc	ording to official r	regulations.			
CECTIO	NI 14 TDAN	ICDODT INCODIA	TION				
SECTIO		ng/shipment by roa					
UN nur		ng/simpilient by 10		o transport regula	tions		
	per shipping	g name:	-				



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Trading name:	HCL REAGENT, P.A.S.					
Product code:	HCLP-OT-X**		Date of compilation:	27 June 2019	Version:	3
,		·	1		:	
Transport hazard cla	ass(es):	-				
Packing group:		-				
Environmentally haz	zardous:	-				
Special precautions	for user:	_				
Transportir	ng/shipment by rail (RI	D)				
UN number:		No	t subject to transport regu	lations		
UN proper shipping	ı name:	-				
Transport hazard cla	ass(es):	-				
Packing group:		-				
Environmentally haz	zardous:	-				
Special precautions	for user:	_				
Inland wate	erway transport (ADN)					
UN number:		No	t subject to transport regu	lations		
UN proper shipping	ı name:	-				
Transport hazard cla	ass(es):	-				
Packing group:		-				
Environmentally haz	zardous:	-				
Special precautions	for user:	_				
Transportir	ng/shipment by sea (IN	ИDG)			
UN number:		No	t subject to transport regu	lations		
UN proper shipping	ı name:	-				
Transport hazard cla	ass(es):	-				
Packing group:		-				
Environmentally haz	zardous:	-				
Special precautions	for user:	-				
Transport in bulk a of MARPOL 73/78 a	ccording to Annex II and the IBC code:	_				
Transportir	ng/shipment by air (IC/	AO-	ΓΙ/ΙΑΤΑ-DGR)			
UN number:		No	t subject to transport regu	lations		
UN proper shipping	ı name:	-				
Transport hazard cla	ass(es):	-				
Packing group:		-				
Environmentally haz	zardous:	-				
Special precautions	for user:	-				
Further information:	: -					



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15.1	Safety, health and enviror	nmental regulations/legislation specific for the substance or mixture
	EU regulations	
	Authorization and/or rest	trictions of use
	Authorizations:	-
	Restrictions:	-
	Other EU regulations:	EC Regulation No. 1906/2007 and EC Regulation No. 1272/2008 of the European Parliament and the European Council; Regulation (EC) No. 1907/2006 of the European Parliament and Council on registration, evaluation, authorization and restriction of chemical substances (REACH); EC Regulation No. 2037/200 of the European Parliament and Council from 29 June 2000 on substances that damage the ozone layer; EC Regulation No. 689/2008 of the European Parliament and Council from 17 June 2008 concerning the export and import of dangerous chemicals; EC Regulation No. 850/2004 of the European Parliament and Council from 29 April 2004 about persistent organic pollutants; Directive 2008/98/EC of the European Parliament and Council of 19 November 2008 on waste and repealing certain Directives
	Information according 19 guideline)	99/13/EC about limitation of emissions of volatile organic compounds (VOC-
	National legislation:	Chemicals Act, Regulation on classification, packaging and labeling of dangerous substances, Ordinance on occupational exposure limit values and on biological limit values, Regulation on categories, types and classification of waste with a waste catalog and list of hazardous waste, Ordinance on writing Material safety data sheet, Transport of Hazardous Substances Act
15.2	Chemical safety assessme	ent
	None	

SECTIO	ECTION 16. Other information					
16.1	Indication of changes:	-				
		PBT	Stable, bioaccumulative and toxic			
		vPvB	Strongly stable and strongly bioaccumulative.			
16.2	Abbreviations and acronyms:	LD ₅₀	Lethal dose, 50%			
		LC ₅₀	Lethal concentration, 50%			
		TCOJ	Specific target organ toxicity - single exposure			
16.3.	Key literature references and source of data:	-				



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16.4.	Classification and procedure used to derive the classification for mixture according to Regulation (EC) 1272/2008 (CLP)					
Classifi	cation	Classification procedure				
_		-				
16.5.	Relevant H statements (num	ber and full text)				
	H: H314	Causes severe skin burns and eye damage.				
	H331	Toxic if inhaled.				
16.6.	Training advice:	-				
		** "X" in the product code marks different volumes (different packagings of the product)				
16.7.	Further information:	We are not responsible for consequences in case of failure to comply with instructions for use or improper use of the product described in this material safety data sheet.				

