

# ALCIAN YELLOW TOLUIDINE BLUE KIT

The kit contains:

Periodic acid, 1% solution
HCL reagent, A.T.
Sodium metabisulphite, solution
Alcian Yellow, solution
Buffer solution, A.T.
Toluidine Blue reagent



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Trading name:	PERIODIC ACID, 1 % SOLUTION				
Product code:	PK1-OT-X**	Date of compilation:	21 Dec 2022	Version:	4

ON 1 IDENTIFICATION (	OF THE SUBS	TANCE/MI	XTURE AND OF THE COMPANY/UNDERTAKING
Product identifier			
Trading name:	PERIODIC ACID, 1 % SOLUTION		
Chemical name:	-		
Catalogue number:	PK1-OT-X**		
Relevant identified use	es of the subs	tance 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 advis	advised against: medical device, registered		uct is intended for use only as an <i>in vitro</i> diagnostic levice, registered at the Agency for Medicinal Products and Devices and there is no reason to use it for other purposes
Details of the supplier	of the safety	data sheet	
Supplier: Bio		oGnost Ltd.	
Address: N		ledjugorska	59, Zagreb
Telephone number: +		385 1 2409997	
Fax no.: +:		-385 1 2404039	
e-mail of competent p	erson: <u>m</u>	sds@biogn	<u>ost.hr</u>
National contact: -			
Emergency telephone	number		
National Protection and Rescue Dire			112
National Protection an	d Rescue Dir	ectorate:	112
National Protection an Medical information:	d Rescue Dir	ectorate:	+385 1 2348 342
	Product identifier Trading name: Chemical name: Catalogue number: Relevant identified use Uses: Uses advised against: Reason why uses advis Details of the supplier Supplier: Address: Telephone number: Fax no.: e-mail of competent p National contact:	Product identifier  Trading name: PERIODIC A  Chemical name: -  Catalogue number: PK1-OT-X**  Relevant identified uses of the subs  Uses:  Uses advised against:  Reason why uses advised against:  Details of the supplier of the safety  Supplier: Bi  Address: M  Telephone number: +  Fax no.: +  e-mail of competent person: m	Product identifier  Trading name: PERIODIC ACID, 1 % Solution of Chemical name:  Catalogue number: PK1-OT-X**  Relevant identified uses of the substance or mitor uses:  Uses: For use with uses advised against: Only the interpretation of the safety data sheet.  Details of the supplier of the safety data sheet.  Supplier: BioGnost Ltd.  Address: Medjugorska.  Telephone number: +385 1 24099.  Fax no.: +385 1 24040.  e-mail of competent person: msds@biogn.  National contact: -

SECTIO	SECTION 2 HAZARDS INFORMATION					
2.1.	Classification of the substance or mixture					
2.1.1.	Classification (REGULATION (EC) No. 1272/2008 (CLP)					
	Hazard class and category	code: Hazard statements*:				
	Not identified as hazardous substance					
2.1.2.	Additional information					
	-					
*For fu	ll text of Hazard- and EU Hazard-sta	atements: see Section 16				
2.2.	Classification according to EC Dire	ective Nr. 1272/2008 CLP)				
	Product identification:	PERIODIC ACID, 1 % SOLUTION				
	Identification number: -					
	Authorization no.: -					
	Hazard pictograms:	-				



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	Signal word:	-		
	Hazard statements:	-		
	Precautionary statements:	-		
	Further information:	-		
2.3.	Other hazards			
	<b>Endocrine Disrupting Propertie</b>	es:		
	No known endocrine disrupting properties <b>Results of PBT and vPvB assessment</b> : According to the results of its assessment, this substance is not a PBT or a vPvB.			

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)		
-	_	_	_	-		

SECTIO	ECTION 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	der: Treat symptomatically.				
4.2.	Most important symptoms ar	nd 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. Longterm exposure may cause drying, cracking and tingling sensation of skin.				



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	Following eye contact:	Direct eye contact may cause slight to moderate irritation, lacrimation and burning sensation.	
	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 <sub>2</sub> 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, 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. 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 containmer	nt and cleaning up			



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6.3.1.	Bunding, covering of drains; capping procedures:	Sand or clay barriers.
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	TION 7 HANDLING AN STORAGE				
7.1.	Precautions for safe handling				
7.1.1.	Protection measures				
	Measures to prevent fire:	i	Keep away from sources of heat and ignition. Do not smoke.		
	Measures to prevent aerosol and dust generati	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 incompatibilities				
	Technical measures and storage conditions:	ventil	in tightly closed and upright set containers in a well lated storage rooms, and away from sources of heat, ght, and other incompatible substances.		
	Packaging materials:	Manu	ufacturer'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:	and c	ot place the unused material in the storage room do not use empty containers for storing other sicals. Do not store with incompatible materials (see on 9).		
7.3.	Specific end use(s)				



Substance

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Biological limit values

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	Recommendations:		-				
	Industrial sector spe	cific solutions:	-				
SECTI	SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION						
8.1.	8.1. Control parameters						
			Occupational exposure limit				

values/short term values

mg/m³

-	-	-	-	No information available
Substance				
name:				

ppm

EC No:	-	CAS No:	-
--------	---	---------	---

CAS No

#### **DNEL**

Dermal

Industrial						
Route of exposure:	Acute effect local	Acute effect systemic	Chronic effect local	Chronic effect systemic		
Oral	-	-	-	-		
Inhalation	-	-	-	-		

Critical physical parameters: solubility, flammability, corrosivity:	-

#### Consumer

Route of exposure:	Acute effect local	Acute effect systemic	Chronic effect local	Chronic effect systemic
Oral	-	-	-	-
Inhalation	-	-	-	-
Dermal	-	-	-	-

#### PNEC

Environmental protection target	PNEC
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



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Air			No information available		
8.2.	Cyposium sontrols				
8.2.1.	Exposure controls  Engineering measures				
0.2.1.	Engineering measures	ـــا			
	Substance/mixture relate measures to prevent expoduring 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 prexposure:	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 preexposure:	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) ovisor.			
8.2.2.2.	Skin protection				
			ctive gloves must be according to the EU Directive 2016/425/EEC and ard EN 374.		
	Hand protection:	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 f	ctive 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 relate measures to prevent expo		See Section 6		
	Structural measures to pr exposure:	event	Use modern equipment.		
	Organisational measures prevent exposure:	to	Adapt the work process to the required working conditions of the workplace.		
	Technical measures to preexposure:	event	See Section 6		

### **SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES**



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	Value	Method
Physical state:	liquid	No information available
Colour:	colourless	No information available
Odour/odour threshold:	no odor/no information available	No information available
Melting point / freezing point:	No information available	No information available
Boiling point or initial boiling point and boiling range:	No information available	No information available
Flammability:	No information available	No information available
Lover and upper explosion limit:	No information available	No information available
Flash point:	No information available	No information available
Auto-ignition temperature:	No information available	No information available
Decomposition temperature:	No information available	No information available
рН:	No information available	No information available
Kinematic viscosity:	No information available	No information available
Solubility:	No information available	No information available
Partition coefficient n-octanol/water (log value):	No information available	No information available
Vapour pressure:	No information available	No information available
Density and/or relative density:	No information available	No information available
Relative vapour density:	No information available	No information available
Particle characteristics:	No information available	No information available

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:	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 TOXICOLOGICAL INFORMATION**



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Trading name:	PERIODIC ACID, 1 % SOLUTION					
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11.1. Informatio	n on hazard classes as	defined in Rea	ulation (FC) No 12	72/2008		
Acute toxic		demica in rieg	4141011 (26) 140 12	12,2000		
Route of exposure:	Method	Species	Effective dose LD <sub>50</sub> /LC <sub>50</sub> or ATE <sub>mixture</sub>	Exposure	e time	Results
Oral exposure:	No information available	-	LD <sub>50</sub>	-		-
Dermal exposure:	No information available	-	LD <sub>50</sub>	-		-
Inhalation exposure:	No information available	-	LC <sub>50</sub>	_		-
Specific ta	rget organ toxicity – si	ngle exposure (	STOT 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	e: No information a	available	No informati	on available	-	
Respirator	y irritation:	No info	rmation available			
Irritation a	nd corrosion					
	Exposure time	Species	Evaluation	Method		Note
Skin irritation:	-	rabbit	-	_	-	
Eye irritation:	-	rabbit	-	-	-	
		·				
Sensitization	on					
Dermal exposure:	No information avail	able				
Inhalation exposure:	No information avail	able				
Symptoms	related to the physica	l, chemical and	toxicological chara	acteristics		
Oral exposure:	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.					
Dermal exposure:		•	ure, resorption effo ingling sensation o		kely. Lor	ng-term exposure



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innalation expositre.			large amount eezing, heada	•		adequately vent	ilated perim	eter may cause
Eye exposure:		Direct eye co sensation.	ontact may cause slight to moderate irritation, lacrimation and burning					
Repeate	ed dos	e toxicity (sub	acute, subchro	onic, chroni	ic)			
<u> </u>		Dose	Exposure time	Species		Method	Evaluation	n Note
Subacute oral	No avail	information able	No information available	No informati available		No information available	No information available	on -
Subacute dermal	No avail	information able	No information available	No informati available	-	No information available	No information available	on -
Subacute inhalation	No avail	information able	No information available	No informati available		No information available	No information available	on -
Subchronic oral	No avail	information able	No information available	No informati available	-	No information available	No information available	on -
Subchronic dermal	No avail	information able	No information available	No informati available		No information available	No information available	on -
Subchronic inhalation	No avail	information able	No information available	No informati available		No information available	No information available	on -
Chronic oral	No avail	information able	No information available	No informati available		No information available	No information available	on -
Chronic dermal	No avail	information able	No information available	No informati available		No information available	No information available	on -
Chronic inhalation	No avail	information able	No information available	No informati available	_	No information available	No informatio available	on -
Specific	target	organ tovicit	y – repeated e	vnosuro (C	TOT P	)E).		
Specific	target		pecific effects	vhosnie (2	101 6	Target orga	 an	Note
Subacute oral			ation available		No i	No information available		-
Subacute dermal			ation available					-
Subacute inhalat	ion	No informa	ntion available		No i	nformation avai	lable	-



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Subchro	onic oral	No information	n available	No information available	-		
Subchro	onic dermal	No information	n available	No information available	-		
Subchro	onic inhalation	No information	n available	No information available	-		
Chronic	oral	No information	n available	No information available	-		
Chronic	dermal	No information	n available	No information available	-		
Chronic	inhalation	No information	n available	No information available	-		
	:						
	CMR effects (c	arcinogenicity, m	nutagenicity, repr	oductive toxicity)			
	Carcinogenicit	y:	Current studies	on test animals did not indicate ca	rcinogenic effects.		
	Mutagenicity i	n-vitro:	Current in vitr	o tests did not indicate mutageni	c effects.		
	Genotoxicity:		No information	available			
	Mutagenicity i	n-vivo:	Current in vivo tests did not indicate mutagenic effects.				
	Germ cell muta	agenicity:	No information available				
	Reproductive t	toxicity:	No toxicity on reproductive organs was determined in reproductive organs.				
	Summary of ev	valuation of the (	CMR properties:	-			
11.2	Information or	n other hazards:					
11.2.1.	Endocrine disr	upting propertie	s:				
	contain complave endocring to Commission D 2017/2100 or	nce/mixture do ponents consid ne disrupting p REACH Article Delegated regula Commission Re 5 at levels of	roperties 57(f) or tion (EU) egulation				
11.2.2.	Other informa	tions:					

SECTION 12 ECOLOG	SECTION 12 ECOLOGICAL INFORMATION:									
12.1. Toxicity										
Acute toxicity	Dose	Exposure time	Species	Method	Evaluation	Note				
Fish	LC <sub>50</sub>	96 hours	No information available	No information	-	-				

available



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Crustacea:	EC <sub>50</sub>	48 hours	No information available	No information available	-	-
Algae/aquatic plants	IC <sub>50</sub>	8 days	No information available	No information available	-	-
Microorganisms	LC <sub>50</sub>	72 hours	-	-	-	-
Chronic toxicity	Dose	Exposure time	Species	Method	Evaluation	Note
Fish	LC <sub>50</sub>	96 hours	No information available	No information available	No information available	-
Crustacea:	EC <sub>50</sub>	48 hours	No information available	No information available	No information available	-
Algae/aquatic plants	IC <sub>50</sub>	72 hours	No information available	No information available	No information available	-
Other organisms	-	-	-	-	-	-

#### 12.2. Persistence and degradability

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	-

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

12.3.	Bioaccumulative potential					
	Partition coefficient: n-c	ctanol/wa	ter (log Ko	w):		
Valu	e Concentration	рН	°C	Method	Evaluation	Note



Trading name:

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-		No availa	inform ble	ation _		_	lo info	ormation le		inform ilable	ation	-	
	Bioco	ncent	tration f	factor (BCF)									
V	/alue	2 2 3 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4		Species		М	lethoc		E	valuatio	n		Note
No info availabl		n	No availab	inform ble	ation	No infor		on	No info	ormatic ole	on	No inforn available	nation
	Chro	nic ec	otoxicit	у		1							1
	Valu	ıe		Dose		osure ime	Spe	ecies	Metl	hod	Eva	luation	Note
Chronic	toxici	ty on t	fish	LC <sub>50</sub>	No infor availa	mation able	No inforr availa	mation ible	No inform availab		No information available		-
Chronic		-	ľ	EC <sub>50</sub>	information info		No inforr availa	mation ıble	No inform availab		No info	ormation le	-
12.4.	Mobi	lity in	soil										
	1			ed distributi	on in e	environme	ental c	ompart	ments:				
	No ir	forma	ation av	ailable									
	Surfa	ce ter	sion:										
	V	alue		°C	C	oncentrat	ion		Method		No	ote	
			ormation ailable	No information available		ion	No information available		-				
	.1		i		<u> </u>			<u>i</u>			i		
	Adso	rption	/ deso	rption						1		1	
Transpo	ort		/D coef nry's co		lo	og Kow	Εv	/aporatio	on rate	N	Method		Note
Soil-wa	ter :	No availa		formation	No ir availa	nformatio able		o inform ailable	ation	No in availa	formation	on -	



13.1.3.

13.1.4.

13.1.5.

Waste treatment – relevant information:

Sewage disposal – relevant information:

Other disposal recommendations:

Waste must not be disposed of into the sewage system.

No information available

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Water-	air No	o ailable	information	No information available	No information available	No information available	-
Soil-air No information available		information	No information available	No information available	No information available	-	
12.5.	Results	of PBT	and vPvB asse	ssment			
	accordi	ng to R	EACH Article 5		n Delegated regula		disrupting propertie 0 or Commission
12.6.	Endocri	ne disr	upting propert	ies			
	The sub	stance	/mixture does	not contain compo	onents considered	o have endocrine	disrupting propertie
	accordi	ng to R	EACH Article 5		n Delegated regula		
12.7.	accordi	ng to R ion (EU	EACH Article 5  ) 2018/605 at	7(f) or Commission	n Delegated regula		
12.7.	accordi Regulat	ng to R ion (EU dverse	EACH Article 5  ) 2018/605 at	7(f) or Commission	n Delegated regula		
12.7.	accordi Regulat	ng to R ion (EU dverse	EACH Article 5 ) 2018/605 at l	7(f) or Commission	n Delegated regula		
	Other a	ng to R ion (EU dverse rmation	EACH Article 5 ) 2018/605 at l	7(f) or Commission evels of 0.1% or h	n Delegated regula		
	Other a No info	ng to R ion (EU dverse rmation	EACH Article 5 () 2018/605 at ( effects n available	7(f) or Commission evels of 0.1% or h	n Delegated regula		
SECTIO	Other a No info	ng to R ion (EU dverse rmation	effects available	7(f) or Commission evels of 0.1% or h	n Delegated regula		
<b>SECTIO</b> 13.1.	Other a No info	dverse rmation  SPOSAI  e treatn  act/Pack	effects n available  L CONSIDERA nent methods  kaging disposa	7(f) or Commission evels of 0.1% or h	n Delegated regula	tion (EU) 2017/210	0 or Commission
<b>SECTIO</b> 13.1.	Other a No info  No info  Produ Subm Prote	dverse rmation  SPOSAI  e treatm  act/Pack it for d ction.	effects n available  L CONSIDERA nent methods  kaging disposa isposal to the l	7(f) or Commission evels of 0.1% or h	n Delegated regula igher. orized by the Minist	tion (EU) 2017/210	0 or Commission