ANNEX: Exposure scenario resulting to chemical safety assessment
-

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Product code:	HEMML-OT-X**	Revision date:	03.06.2019.	Version:	5

SECTI	ON 1: Identification of	the substa	nce/mixture a	and of the company/undertaking			
1.1.	Product identifier						
	Trading name:	HEMATO	XYLIN ML				
	Chemical name:	-					
	Catalogue number:	HEMML-	HEMML-OT-X**				
1.2.	Relevant identified us	ses of the substance or mixture and uses advised against					
	Uses:		Modified	hematoxylin acc. to Mayer-Lillie for nuclear staining.			
	Uses advised against:		Only the i	dentified uses are advised.			
	Reason why uses advi	ised against	uct is intended for use only as an <i>in vitro</i> diagnostic evice, registered at the Agency for Medicinal Products and Devices and there is no reason to use it for other purposes				
1.3.	1.3. Details of the supplier of the safety data sheet						
	Supplier:	Supplier: B		BioGnost Ltd.			
	Address:		Medjugorska 59, Zagreb				
	Telephone number:		+385 1 2409997				
	Fax no.:		+385 1 2404039				
	e-mail of competent	person:	msds@biogn	<u>ost.hr</u>			
	National contact:		-				
1.4.	Emergency telephone	mergency telephone number					
_	National Protection a	nd Rescue [Directorate:	112			
	Medical information:			+385 1 2348 342			
	Other information:			-			

SECTIO	TION 2. Hazards identification						
2.1.	Classification of the substance or mixture						
2.1.1.	Classification according to Regulation (EC) No 1272/2008 (CLP)						
	Hazard class and cate	gory code:	Hazard statements*:				
	Not identified as hazardous s	ubstance	-				
2.1.2.	Additional information						
	-						
*For fu	ll text of Hazard- and EU Hazard	d-statements: see S	ection 16				
2.2.	Label elements						
	Product identification:	HEMATOXYL	IN ML				
	Identification number:	-					
	Authorization number: -						
	Hazard pictograms: -						
	Signal word:	-					

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	Hazard statements: Precautionary statements:	-
	Further information:	-
2.3.	Other hazards	
	-	

SECTION 3. Co	SECTION 3. Composition/information on ingredients								
CAS/ EC/ Index no.	REACH Registration No	Weight % content (or range)	Identification name	Classification according to Regulation (EC) No 1272/2008 (CLP)					
56-81-5/ 200-289-5/ -	-	≤ 50%	glycerol	Not Classified					

SECTI	ON 4. First aid measures				
4.1.	Description of first aid mea	asures			
	General notes:		-		
	Following inhalation: Following skin contact: Following eye contact: Following ingestion:		Carry the afflicted person out of the contaminated area into a well-ventilated area or out for fresh air. If breathing becomes erratic or it stops, immediately apply artificial respiration (other than mouth-to-mouth) and contact a physician.		
			Remove contaminated clothing. Immediately wash with plenty of water and soap. Seek medical assistance if the symptoms of irritation remain.		
			Rinse out with plenty of water with the eyelid held wide open using clean fingers. If the symptoms remain, immediately call a physician.		
			Provide the person with water (2 glasses at most). Immediately consult a physician. In extreme case, if medical assistance is not available within 1 hour, induce vomiting (only if the person is fully awake and conscious), apply activated charcoal (20-40 g in a 10% solution) and consult a physician as soon as possible.		
	Self-protection of the first	aider:	Treat symptomatically.		
4.2.	Most important symptoms	s and eff	fects, both acute and delayed		
	Following inhalation:		tion of large amounts of vapors in inadequately ventilated perimeter ause coughing, sneezing, headache and nausea.		
	FOIIOWING END CONTACT.		irritation. After short exposure, resorption effects are not likely. Long- xposure may cause drying, cracking and tingling sensation of skin.		
	Following eye contact:		eye contact may cause slight to moderate irritation, lacrimation and g sensation.		