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	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			
12.1.6	ignition may occur.			
13.1.6.	Relevant Community prov	isions:		
	-			
	I 14 TRANSPORT INFORM			
i	Transporting/shipment by ro			
UN numl		Not subject to transport regulations.		
	er shipping name:	-		
······	t hazard class(es):	-		
Packing (	group:	-		
Environm	nentally hazardous:	-		
Special p	recautions for user:	-		
	Transporting/shipment by ra	ail (RID)		
UN numl	oer:	Not subject to transport regulations.		
UN prop	er shipping name:			
Transpor	t hazard class(es):	-		
Packing (	group:	-		
Environm	nentally hazardous:	-		
Special p	recautions for user:	-		
	Inland waterway transport (A	ADN)		
UN numl	per:	Not subject to transport regulations.		
UN prop	er shipping name:	-		
Transpor	t hazard class(es):	-		
Packing (	group:	-		
Environm	nentally hazardous:	-		
Special p	recautions for user:	-		
	Transporting/shipment by se	ea (IMDG)		
UN numl	per:	Not subject to transport regulations.		
UN prop	er shipping name:	-		
•	t hazard class(es):	-		
Packing o		-		
	nentally hazardous:	-		
Special precautions for user:		_		



### **SAFETY DATA SHEET**

### BIOGNOST® According to Regulation (EC) No. 1907/2006 amended by Regulation (EU) No. 2020/878

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Trading name:		PERIODIC ACID, 1 %	SOLUTION		
Product code:	PK1-OT-X**	Date of compilation:	21 Dec 2022	Version:	4

Transporting/shipment by air (ICAO-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: -				

5.1. 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:	Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC; Directive 2004/42/CE of the European Parliament and of the Council of 21 April 2004 on the limitation of emissions of volatile organic compounds due to the use of organic solvents in certain paints and varnishes and vehicle refinishing products and amending Directive 1999/13/EC; Council Directive 98/24/EC of 7 April 1998 on the protection of the health and safety of workers from the risks related to chemical agents at work; Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006; REACH Restrictions on the manufacturing, placing on the market and use of certain dangerous substances, mixtures and articles (Annex XVII);



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Trading name:		PERIODIC ACID, 1 %	SOLUTION	_
Product code:	PK1-OT-X**	Date of compilation:	21 Dec 2022	Version: 4

	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	ON 16 Other information		
16.1.	Indication of changes:	-	
16.2.	Abbreviations and acronyms:	ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)  IMDG: International Maritime Code for Dangerous Goods  IATA: International Air Transport Association  GHS: Globally Harmonised System of Classification and Labelling of Chemicals EINECS: European Inventory of Existing Commercial Chemical Substances  CAS: Chemical Abstracts Service (division of the American Chemical Society)  DNEL: Derived No-Effect Level (UK REACH)  LC50: Lethal concentration, 50 percent  LD50: Lethal dose, 50 percent  PBT: Persistent, Bioaccumulative and Toxic  vPvB: very Persistent and very Bioaccumulative	
16.3.	Key literature references and source of data:	-	
16.4.	Classification and procedure u 1272/2008 (CLP)	sed to derive the classification for mixture according to Regulation (EC)	
Classifi	ication	Classification procedure	
_		-	
16.5.	Relevant H statements (number	er and full text)	
	H: -	-	
16.6.	Training advice:	-	
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.	

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**Exposure scenario resulting to Chemical safety assessment** 

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Trading name:	HCL REAGENT, A.T.				
Product code:	HCLAT-OT-X**	Date of compilation:	21 Dec 2022	Version:	3

SECTI	ION 1: Identification of	the substance	e/mixture	e and of the company/undertaking		
1.1	Product identifier					
	Trading name:	HCL REAGE	HCL REAGENT, A.T.			
	Chemical name:	-				
	Catalogue number:	HCAT-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 in histopathology.		
	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	Details of the supplier of the safety data sheet				
	Supplier:	Supplier:		BioGnost Ltd.		
	Address:		Medjugorska 59, Zagreb			
	Telephone number:		+385 1 2409997			
	Telefax.:		+385 1 2404039			
	e-mail of competent p	person:	msds@biognost.hr			
	National contact:	National contact:		-		
1.4	Emergency telephone	Emergency telephone number				
	National Protection a	nd Rescue Dire	ectorate:	112		
	Medical information:			+385 1 2348 342		
	Other information:			-		

SECTIO	ON 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 ca	tegory code:	Hazard statements*:		
	Not identified as hazardous	substance.	-		
2.1.2.	Additional information				
	-				
*For fu	ıll text of Hazard- and EU Haza	ard-statements: see S	SECTION 16		
2.2	Label elements				
	Product identification:	HCL REAGENT,	A.T.		
	Identification number: -				
	Authorization number: -				
	Hazard pictograms:	-			



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Trading name:	HCL REAGENT, A.T.				
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	Signal word:	-		
	Hazard statements:	-		
	Precautionary statements:	-		
	Supplemetal hazard information (EU):	-		
2.3	Other hazards			
	<b>Endocrine Disrupting Propert</b>	ies:		
	No known endocrine disrupting properties			
	<b>Results of PBT and vPvB assessment</b> : According to the results of its assessment, this substance is not a PBT or a vPvB.			

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	01-2119484862-27- xxxx	< 1%	hydrochloric acid, 37%	Skin Corr. 1B; H314 STOT SE 3; H335	

SECTI	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 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:	Depending on concentration and exposure time, it may lead to mucosa irritation, cough, and dyspnea.



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Trading name:	HCL REAGENT, A.T.				
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	Following skin contact:	Depending on concentration and exposure time, it may lead to irritation, rash, skin drying and skin cracking.
	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	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 <sub>2</sub> 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				
	Cool endangered receptacles with contaminate the environment with	water spray. Collect contaminated fire fighting water separately. Do not extinguishing media.			

SECTIO	ON 6. Accidental release measur	res
6.1	Personal precautions, protective	e 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 ca (see Section 8).	se of inadequate ventilation use adequate airways protective equipment
6.2	Environmental precautions:	
	Do not dispose of in sewage, dr Protection and Rescue Directora	ainage system and waterways. In case of large spillage contact National ate (NPRD) on 112.
6.3	Methods and material for conta	inment and cleaning up



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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 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	n:	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. The	oroughly was	sh hands after work and before eating.
7.2	Conditions for safe storage, including any incom	patibilities	
	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:	must be re	e must be made of hard material; floors esistant to chemicals. There must be no drain ly leads into sewage system. Secure proper .



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	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	sure contr	ols/nerso	nal prot	tection			
	arameters	015/ pc150	mai pro	.cction			
Substanc		CA	S No			exposure limit term values	Biological limit values
				ı	opm	mg/m³	3
Hydrogen chloride	9	764	7-01-0	Ĩ	5/10	8/15 -	
Substance name:	-	T				1	
EC No:	-	CAS No	: -	-			
DNEL							
				Ind	lustrial		
Route of	Acı	ute	А	cute		Chronic	Chronic
exposure:	effect	local	effect	systemic		effect local	effect systemic
Oral	-		-		-		-
Inhalation	-		-		-		
Dermal	-		-		-	i	-
Critical physical pa	arameters:	solubility,	flammak	oility, cori	rosivity:	-	
				Cor	nsumer		
Route of	A	cute	А	cute		Chronic	Chronic
exposure:	effe	ct local	effect	systemic	:	effect local	effect systemic
Oral	_		-		-		-
Inhalation	-		-		-		-
Dermal			-				-
PNEC							
Environmental pro	tection tar	get			PNEC		
Fresh water					no inform	nation available	
Freshwater sedim	ents				no inform	nation available	
Marine water					no inform	nation available	
Marine sediments					no information available		



Food chain

#### **SAFETY DATA SHEET** BIOGNOST® According to Regulation (EC) No. 1907/2006 amended by Regulation (EU) No. 2020/878

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no information available

Microorga	anisms in sewage treatment	no information available	
Soil (agric	:ultural)		no information available
Air			no information available
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 preven exposure:	nt	Organization of work in order to reduce other worker's influence during work process.
	Technical measures to prevent exp	osure:	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		
			otective gloves have to satisfy the specification of tion (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 t impern	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



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Structural measures to prev exposure:	Use modern equipment.
Organisational measures to prevent exposure:	Adapt the work process to the required working conditions of the workplace.
Technical measures to prevene exposure:	ent See Section 6

Colour:  Colourless  Diting/no information available  No information available	Information on basic physical and chemical properties						
Colour:  Colourless		Value	Method				
Odour/odour threshold:  Melting point / freezing point:  No information available	Physical state:	liquid	No information available				
Melting point / freezing point:  Melting point or initial boiling point and boiling range:  Flammability:  Lover and upper explosion limit:  No information available	Colour:	colourless	No information available				
Boiling point or initial boiling point and boiling range:  Flammability:  No information available  Lover and upper explosion limit:  No information available	Odour/odour threshold:		No information available				
point and boiling range:  Flammability:  No information available  Lover and upper explosion limit:  No information available  Flash point:  No information available	Melting point / freezing po	oint: No information available	No information available				
Lover and upper explosion limit:  No information available  Flash point:  No information available		No information available	No information available				
Flash point:  Auto-ignition temperature:  Decomposition temperature:  No information available	Flammability:	No information available	No information available				
Auto-ignition temperature:  Decomposition temperature:  No information available  No information available  PH:  No information available	Lover and upper explosior	n limit: No information available	No information available				
Decomposition temperature:  Decomposition temperature:  No information available	Flash point:	No information available	No information available				
pH: No information available No information available Kinematic viscosity: No information available Solubility: No information available Partition coefficient n- octanol/water (log value):  Vapour pressure: No information available Density and/or relative density: No information available Relative vapour density: No information available	Auto-ignition temperature	e: No information available	No information available				
Kinematic viscosity:  No information available  No information available  No information available  No information available  Partition coefficient n- octanol/water (log value):  Vapour pressure:  No information available	Decomposition temperatu	re: No information available	No information available				
Solubility:  Partition coefficient n- octanol/water (log value):  Vapour pressure:  Density and/or relative density:  No information available	рН:	No information available	No information available				
Partition coefficient n- octanol/water (log value):  Vapour pressure:  No information available	Kinematic viscosity:	No information available	No information available				
octanol/water (log value):  No information available	Solubility:	No information available	No information available				
Density and/or relative density:  No information available  Relative vapour density:  No information available  No information available		No information available	No information available				
Relative vapour density: No information available No information available	Vapour pressure:	No information available	No information available				
	Density and/or relative de	nsity: No information available	No information available				
Particle characteristics: No information available No information available	Relative vapour density:	No information available	No information available				
	Particle characteristics:	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 hazard da	ccac ac dafinad	in Regulatio	n (EC) No 1272/2	2008		
Acute toxic		3363 43 46111164	iii Regulatio	11 (20) 140 1272/2	.000		
Route of exposure:	Method	Species		D <sub>50</sub> /LC <sub>50</sub> or TE <sub>mix</sub>	Exposure tir	me	Results
Oral:	-	-		ormation ailable	-		_
Dermal:	-	-		formation ailable	_		_
Inhalation:	-	_		formation ailable	_		_
Specific tar	get organ toxic	city – single expo	osure (STOT	SE):			
	Spe	ecific effects		Target orga	an		Note
Oral:	No information	n available	No	information avai	lable	-	
Dermal:	No information	n available	No	information avai	lable	-	
Inhalation:	No information	on available	No	information avai	lable	-	
Aspiration I	nazard:	N	lo information	on available.			
Irritation ar	nd corrosion						
	Exposi	ure time	Species	Evaluation	Method		Note
Skin corrosion/irritation:	-	-		-	_	-	
Serious eye damage/irritation	-	-		-	-	-	
Sensitizatio	n						
Skin sensitization:	No ii	nformation avai	lable.				
Respiratory sensitiza	tion Noi	nformation avai	lahla				



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3,p.c	ms relat	ed to the ph	nysical, chemic	al and toxicolog	gical characterist	ics	
Oral exposure:	l	No informati	on available.				
Dermal exposure	e: N	No informati	on available.				
Inhalation expos	ure: N	No informati	on available.				
Eye exposure:	١	No informati	on available.				
Repeate	ed dose	toxicity (sub	acute, subchro	onic, chronic)			
		Dose	Exposure time	Species	Method	Evaluation	Note
Subacute oral	No ir availat	nformation ole	No information available	No information available	No information available	No information available	-
Subacute dermal	No ir availat	nformation ole	No information available	No information available	No information available	No information available	-
Subacute inhalation	No ir availat	nformation ole	No information available	No information available	No information available	No information available	-
Subchronic oral	No ir availat	nformation ole	No information available	No information available	No information available	No information available	-
Subchronic dermal	No ir availak	nformation ole	No information available	No information available	No information available	No information available	-
Subchronic inhalation	No ir availat	nformation ole	No information available	No information available	No information available	No information available	-
Chronic oral	No ir availat	nformation ole	No information available	No information available	No information available	No information available	-
Chronic dermal	No ir availat	nformation ole	No information available	No information available	No information available	No information available	-
Chronic inhalation	No ir availat	nformation ole	No information available	No information available	No information available	No information available	-



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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)  Carcinogenicity: Based on available data, the classification criteria are not met.  Mutagenicity in vitro: Based on available data, the classification criteria are not met.  Genotoxicity: Based on available data, the classification criteria are not met.  Germ cell mutagenicity: Based on available data, the classification criteria are not met.  Reproductive toxicity: Based on available data, the classification criteria are not met.  Reproductive toxicity: Based on available data, the classification criteria are not met.  Summary of evaluation of the CMR Based on available data, the classification criteria are not met.  Summary of evaluation of the CMR Based on available data, the classification criteria are not met.	Subacu	te oral	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 -  Chronic inhalation No information available No information available -  CMR effects (carcinogenicity; mutagenicity; reproductive toxicity)  Carcinogenicity: Based on available data, the classification criteria are not met.  Mutagenicity in vitro: Based on available data, the classification criteria are not met.  Mutagenicity in vivo: Based on available data, the classification criteria are not met.  Germ cell mutagenicity: Based on available data, the classification criteria are not met.  Reproductive toxicity: Based on available data, the classification criteria are not met.  Summary of evaluation of the CMR Based on available data, the classification criteria are not met.	Subacu	e dermal 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 - Chronic inhalation No information available No information available - CMR effects (carcinogenicity; mutagenicity; reproductive toxicity)  Carcinogenicity: Based on available data, the classification criteria are not met. Mutagenicity in vitro: Based on available data, the classification criteria are not met. Mutagenicity in vivo: Based on available data, the classification criteria are not met. Germ cell mutagenicity: Based on available data, the classification criteria are not met. Reproductive toxicity: Based on available data, the classification criteria are not met.  Summary of evaluation of the CMR Based on available data, the classification criteria are not met.	Subacu	te inhalation	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 - Chronic inhalation No information available No information available - CMR effects (carcinogenicity; mutagenicity; reproductive toxicity)  Carcinogenicity: Based on available data, the classification criteria are not met. Mutagenicity in vitro: Based on available data, the classification criteria are not met. Genotoxicity: Based on available data, the classification criteria are not met. Germ cell mutagenicity: Based on available data, the classification criteria are not met. Reproductive toxicity: Based on available data, the classification criteria are not met.  Summary of evaluation of the CMR Based on available data, the classification criteria are not met.	Subchro	onic oral	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 - Chronic inhalation No information available No information available - CMR effects (carcinogenicity; mutagenicity; reproductive toxicity)  Carcinogenicity: Based on available data, the classification criteria are not met. Mutagenicity in vitro: Based on available data, the classification criteria are not met. Genotoxicity: Based on available data, the classification criteria are not met. Mutagenicity in vivo: Based on available data, the classification criteria are not met. Germ cell mutagenicity: Based on available data, the classification criteria are not met. Reproductive toxicity: Based on available data, the classification criteria are not met.  Summary of evaluation of the CMR Based on available data, the classification criteria are not met.	Subchro	onic dermal	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)  Carcinogenicity: Based on available data, the classification criteria are not met. Mutagenicity in vitro: Based on available data, the classification criteria are not met. Genotoxicity: Based on available data, the classification criteria are not met. Mutagenicity in vivo: Based on available data, the classification criteria are not met. Germ cell mutagenicity: Based on available data, the classification criteria are not met. Reproductive toxicity: Based on available data, the classification criteria are not met.  Summary of evaluation of the CMR Based on available data, the classification criteria are not met.	Subchro	onic inhalation	No information available		No information available	-				
Chronic inhalation No information available No information available -  CMR effects (carcinogenicity; mutagenicity; reproductive toxicity)  Carcinogenicity:  Based on available data, the classification criteria are not met.  Mutagenicity in vitro:  Based on available data, the classification criteria are not met.  Genotoxicity:  Based on available data, the classification criteria are not met.  Mutagenicity in vivo:  Based on available data, the classification criteria are not met.  Germ cell mutagenicity:  Based on available data, the classification criteria are not met.  Reproductive toxicity:  Based on available data, the classification criteria are not met.  Summary of evaluation of the CMR Based on available data, the classification criteria are not met.	Chronic	oral	No information available		No information available	-				
CMR effects (carcinogenicity; mutagenicity; reproductive toxicity)  Carcinogenicity:  Based on available data, the classification criteria are not met.  Mutagenicity in vitro:  Based on available data, the classification criteria are not met.  Genotoxicity:  Based on available data, the classification criteria are not met.  Mutagenicity in vivo:  Based on available data, the classification criteria are not met.  Germ cell mutagenicity:  Based on available data, the classification criteria are not met.  Reproductive toxicity:  Based on available data, the classification criteria are not met.  Summary of evaluation of the CMR Based on available data, the classification criteria are not met.	Chronic	: dermal	No information available		No information available	-				
Carcinogenicity:  Based on available data, the classification criteria are not met.  Mutagenicity in vitro:  Based on available data, the classification criteria are not met.  Genotoxicity:  Based on available data, the classification criteria are not met.  Mutagenicity in vivo:  Based on available data, the classification criteria are not met.  Germ cell mutagenicity:  Based on available data, the classification criteria are not met.  Reproductive toxicity:  Based on available data, the classification criteria are not met.  Summary of evaluation of the CMR Based on available data, the classification criteria are not met.	Chronic	: inhalation	No information available		No information available	-				
Carcinogenicity:  Based on available data, the classification criteria are not met.  Mutagenicity in vitro:  Based on available data, the classification criteria are not met.  Genotoxicity:  Based on available data, the classification criteria are not met.  Mutagenicity in vivo:  Based on available data, the classification criteria are not met.  Germ cell mutagenicity:  Based on available data, the classification criteria are not met.  Reproductive toxicity:  Based on available data, the classification criteria are not met.  Summary of evaluation of the CMR Based on available data, the classification criteria are not met.										
Mutagenicity in vitro:  Based on available data, the classification criteria are not met.  Genotoxicity:  Based on available data, the classification criteria are not met.  Mutagenicity in vivo:  Based on available data, the classification criteria are not met.  Germ cell mutagenicity:  Based on available data, the classification criteria are not met.  Reproductive toxicity:  Based on available data, the classification criteria are not met.  Summary of evaluation of the CMR Based on available data, the classification criteria are not met.		CMR effects (ca	arcinogenicity; mutagenicit	y; reproductive	toxicity)					
Genotoxicity:  Based on available data, the classification criteria are not met.  Mutagenicity in vivo:  Based on available data, the classification criteria are not met.  Germ cell mutagenicity:  Based on available data, the classification criteria are not met.  Reproductive toxicity:  Based on available data, the classification criteria are not met.  Summary of evaluation of the CMR Based on available data, the classification criteria are not met.		Carcinogenicity: Based on available data, the classification criteria are not met.								
Mutagenicity <i>in vivo</i> :  Germ cell mutagenicity:  Based on available data, the classification criteria are not met.  Reproductive toxicity:  Based on available data, the classification criteria are not met.  Based on available data, the classification criteria are not met.  Summary of evaluation of the CMR Based on available data, the classification criteria are not met.		Mutagenicity <i>in vitro</i> : Based on available data, the classification criteria are not met.								
Germ cell mutagenicity:  Reproductive toxicity:  Based on available data, the classification criteria are not met.  Based on available data, the classification criteria are not met.  Summary of evaluation of the CMR Based on available data, the classification criteria are not met.		Genotoxicity: Based on available data, the classification criteria are not met.								
Reproductive toxicity:  Based on available data, the classification criteria are not met.  Summary of evaluation of the CMR Based on available data, the classification criteria are not met.		Mutagenicity <i>ir</i>	Mutagenicity <i>in vivo</i> : Based on available data, the classification criteria are not met.							
Summary of evaluation of the CMR Based on available data, the classification criteria are no		Germ cell muta	genicity:	Based on avai	lable data, the classification c	riteria are not met.				
		Reproductive toxicity: Based on available data, the classification criteria are not me								
		•	evaluation of the CN		available data, the classifica	ation criteria are not				
11.2. Information on other hazards:	11.2.	Information on	other hazards:							
11.2.1. Endocrine disrupting properties:										
No known endocrine disrupting properties that affect human health.		No known end	docrine disrupting propert	iies						
11.2.2. Other informations:	11.2.2.	Other informat	ions:							
-		-								