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	Following ingestion:	Swallowing may cause irritation of mucosa, tingling sensation in the mouth, burning sensation; higher levels of concentration may cause nausea, abdominal pain and vomiting. In case of vomiting, aspiration causes coughing, difficult breathing. Higher levels of concentration may cause suffocation.
4.3.	Indication of any immedia	ate medical attention and special treatment needed
	-	

SECTIO	ECTION 5. Firefighting measures						
5.1.	Extinguishing media	Extinguishing media					
	Suitable extinguishing media:	nall fire - water spray, dry powder, CO ₂ rge fire - water spray or alcohol-resistant foam					
	Unsuitable extinguishing media: Wa	ater with full jet.					
5.2.	Special hazards arising from the substa	ance or mixture					
	Hazardous combustion products: Fo	rmation of toxic gases is possible during heating or in case of fire.					
5.3.	Advice for firefighters						
	Use a self-contained open-circuit compressed air breathing apparatus and fireproof clothing. Cool closed containers exposed to fire with water spray or vapor.						
5.4.	Additional information						
	Remove sources of heat and ignition.						
	Do not contaminate the environment	with extinguishing media.					

SECTIO	SECTION 6. Accidental release measures					
6.1.	Personal precaution	s, protective	equipment and emergency procedures			
6.1.1.	For non-emergency	personnel				
	Protective equipmer	nt:	Use personal protective equipment (see Section 8).			
	Accident prevention	methods:	Evacuate members of all non-essential personnel and those member without protective equipment. Remove all sources of sparks and ignition. Do not smoke.			
	Emergency procedures: Mark the area using proper signs.					
6.1.2.	For emergency responders:					
	Wear protective equipment (see Section 8).					
6.2.	Environmental precautions:					
	Do not dispose of in sewage, drainage system and waterways. In case of large spillage contact National Protection and Rescue Directorate (NPRD) on 112.					
6.3.	Methods and material for containment and cleaning up					
6.3.1.	Bunding, covering of drains; capping procedures: Cap the drains. Collect, nudle and pump out everything that got spilled.					

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6.3.2.	Cleaning up:	Where possible, the substance can be absorbed by using inflammable material (sand, diatomaceous earth, vermiculite). Place the waste material in tightly closed impermeable containers. Store the substance in well ventilated storage rooms until disposal. Submit for disposal to the legal persons authorized by the Ministry of Environmental and Nature Protection. After disposal of the products, wash the area and involved materials with water.
6.3.3.	Other information:	-
6.4.	Reference to other s	sections
	For indications of wa	aste processing see Section 13.

SECTIO	ON 7. Handling and storage			
7.1.	Precautions for safe handling			
7.1.1.	Protection measures			
	Measures to prevent fire:	Keep away from sources of heat and ignition. Do not smoke.		
	Measures to prevent aerosol and dust generati	ion: Secure proper ventilation.		
	Measures to protect the environment:	Prevent spilling into the sewage system and waterways.		
	Other measures:	-		
7.1.2.	Advice on general occupational hygiene:	general occupational hygiene:		
	Do not eat, drink or smoke in the workspace. T	horoughly wash hands after work and before eating.		
7.2.	Conditions for safe storage, including any inco	compatibilities		
	Technical measures and storage conditions:	Keep in tightly closed and upright set containers in a well ventilated storage rooms, and away from sources of heat, sunlight, and other incompatible substances.		
	Packaging materials:	Manufacturer's original packaging.		
	Requirements for storage rooms and vessels:	Keep away from food and drink. Keep the containers tightly closed.		
	Advices for storage equipment:	The storage must be made of hard material; floors must be resistant to chemicals. There must be no drain that directly leads into sewage system. Secure proper ventilation.		
	Further information on storage conditions:	Do not place the unused material in the storage room and do not use empty containers for storing other chemicals. Do not store with incompatible materials (see Section 9).		
7.3.	Specific end use(s)			
	Recommendations:	-		
	Industrial sector specific solutions:	-		



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SECTION 8. Exposure controls/personal protection								
8.1. Control para	ameters							
Substance		CAS N	No			exposure limit term values	Biological limit values	
				ppn	า	mg/m³		
-		-		_		-	-	
Substance - name:								
EC No: -	EC No: - CAS No: -							
DNEL								
				Indust	rial			
Route of	,	Acute		Acute		Chron	ic	Chronic
exposure:	effe	ect local	effe	ect system	iic	effect lo	ocal	effect systemic
Oral	-		-			-		-
Inhalation -			-			-		-
Dermal						-		-
Critical physical para	meters: s	solubility, fla	mmabilit	ty, corrosi	vity:	-		
				Consu	mer			
Route of		Acute	Acu			Chron	ic	Chronic
exposure:	effe	ect local	effect sys		iic	effect lo	ocal	effect systemic
Oral	-		-			-		-
Inhalation	-		-			-		-
Dermal	-		-			-		-
PNEC								
Environmental protection	tion tar	get			NEC			
Fresh water				No	No information available			
Freshwater sediment	S				No information available			
Marine water				No	No information available			
Marine sediments				No	No information available			
Food chain				No	No information available			
Microorganisms in sewage treatment			No	No information available				
Soil (agricultural)			No	No information available				
Air				No	No information available			
8.2. Exposur	e contro	ls						
8.2.1. Appropr	riate eng	ineering cor	ntrols					