SECTION 12. Ecologic	cal informat	ion				
12.1 Toxicity						
Acute (short-term) toxicity	Dose	Exposure time	Species	Method	Evaluation	Note
Fish	LC <sub>50</sub>	96 hours	No information available	No information available	8.140 mg/l (ethanol)	-



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No information available		No intavailable	ormation	No information available	No informatio available	'n	No infor	
% Degradati	on	Time (c	lays)	Method	Evaluatio	n		Note
Biode	gradatio	on						
Soil	No ir	nformation a	vailable	No information available	No informatio available	n	-	
Air	No information available		No information available	No information available		-		
Fresh water	No ir	nformation a	vailable	No information available	No informatio available	n	-	
Marine water	No ir	nformation a	vailable	No information available	No informatio available	n	-	
į.	i -	gradation ha	alf-lives	Method	Evaluatio	n		Note
	c degra		mity					
		nd degradab	ility					
Other organisms		-	-	avalial	JIC .	-		
Algae/aquatic ¡	olants	IC <sub>50</sub>	72 hours	No information available	No information available	No inform availat		-
Crustacea:		EC <sub>50</sub>	48 hours	No information available	No information available	No inform availat		-
Fish		LC <sub>50</sub>	96 hours	No information available	No information available	No inform availat		-
Chronic (long-t toxicity	erm)	Dose	Exposur time	e Species	Method	Eval	uation	Note
Other organism	าร	-	-	-	-	-		-
Algae/aquatic p	olants	IC <sub>50</sub>	4 days	No information available	No information available		0 mg/l nanol)	-
Crustacea:		EC <sub>50</sub>	48 hours	No information available	No information available		0 mg/l nanol)	-



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12.3	Bioaccumu	lative n	otential								
12.3		•	tition coeffi	cient (	loa Kow)	<u> </u>					
Valu		centrat			°C		ethod	Evalua	ation		Note
-	-		-					-		_	
	Bioconcent	tration f	actor (BCF)								
V	alue		Species		١	/lethoc	l	Evaluatio	on		Note
No info		No availab	informa le	ation	No info		n	No information	on	-	
			_								
	1				ı		<u> </u>	ı			
	Chronic ec	otoxicit	У								
	Value		Dose		osure ime	Spe	ecies	Method	Evalu	ıation	Note
Chronic	toxicity on	fish	LC <sub>50</sub>	No infor	mation able	No inforr availa	nation Ible	No information available	No inform availab		-
	toxicity on ea ( <i>Daphnia</i> )	)	EC <sub>50</sub>	No information available		No inforr availa	nation Ible	No information available	No inform availab		-
					·						
12.4	Mobility in	soil									
	······································		d distribution	on in e	environm	ental c	ompart	ments:			
	No informa	ation av	ailable								
	Surface ter	nsion:									
	Value		°C	C	oncentra	tion	**************************************	Method			Note
	No information available		ormation ailable		informa <sup>a</sup> iilable	tion	No info	ormation ble	-		
	Adsorption	ı / deso	rption								



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Transpo	rt A/D coefficient Henry's constant	log Kow	Evaporation rate	Method	Note
Soil-wat	er No information available	No information available	No information available	No information available	-
Water-a	ir 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 asses	ssment			
	Based on available data, the p	product does not o	contain any PBT or v	PvB substances.	
12.6	Endocrine disrupting propert	ies			
	Based on available data, does	not contain endo	crine disruptors.		
12.7	Other adverse effects				
	No further relevant information	on available.			
SECTIO	N 13. Disposal consideration	s			
13.1	Waste treatment methods				
12.1.1	Duration of (Darker in a discourse of the control o	1.			
13.1.1.	Product/Packaging disposal Submit for disposal to the I Protection.		rized by the Ministr	y of Environmental	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	d with hazardous
13.1.3.	Waste treatment – relevant	information:			
	No information available				
	:				
13.1.4.	Sewage disposal – relevant	information:			
13.1.4.	Sewage disposal – relevant Waste must not be dispose		ge system.		



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	authorized by the ministry in	ct's remains into the sewage system. Submit the remains to the collectors charge. Do not dispose of the packaging into the sewage system. Submit ors authorized by the ministry in charge.
13.1.6.	Relevant Community provision	ons:
	Disposal must be made accor	rding to official regulations.
SECTION	N 14 TRANSPORT INFORMATI	ION
	Transporting/shipment by road	I (ADR)
UN num	ber:	Not subject to transport regulations
UN prop	er shipping name:	-
Transpor	rt hazard class(es):	-
Packing	group:	-
Environn	nentally hazardous:	-
Special p	precautions for user:	-
	Transporting/shipment by rail (	RID)
UN num	ber:	Not subject to transport regulations
UN prop	er shipping name:	-
Transpor	rt hazard class(es):	-
Packing	group:	-
Environn	nentally hazardous:	-
Special p	precautions for user:	-
	Inland waterway transport (ADI	N)
UN num	ber:	Not subject to transport regulations
UN prop	er shipping name:	-
Transpor	rt hazard class(es):	-
Packing	group:	-
Environn	nentally hazardous:	-
Special precautions for user:		-
	Transporting/shipment by sea	(IMDG)
UN num	ber:	Not subject to transport regulations
UN proper shipping name:		-
Transpor	rt hazard class(es):	-
Packing	group:	-
Environn	nentally hazardous:	-
Special precautions for user:		-



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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:	Not subject to transport regulations
UN proper shipping name:	-
Transport hazard class(es):	-
Packing group:	-
Environmentally hazardous:	-
Special precautions for user:	-
Further information: -	

5.1 Safety, health and envir	onmental regulations/legislation specific for the substance or mixture
EU regulations	
Authorization and/or re	strictions of use
Authorizations:	-
Restrictions:	-
Other EU regulations:	Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC; Directive 2004/42/CE of the European Parliament and of the Council of 21 April 2004 on the limitation of emissions of volatile organic compounds due to the use of organic solvents in certain paints and varnishes and vehicle refinishing products and amending Directive 1999/13/EC; Council Directive 98/24/EC of 7 April 1998 on the protection of the health and safety of workers from the risks related to chemical agents at work; Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006; REACH Restrictions on the manufacturing, placing on the market and use of certain dangerous substances, mixtures and articles (Annex XVII);



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Trading name:		HCL REAGENT,	A.T.		
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	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	ON 16. Other information	
16.1	Indication of changes:	-
16.2	Abbreviations and acronyn	ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)  IMDG: International Maritime Code for Dangerous Goods  IATA: International Air Transport Association  GHS: Globally Harmonised System of Classification and Labelling of Chemicals EINECS: European Inventory of Existing Commercial Chemical Substances  CAS: Chemical Abstracts Service (division of the American Chemical Society)  DNEL: Derived No-Effect Level (UK REACH)  LC50: Lethal concentration, 50 percent  LD50: Lethal dose, 50 percent  PBT: Persistent, Bioaccumulative and Toxic  vPvB: very Persistent and very Bioaccumulative
16.3.	Key literature references ar source of data:	nd _
16.4.	Classification and procedu 1272/2008 (CLP)	re used to derive the classification for mixture according to Regulation (EC)
Classifi	cation	Classification procedure
-		-
16.5.	Relevant H statements (nu	mber and full text)
	314	Causes severe skin burns and eye damage.
	H: 335	May cause respiratory irritation.
16.6.	Training advice:	-
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
ĺ	-



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Trading name:	SODIUM METABISULFITE, SOLUTION				
Product code:	NM-OT-X**	Revision date:	21 Dec 2022	Version:	4

1.1.	ON 1: Identification of the substance/mixture and of the company/undertaking  Product identifier					
1.1.		CODILIN	4	ETARICHI FITE COLUTION		
	Trading name:	SODION	SODIUM METABISULFITE, SOLUTION			
	Chemical name:	-	-			
	Catalogue number:	per: NM-OT-X**				
1.2.	Relevant identified us	es of the su	ubstance 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	Details of the supplier of the safety data sheet				
	Supplier: Bid		BioGnost Ltd.	BioGnost Ltd.		
	Address:					
	Address:		Medjugorska	59, Zagreb		
	Telephone number:		Medjugorska +385 1 24099			
				97		
	Telephone number:	person:	+385 1 24099	97 39		
	Telephone number: Fax no.:	person:	+385 1 24099 +385 1 24040	97 39		
1.4.	Telephone number: Fax no.: e-mail of competent		+385 1 24099 +385 1 24040	97 39		
1.4.	Telephone number: Fax no.: e-mail of competent   National contact:	number	+385 1 24099 +385 1 24040 msds@biogno	97 39		
1.4.	Telephone number: Fax no.: e-mail of competent   National contact: Emergency telephone	number	+385 1 24099 +385 1 24040 msds@biogno	97 98 98 98 98 98 98		

CECTIC	SECTION 2. Hazards identification				
SECTIO	N 2. Mazards 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*:		
	Eye Irr. 2		H319		
2.1.2.	Additional information				
	-				
*For fu	ll text of Hazard- and EU Hazar	rd-statements: see Section	16		
2.2.	Label elements				
	Product identification:	SODIUM METABISUL	FITE, SOLUTION		
	Identification number:	-			
	Authorization no.:	Authorization no.:			



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Trading name:	SODIUM METABISULFITE, SOLUTION				
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	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					
	Endocrine Disrupting Proper	ties:				
	No known endocrine disrupting	No known endocrine disrupting properties				
	<b>Results of PBT and vPvB asso</b> PBT or a vPvB.	<b>essment</b> : According to the results of its assessment, this substance is not a				

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)		
7681-57-4/ 231-673-0/ 016-063-00-2	-	< 10 %	sodium metabisulfite	Acute Tox. 4, H302 Eye Dam. 1; H318 EUH031		

SECTION	SECTION 4. First aid measures				
4.1.	Description of first aid measures				
	General notes:	Take off contaminated clothing.			
	Following inhalation:	Provide fresh air. In all cases of doubt, or when symptoms persist, seek medical advice.			
	Following skin contact:	Rinse skin with water/shower. In all cases of doubt, or when symptoms persist, seek medical advice.			
	Following eye contact:	In case of contact with eyes flush immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart and consult an ophthalmologist.			



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Trading name:	SODIUM METABISULFITE, SOLUTION				
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	Following ingestion: Self-protection of the first aider:		Rinse mouth. Call a doctor if you feel unwell.  Treat symptomatically.	
4.2.	Most important symptom	s and ef	fects, both acute and delayed	
			nformation available	
			No information available	
	Following eye contact:	Risk	of blindness, Risk of serious damage to eyes.	
	Following ingestion: No information available		nformation available	
4.3.	Indication of any immedia	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, foam, CO <sub>2</sub> 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				
	Do not enter fire area without proper protective equipment, including respiratory protection.				
5.4.	Additional information				
	Remove sources of heat and ignition.  Do not contaminate the environment with extinguishing media.				

SECTIO	ON 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. Remove all sources of sparks and ignition. Do not smoke.		
	Emergency procedures:	Mark the area using proper signs.		
6.1.2.	For emergency responders:			
	Do not enter fire area without pro	oper protective equipment, including respiratory protection.		
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.			



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Trading name:	SODIUM METABISULFITE, SOLUTION					
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6.3.	Methods and material for containment and cleaning up				
6.3.1.	Bunding, covering of drains; capping procedures:	Covering of drains. Take up mechanically.			
6.3.2.	Cleaning up:	Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. On land, sweep or shovel into suitable containers. 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:	Place in appropriate containers for disposal.			
6.4.	Reference to other sections				
	See Section 7 for information about secure handling.  See Section 8 for information about personal protective equipment.  See Section 13 for information about containment.				

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 generat	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	mpatibili	ities		
	Technical measures and storage conditions:	•	n tightly closed and upright set containers in a well ted place.		
	Packaging materials:	Manufa	acturer's original packaging.		
	Requirements for storage rooms and vessels:	Keep av	way from food and drink. Keep the containers 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:	place the unused material in the storage room not use empty containers for storing other als. Do not store with incompatible materials (see 19).			



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

SECTION 8. Exposu	re contr	ols/persona	al prote	ction				
8.1. Control par	ameters							
Substance				l l	ccupational exposure limit values/short term values			Biological limit values
				ı	ppm	mg/m³		
-	-		-	-	No i	nformation available		
Substance								
name:		T.						
EC No: -		CAS No:	-					
DNEL								
				Inc	dustrial			
Route of exposure:		Acute ect local	effe	Acute		Chronic effect local		Chronic effect systemic
Oral	-	et local	-	et syst	.crinc	-		-
Inhalation	_		-			-		-
Dermal	-		-			-		-
Critical physical para	meters:	solubility, fla	ammabili	ity, cor	rosivity:	-		
				Co	nsumer			
Route of	A	Acute		Acute	9	Chronic	:	Chronic
exposure:	effe	ect local	effe	ct syst	temic	effect loc	al	effect systemic
Oral	-		-			-		-
Inhalation	-		-			-		-
Dermal	-		-			-		-
PNEC								
Environmental prote	ction tar	get			PNEC			
Fresh water						mation available		
Freshwater sediment	:S				No information available			
Marine water					No information available			
Marine sediments					No information available			
Food chain					No information available			
Microorganisms in s	ewage tr	eatment			No information available			