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	Substance/mixture related measures to prevent exposure during identified uses:	•	duct in well ventilated rooms. Use personal protective Do not eat, drink or smoke in the workspace.		
	Structural measures to prevent exposure:	No informati	on available		
	Organisational measures to prevent exposure:	Organization of work in order to reduce other worker's influence during work process.			
	Technical measures to prevent exposure:	Secure proper workspace ventilation in order to keep concentration levels in air below permitted levels.			
8.2.2.	Personal protection equipment				
8.2.2.1.	Eye and face protection:	Safety glasses that stick to face (EN 166) or visor in case of lower levels of concentration in air; protective gas mask that covers the entire face in case of higher levels of concentration in air.			
8.2.2.2.	Skin protection				
	Protective gloves must be according to the Directive EU 2016/425/EEC and standard EN 374. Hand protection: Glove material: nitrile rubber Glove thickness: ≥0.40 mm Permeation period: > 480 min				
	Other skin protection:	of protective concentratio	it protecting against chemicals (EN 13688). The type equipment must be selected according to the n and amount of the dangerous substance at the splace and shoes that cover the entire foot.		
8.2.2.3.	Respiratory protection:	During long- equipped wi	term exposure wear a protective mask or a half mask th filter A.		
8.2.2.4.	Thermal hazards:	No informati	on available		
8.2.3.	Environmental exposure controls	3			
	Substance/mixture related measure prevent exposure:	ures to	See Section 6		
	Structural measures to prevent e	xposure:	Use modern equipment.		
	Organisational measures to prev	ent exposure:	Adapt the work process to the required working conditions of the workplace.		
	Technical measures to prevent ex	xposure:	See Section 6		

SECTI	SECTION 9. Physical and chemical properties				
9.1.	.1. Information on basic physical and chemical properties				
		Value	Method		
	Physical state:	liquid	No information available		
	Color:	red-purple	No information available		
	Odor:	glycerol like	No information available		

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	Odor threshold:	No information available	No information available
	рН:	2.15 -2.55	No information available
	Melting point / freezing point;	No information available	No information available
	Initial boiling point and boiling range:	No information available	No information available
	Flash point:	No information available	No information available
	Evaporation rate:	No information available	No information available
	Flammability (solid, gas):	No information available	No information available
	Upper/lower flammability or explosive limits:	No information available	No information available
	Vapor pressure:	No information available	No information available
	Vapor density:	No information available	No information available
	Relative density:	No information available	No information available
	Bulk density:	No information available	No information available
	Solubility(ies):	Soluble in water (20 °C)	No information available
	Partition coefficient: n-octanol/water (log Kow):	No information available	No information available
	Auto-ignition temperature:	No information available	No information available
	Decomposition temperature:	No information available	No information available
	Viscosity:	No information available	No information available
	Explosive properties:	No information available	No information available
	Oxidizing properties:	No information available	No information available
2.	Other information	<u>'</u>	·

SECTIO	ECTION 10. Stability and reactivity				
10.1.	Reactivity:	See subsections 10.3 through 10.5.			
10.2.	Chemical stability:	The product is chemically stable under standard ambient conditions of storing and using (room temperature).			
10.3.	Possibility of hazardous reactions:	With strong oxidants, sodium-hydroxide, sulfuric acid, aluminum.			
10.4.	Conditions to avoid:	Sources of heat, sparks, and ignition.			
10.5.	Incompatible materials:	Strong base, strong oxidants.			
10.6.	Hazardous decomposition products:	No information available.			