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Soil (agric	ultural)		No information available			
Air			No information available			
8.2.	Exposure controls					
8.2.1.	Engineering measures					
	Substance/mixture relate measures to prevent expoduring 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 prexposure:	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 pr 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					
	Hand protection:	Chem 374.	Glove material: nitrile rubber Glove thickness: > 0.11 mm Break through time: >480 min			
	Other skin protection:		antistatic clothing made of natural fibers (such as cotton) with long es (EN 13034), and shoes that cover the entire foot (EN 10335).			
8.2.2.3.	Respiratory protection:	In cas	e of inadequate ventilation wear respiratory protection.			
8.2.2.4.	Thermal hazards:	No in	formation available			
8.2.3.	Environmental exposure	controls				
	Substance/mixture relate measures to prevent expe		See Section 6			
	Structural measures to prexposure:	event	Use modern equipment.			
	Organisational measures prevent exposure:	to	Adapt the work process to the required working conditions of the workplace. Keep away from drains, surface and ground water.			
	Technical measures to prexposure:	event	See Section 6			

#### **SECTION 9. Physical and chemical properties**

9.1. Information on basic physical and chemical properties



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Trading name:	SODIUM METABISULFITE, SOLUTION					
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	Value	Method
Physical state:	liquid	No information available
Color:	colourless	No information available
Odour/odour threshold:	No information avaialble/no information available	No information available
Melting point / freezing point:	No information available	No information available
Boiling point or initial boiling point and boiling range:	No information available	No information available
Flammability:	No information available	No information available
Lover and upper explosion limit:	No information available	No information available
Flash point:	No information available	No information available
Auto-ignition temperature:	No information available	No information available
Decomposition temperature:	No information available	No information available
pH:	No information available	No information available
Kinematic viscosity:	No information available	No information available
Solubility:	No information available	No information available
Partition coefficient n-octanol/water (log value):	No information available	No information available
Vapour pressure:	No information available	No information available
Density and/or relative density	No information available	No information available
Relative vapour density:	No information available	No information available
Particle characteristics:	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:	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. Toxicological information**

Information on hazard classes as defined in Regulation (EC) No 1272/2008 11.1.



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Trading name:	SODIUM METABISULFITE, SOLUTION				
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Acute tox	icity:				
Route of exposure:	Method	Species	Effective dose LD <sub>50</sub> /LC <sub>50</sub> or ATE <sub>mixture</sub>	Exposi time	RACILITE
Oral exposure:	No information available	-	LD <sub>50</sub>	-	-
Dermal exposure:	No information available	-	LD <sub>50</sub>	-	-
Inhalation exposure:	No information available	-	LC <sub>50</sub>	-	-
Specific ta	arget organ toxicity – sin	gle exposure (STO	ΓSE):		
	Specifi	c effects	Targ	et organ	Note
Oral exposure:	No information av	ailable	No information available		-
Dermal exposure:	No information av	ailable	No inform available	nation	-
Inhalation exposure	e: No information av	No information available		nation	-
Respirato	ry irritation:	No information	available		
	,				
Irritation a	and corrosion				
	Exposure time	Species	Evaluati on	Meth od	Note
Skin irritation:	-	-	-	_	
Eye irritation:	-	-	-	_	Causes serious eye damage
Sensitizat	ion				
Dermal exposure:	No information availab	ole			
Inhalation exposure:	No information availab	ole			
		ah anaka 1 anta a		<b>.</b> · · · ·	
	s related to the physical,		cological chara	acteristics	
Oral exposure:	No information avai				
Dermal exposure:	No information avai				
Inhalation exposure	e: No information avai	lable			



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Trading name:		SODIUM METAB	SULFITE, SOLUTION		
Product code:	NM-OT-X**	Revision date:	21 Dec 2022	Version:	4

Repeat	ed dose toxicity (su	bacute, subchr	onic, chronic)				
	Dose	Exposure time	Species	Method	Evaluation	1	Note
Subacute oral	No information available	No information available	No information available	No information available	No inform available	nation	-
Subacute dermal	No information available	No information available	No information available	No information available	No inform	nation	-
Subacute inhalation	No information available	No information available	No information available	No information available	No inform	nation	-
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 inform available	nation	-
Chronic inhalation	No information available	No information available	No information available	No information available	No inform available	nation	-
-							
Specific	target organ toxic	<u> </u>	•				
		Specific effect	ts	Target or			Note
Subacute oral		ation available		No information		-	
Subacute derma		ation available		No information		-	
Substranis and		ation available		No information		-	
Subchronic oral Subchronic derm		ation available		No information		-	



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Trading name:		SODIUM METAB	ISULFITE, SOLUTION	-	
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Subchro	onic inhalation	No information ava	ilable	No information available	-			
Chronic	ic oral No information avai		ilable	No information available	-			
Chronic	dermal	No information ava	ilable	No information available	-			
Chronic inhalation No information available		ilable	No information available	-				
	CMR effects (c	carcinogenicity, mutag	genicity, repr	oductive toxicity)				
	Carcinogenicity:		No informa	ation available				
	Mutagenicity in-vitro:		No information available					
	Genotoxicity:		No informa	ation available				
	Mutagenicity in-vivo:		No informa	ation available				
	Germ cell mut	agenicity:	No information available					
	Reproductive	toxicity:	No information available					
				,				
	Summary of e	valuation of the CMR	properties:	-				
11.2.	Information o	n other hazards:						
11.2.1.	Endocrine disr	rupting properties:						
	No known properties tha	endocrine disrup t affect human health	-					
11.2.2.	Other informa	tions:						

CECTION 12	) Ecological	information
SECTION 12	z. Ecolouicai	IIIIOIIIIauoii

#### 12.1. Toxicity

Acute (short-term) toxicity	Dose	Exposure time	Species	Method	Evaluation	Note
Fish	LC <sub>50</sub>	96 hours	No information available	No information available	No information available	-
Crustacea:	EC <sub>50</sub>	48 hours	No information available	No information available	No information available	-
Algae/aquatic plants	IC <sub>50</sub>	8 days	No information available	No information available	No information available	-
Microorganisms	LC <sub>50</sub>	72 hours	-	-	-	-
Chronic toxicity	Dose	Exposure time	Species	Method	Evaluation	Note
Fish	LC <sub>50</sub>	96 hours	No information available	No information available	No information available	-



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									Page 11	01 17
Trading nam	e:			SOD	IUM METAI	BISUL	FITE, SOLU	TION		
Product code	e:	NM-OT-X	<b>*</b> *	Re	vision date:	21	Dec 2022		Version:	4
Crustacea:	rustacea: FC <sub>50</sub> A8 hours			nformation lable	No information available		No info	rmation e	<b>-</b>	
Algae/aquatic plants		IC <sub>50</sub>	72 hours	No information available		No ir availa	nformation able	No info availabl	rmation e	-
Other organis	ther organisms microorganisms No information available		No info availabl		-					
12.2. Persi	istence	and degrad	dability							
Abio	tic deg	radation								
	Degradation half-lives			Method		Ev	aluation		Note	
Marine water	No ir	nformation a	available	No inf	ormation avai	lable	No informat	tion avail	able	-
Fresh water	No ir	nformation a	available	No inf	ormation avai	lable	No informat	tion avail	able	-
۹ir	No ir	nformation a	available	No inf	ormation avai	ilable No information a			able	-
Soil	No ir	nformation a	available	No inf	ormation avai	available No information av		tion avail	able	-
Biod	egrada	ntion								
% Degradation	n	Time (da	ays)	M	lethod		Evaluation		No	te
No informatio available		o info vailable					o informati ailable	on		
		lative poten						:		
		efficient: n-								
Value		entration	рН	°C	Method				N	ote
_	No ir availab	nformation ble	-	-	No informat available			tion	-	
	oncent	ration facto	r (BCF)							
Bioc		Value Species		Method		Evaluation			Note	
i i		Spe	Species information		Method		Evaluation		INC	te



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	Ch	ronic ecoto	xicity		-		:				
	Va	alue	Dose	Exposure Spo		Species	Meth	od	Evalua	ntion	Note
Chronic toxicity on fish LC <sub>5</sub>		LC <sub>50</sub>	information i			No information available		No inform available	ation	-	
Chronic		city on aphnia)	EC <sub>50</sub>	No inforr availa	nation ic	lo nformat on vailable	No inform available	nation	No inform available	ation	-
12.4.	Мс	bility in so	il								
	-	•	dicted distribut	ion in e	environmer	ntal com	partments:				
			n available								
	Surface tension:										
	Value °C  No information available  No info available				Concen	tration	Meth	od		Note	
				nation			No information available				
	Ad	sorption / o	desorption								
Transp		A/D o	coefficient 's constant	lo	log Kow Eva		oration rate M		lethod	1	Note
Soil-wa	ater	No available	information	No in availa	formation ble	No info	ormation le	No inf availat	ormation ole	-	
Water-	air	No available	information	No in availa	formation ble	No info	ormation le	No inf availat	ormation ole	-	
Soil-air	I-air No information No information available		No info	ormation le	No inf availat	ormation ole	-				
12.5.	Res	sults of PRI	and vPvB asse	ssment							
. 2.3.			on available	551110110							