SECTIO	SECTION 11. Toxicological information				
11.1.	Information on toxicological effects				
	Acute toxicity:				

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Froduct code.	TILIVIIVIL-OT-X	Revision	1 date. 05.00.20	JIJ. VEISIO	л. Э	
Route of exposure:	Method	Species	Effective dose LD ₅₀ /LC ₅₀ or ATE _{mixture}	LD ₅₀ /LC ₅₀ or Exposure tin		
Oral:	No information available	rat	LD ₅₀	-	25.000 mg/kg (glycerol)	
Dermal:	No information available	-	LD ₅₀	-		
Inhalation:	No information available	-	LC ₅₀	-	-	
Specific tar	rget organ toxicity – si	ngle exposure ((STOT SE):			
	Specifi	c effects	Targe	t organ	Note	
Oral:	No information av	railable		tion available	-	
Dermal:	No information av	ailable	No informa	tion available	-	
Inhalation:	No information av	No information available				
Aspiration	hazard:	No info	rmation available			
Irritation a	nd corrosion					
	Exposure time	Species	Evaluation	Method	Note	
Skin corrosion/irritation:	-	- -	-	-		
Serious eye damage/irritation	-	-	-			
Sensitization		voilable				
Skin sensitization:	No information av	railable				
Respiratory sensitization:	No information av	ailable				
:						
Symptoms	related to the physica	l, chemical and	toxicological chara	cteristics		
Oral exposure:	sensation; highe	r levels of conce e of vomiting, a	entration may caus spiration causes co	e nausea, abdo	the mouth, burning ominal pain and It breathing. Higher	
Dermal exposure:		•	osure, resorption ef cking and tingling			
Inhalation exposure	Inhalation of larg		•	tely ventilated	perimeter may cause	

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Eye exposure:	Direct of sensati	eye contact may ca on.	ause slight to m	oderate irritatior	n, lacrimation	n and burning
Repeate	ed dose toxicity	(subacute, subchro	onic, chronic)			
. ·	Dose	Exposure time	Species	Method	Evaluation	n Note
Subacute oral	No informat available	ion No information available	No information available	No information available	No information	on -
Subacute dermal	No informat available	ion No information available	No information available	No information available	No information available	on -
Subacute inhalation	No informat available	ion No information available	No information available	No information available	No information available	on -
Subchronic oral	No informat available	ion No information available	No information available	No information available	No information available	on -
Subchronic dermal	No informat available	ion No information available	No information available	No information available	No information available	on -
Subchronic inhalation	No informat available	ion No information available	No information available	No information available	No information available	on -
Chronic oral	No informat available	ion No information available	No information available	No information available	No information available	on -
Chronic dermal	No informat available	ion No information available	No information available	No information available	No information available	on -
Chronic inhalation	No informat available	ion No information available	No information available	No information available	No information available	on -
Specific	target organ to	xicity – repeated e	•			
Cubacuta and		Specific e		Target o		Note
Subacute oral Subacute dermal		No information ava		The initial desired in the second sec		_
Subacute inhalat		No information ava		No information available No information available		_
Subchronic oral		No information ava		No information available -		_
Subchronic derm			information available		No information available	

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Subchr	onic inhalation	No information availabl	le	No information available	-		
Chroni	c oral	No information availabl	le	No information available	-		
Chroni	c dermal	No information availabl	le	No information available	-		
Chroni	c inhalation	No information availabl	le	No information available	-		
	CMR effects (carcinog	jenicity, mutagenicity, rep	productive to	oxicity)			
	Carcinogenicity:	Current studies o	Current studies on test animals did not indicate carcinogenic effects. Current <i>in vitro tests</i> did not indicate mutagenic effects. No information available				
	Mutagenicity in vitro:	Current in vitro te					
	Genotoxicity:	No information a					
	Mutagenicity in vivo:	Current in vivo te	ests did not in	ndicate mutagenic effects.			
	Germ cell mutagenici	ty: No information a	No information available				
	Reproductive toxicity:	No toxicity on re	No toxicity on reproductive organs was determined in reproductive organs.				
	Summary of evaluation	on of the CMR properties:	: -				
11.2.	Practical experiences:						
	Remarks relevant for	classification:	No inform	ation available			
	Other remarks:		No information available				
11.3.	General notes:						

SECTION 12. Ecologica	l information		
12.1. Toxicity			
	_		

Acute (short-term) toxicity	Dose	Exposure time	Species	Method	Evaluation	Note
Fish	LC ₅₀	96 hours	fish	No information available	1.000 mg/l (glycerol)	-
Crustacea:	EC ₅₀	48 hours	-	No information available		-
Algae/aquatic plants	IC ₅₀	8 days	-	No information available		-
Other organisms	LC ₅₀	72 hours	-	-	_	-
Chronic (long-term) toxicity	Dose	Exposure time	Species	Method	Evaluation	Note

Trading nam	ne:				HEMAT	OXYLIN	I M				
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Fish		LC ₅₀	96 ho	urs	No information available	No informa available		No informat available	_	-	
Crustacea:		EC ₅₀	48 ho	urs	No information available	No informa availabl		No informat available		-	
Algae/aquatic plants		s IC ₅₀ 72 hours		availahle		o No formation information vailable available			_		
Other organis	Other organisms			-	-		-		_		
	istence a	and degrac	lability								
	Deg	gradation h	nalf-lives		Method			Evalua	tion		Note
Marine water	No in	formation	available	No	o information avail	able N	No information available			-	
Fresh water	No in	formation	available	No	o information avail	able N	No information available			-	
Air	No in	formation	available	No	o information avail	able N	lo inf	ormation	available		-
Soil	No in	formation	available	No	o information avail	able N	lo inf	ormation	available		_
Biod	egradati	ion									
% Degradation		Time (d	ays)		Method	Ev	valuat	ion		Note	
No information			ormation	No	information	No inf	forma	tion	No infor	mation	1

Biodegra	adation			
% Degradation	Time (days)	Method	Evaluation	Note
No information available	No information available	No information available	No information available	No information available

12.3.	Bioaccumulative potential
	Partition coefficient: n-octanol/water (log Kow):

Value	Concentration	рН	°C	Method	Evaluation	Note
-	No information available	-	-	No information available	No information available	-

Bioconce	entration	factor (BCF)				
Value		Species	Method	Evaluation	Note	
information	Nο	information	No information	No information	No information	

value	Species	Method	Evaluation	note
No information	No information	No information	No information	No information
available	available	available	available	available



Tradin	a nama					ENAAT	OXYLIN	N //	<u>'</u>	Page 12 of	10
	g name			ь.				······	······································	-	
Produc	ct code:	H	EMML-OT-X**	Revi	ision d	late:	03.06.20)19.	Version:	5	
	Chroni	ic ecoto	xicity								
	Value	9	Dose	Exposure time	Spe	ecies	Meth	nod	Evaluatio	on	Note
Chronic	c toxicity	on fish	LC ₅₀	informati	No inform availab		No informa availab		No informa	tion -	
	c toxicity ea (<i>Dapl</i>		EC ₅₀	ıntormatı	No inform availab		No informa availab		No informa available	tion -	
12.4. Mobility in soil											
	Known or predicted distribution in environmental compartments:										
	No inf	ormatio	n available								
	Surfac	e tensio	n:								
	Val	lue	°C	Concentration		n Method			Note		
	No inform availab		No information available	No information available		No information available		-			
	Adsorr	otion / (Nesoration (
Adsorption / desorption A/D coefficient Henry's constant		coefficient	log Kow		Evaporation rate		Method		No	te	
Soil-wa	tor :	lo vailable	information			No information available		No information available		-	
Water-	air	lo vailable	information			o infor vailable			formation ble	-	
Soil-air	'	lo vailable	information	No informati available		o infor vailable	mation	No in availa	formation ble	_	
12.5.			and vPvB asses	sment							
	No inf	ormatio	n available								

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12.6.	Other adverse effects				
	No information available				
SECTIO	N 13. Disposal considerati	ons			
13.1.	Waste treatment method	s			
13.1.1.	Product/Packaging dispo	sal:			
	Submit for disposal to the Protection.	e legal person authorized by the Ministry of Environmental and Nature			
13.1.2.	Waste codes/waste design	nations according to Law:			
	No information available				
1212					
13.1.3.	Waste treatment – releva	nt information:			
	No information available				
13.1.4.	.4. Sewage disposal – relevant information:				
	-	sed of into the sewage system.			
	<u>'</u>	3 ,			
13.1.5.	5. Other disposal recommendations:				
	Do not dispose of the product's remains into the sewage system. Submit the remains to the collectors authorized by the ministry in charge. Do not dispose of the packaging into the sewage system. Submit the packaging to the collectors authorized by the ministry in charge. Do not dispose of in places where ignition may occur.				
13.1.6.	Relevant Community pro	visions:			
	-				
SECTIO	N 14. Transport information	on			
	Transporting/shipment by	road (ADR)			
UN number:		Not subject to transport regulations.			
UN proper shipping name:		-			
Transport hazard class(es):		-			
Packing	group:	-			
Environr	mentally hazardous:	-			
Special p	precautions for user:	-			
	Transporting/shipment by	rail (RID)			
UN num	ber:	Not subject to transport regulations.			



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UN proper shipping name:	-			
Transport hazard class(es):	-			
Packing group:	-			
Environmentally hazardous:	-			
Special precautions for user:	-			
Inland waterway transport (ADN)			
UN number:	Not subject to transport regulations.			
UN proper shipping name:	-			
Transport hazard class(es):	-			
Packing group:	-			
Environmentally hazardous:	-			
Special precautions for user:	-			
Transporting/shipment by sea (IMDG)				
UN number:	Not subject to transport regulations.			
UN proper shipping name:	-			
Transport hazard class(es):	-			
Packing group:	-			
Environmentally hazardous:	-			
Special precautions for user:	-			
Transporting/shipment by air (IC	CAO-TI/IATA-DGR)			
UN number:	Not subject to transport regulations.			
UN proper shipping name:	-			
Transport hazard class(es):	-			
Packing group:	-			
Environmentally hazardous:	-			
Special precautions for user:	-			
Further information: The product is	s not subject to classification.			

SECTION	ECTION 15. Regulatory information				
15.1.	Safety, health and environmental regulations/legislation specific for the substance or mixture				
	EU regulations				
	Authorization and/or restrictions of use				
	Authorizations:	-			
	Restrictions:	_			

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		EC Regulation No. 1906/2007 and EC Regulation No. 1272/2008 of the	
	Other EU regulations:	European Parliament and the European Council; The European Commission Regulation No. 453/2006 of 2010 on changes and amendments to the Regulation (EC) No. 1907/2006 of the European Parliament and Council on registration, evaluation, authorization and restriction of chemical substances (REACH);	
		EC Regulation No. 2037/200 of the European Parliament and Council from 29 June 2000 on substances that damage the ozone layer;	
		EC Regulation No. 689/2008 of the European Parliament and Council from 17 June 2008 concerning the export and import of dangerous chemicals;	
		EC Regulation No. 850/2004 of the European Parliament and Council from 29 April 2004 about persistent organic pollutants;	
		Directive 2008/98/EC of the European Parliament and Council of 19 November 2008 on waste and repealing certain Directives	
	Information according 1999/13/EC about limitation of emissions of volatile organic compounds (VOC-guideline)		
	National legislation:	Chemicals Act, Regulation on classification, packaging and labeling of dangerous substances, Ordinance on occupational exposure limit values and on biological limit values, Regulation on categories, types and classification of waste with a waste catalog and list of hazardous waste, Ordinance on writing Material safety data sheet, Transport of Hazardous Substances Act	
15.2.	Chemical safety assessment		
	None		

SECTIO	N 16. Other information				
16.1.	Indication of changes:		-		
			PBT	Stable, bioaccumulative and toxic	
			vPvB	Strongly stable and strongly bioaccumulative.	
16.2.	Abbreviations and acronyms:		LD ₅₀	Lethal dose, 50%	
			LC ₅₀	Lethal concentration, 50%	
			STOT-SE	Specific target organ toxicity - single exposure	
16.3.	Key literature references and source of data:		-		
16.4. Classification and procedure used 1272/2008 (CLP)			to derive the c	classification for mixture according to Regulation (EC)	
Classific	cation	Class	ssification procedure		
_	- -				
16.5.	. Relevant H statements (number ar		d full text)		
	H: -	-			
16.6.	Training advice:	-			



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Trading name:		TOXYLIN M				
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		** "X" in the product code marks different volumes (different packagings of the product)
16.7.	Further information:	We are not responsible for consequences in case of failure to comply with
		instructions for use or improper use of the product described in this
		material safety data sheet.

Δ	N	IN	П	F	X	•

EXPOSURE SCENARIO RESULTING TO CHEMICAL SAFETY ASSESSMENT

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