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	No known endocrine disrupting	properties that affect the environment.				
12.7.	Other adverse effects					
	No adverse effects are expected	<u>l</u>				
	13. Disposal considerations					
13.1.	Waste treatment methods					
12.1.1	Duraturat/Darkarainan diananah					
13.1.1.	Product/Packaging disposal:	Lineare a subharinad butha Ministry of Environmental and Natura				
	Protection.	al person authorized by the Ministry of Environmental and Nature				
	1					
13.1.2.	Waste codes/waste designatio	ns according to Law:				
	No information available					
13.1.3.	Waste treatment – relevant information:					
	No information available					
13.1.4.	Sewage disposal – relevant information:					
	Waste must not be disposed o	f into the sewage system.				
13.1.5.	Other disposal recommendation					
	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 provision	ns:				
	-					
	1 14. Transport information					
<u>i</u>	Transporting/shipment by road					
UN numb		Not subject to transport regulations.				
	er shipping name:	-				
•	t hazard class(es):	-				
Packing o		-				
Environmentally hazardous: -						



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### BIOGNOST® According to Regulation (EC) No. 1907/2006 amended by Regulation (EU) No. 2020/878

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Trading name:	SODIUM METABISULFITE, SOLUTION					
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Special precautions for us	er: -
Transporting/sh	ipment by rail (RID)
UN number:	Not subject to transport regulations.
UN proper shipping name	e: -
Transport hazard class(es)	):
Packing group:	-
Environmentally hazardou	ıs: -
Special precautions for us	er: -
Inland waterway	transport (ADN)
UN number:	Not subject to transport regulations.
UN proper shipping name	e:
Transport hazard class(es)	):
Packing group:	-
Environmentally hazardou	ıs: -
Special precautions for us	er: -
Transporting/sh	ipment by sea (IMDG)
UN number:	Not subject to transport regulations.
UN proper shipping name	e: -
Transport hazard class(es)	):
Packing group:	-
Environmentally hazardou	ıs: -
Special precautions for us	er: -
Transporting/sh	ipment by air (ICAO-TI/IATA-DGR)
UN number:	Not subject to transport regulations.
UN proper shipping name	e: -
Transport hazard class(es)	): -
Packing group:	-
Environmentally hazardou	ıs: -
Special precautions for us	er: -
Further information:	The product is not subject to classification.

SECTION 15. Regulatory information					
15.1.	Safety, health and environmental regulations/legislation specific for the substance or mixture				
	EU regulations				



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Trading name:	SODIUM METABISULFITE, SOLUTION				
Product code:	NM-OT-X**	Revision date:	21 Dec 2022	Version:	4

	Authorizations:	-
	Restrictions:	-
	Other EU regulations:	Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/9 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC;  Directive 2004/42/CE of the European Parliament and of the Council of 21 April 200 on the limitation of emissions of volatile organic compounds due to the use of organic solvents in certain paints and varnishes and vehicle refinishing products and amending Directive 1999/13/EC;  Council Directive 98/24/EC of 7 April 1998 on the protection of the health and safet of workers from the risks related to chemical agents at work;  Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 1 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006;  REACH Restrictions on the manufacturing, placing on the market and use of certain dangerous substances, mixtures and articles (Annex XVII);
	Information according 19 guideline)	999/13/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
5.2.	Chemical safety assessme	ent
	None	

SECTIO	N 16. Other information	
16.1.	Indication of changes:	-



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16.2. Abbreviations and acronyms:		5:	ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)  IMDG: International Maritime Code for Dangerous Goods  IATA: International Air Transport Association  GHS: Globally Harmonised System of Classification and Labelling of Chemicals  EINECS: European Inventory of Existing Commercial Chemical Substances  CAS: Chemical Abstracts Service (division of the American Chemical Society)  DNEL: Derived No-Effect Level (UK REACH)  LC50: Lethal concentration, 50 percent  LD50: Lethal dose, 50 percent  PBT: Persistent, Bioaccumulative and Toxic  vPvB: very Persistent and very Bioaccumulative		
16.3.	Key literature references and source of data:			-	
16.4.		ssification and procedure	e used to	o derive the classification for mixture according to Regulation (EC)	
Classifi	cation	า	Classif	ication procedure	
-			-		
16.5.	Rel	evant H statements (num	ber and	full text)	
		302	Harmf	ul if swallowed.	
	H:	318	Causes	s serious eye damage.	
		319	Cause	s serious eye irritation.	
		EUH031	Contac	ct with acids liberates toxic gas.	
16.6.	Tra	ining advice:	-		
16.7.	Fur	ther 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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Trade name:		ΓΙΟΝ	<u> </u>		
Product code:	AY-OT-X**	Date of compilation:	14 Nov 2022	Version:	3

1.1.	Product identifier						
	Trade name:	ALCIAN YELLOW, SOLUTION					
	Chemical name:	-					
	Catalogue number:	AY-OT-X**					
1.2.	Relevant identified uses of the substance or mixture and uses advised against						
	Uses:			For use w	th Alcian Yellow Toluidine Blue kit.		
	Uses advised against:			Only the i	dentified uses are advised.		
	Reason why uses a	advised against:		medical d	act is intended for use only as an <i>in vitro</i> diagnostic evice, registered at the Agency for Medicinal and Medical Devices and there is no reason to use r purposes.		
1.3.	Details of the supplier of the safety data sheet						
	Supplier:		BioGnost Ltd.				
	Address:		Medjugorska 59, Zagreb				
	Telephone numbe	r:	+385 1 2409997				
	Telefax:		+385 1 2404039				
	E-mail of compete	nt person:	msds@biognost.hr				
	National contact:		-				
1.4.	Emergency telephone numbers						
	National Protection and Rescue Directorate		2:	112			
	Medical information:			+385 1 2348 342			
	Other information:				-		

SECTION	SECTION 2. Hazards identification						
2.1.	Classification of the substar	nce or mixture					
2.1.1.	Classification according to I	Regulation (EC) No	o. 1272/2008 (CLP)				
	Hazard class and cate	egory code:		Hazard statement*:			
	Flam. Liq. 2		H225				
2.1.2.	Additional information						
	-						
*For fu	ıll text of Hazard- and EU Haza	ırd-statements: see	e Section 16.				
2.2.	Label elements						
	Product identification:	ALCIAN YELLO	OW, SOLUTION				
	Identification number:	-					



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Trade name:	ALCIAN YELLOW, SOLUTION					
Product code:	AY-OT-X**	Date of compilation:	14 Nov 2022	Version:	3	

	Authorisation number:	-
	Hazard pictograms:	GHS02
	Signal word:	Danger
	Warning statement:	H225 Highly flammable liquid and vapor.
	Precautionary statement:	<ul> <li>P210 Keep away from heat/sparks/open flames/hot surfaces Do not smoke.</li> <li>P233 Keep container tightly closed.</li> <li>P280 Wear protective gloves/protective clothing/eye/protection/face protection.</li> </ul>
	Supplemental hazard information (EU):	-
2.3.	Other hazards	
	Results of PBT and vPvB ass PBT or a vPvB.	

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	01-2119457610-43- 0147	40 – 60 %	ethanol	Flam. Liq. 2; H225			

SECT	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 all contaminated clothes/footwear. Thoroughly wash with water for at least 15 minutes.	



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Trade name:	ALCIAN YELLOW, SOLUTION				
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	Following eye contact:	Rinse the eyes using mild jet of clean water for at least 20 minutes with the eyelids held wide open.	
	Following swallowing:	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:	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.	
	Following eye contact:	Depending on concentration and exposure time, it may lead to irritation, tearing, redness and pain.	
	Following swallowing:	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 med	ical attention and special treatment needed	
	No information available		

SECT	SECTION 5. Firefighting measures				
5.1.	Extinguishing media				
	Suitable extinguishing media:	Small fire - water spray, dry powder, alcohol-resistant foam, CO2 Large fire - water spray or alcohol-resistant foam			
	Unsuitable extinguishing media:	Water with full jet			
5.2.	Special hazards arising from the substance or mixture				
	Hazardous byproducts of fire: Incomplete combustion of the product.				
5.3.	Advice for firefighters				
	Stay in danger area only with self-contained open-circuit compressed air breathing apparatus and a set for protecting the body from heat dissipation (fireproof clothing).				
5.4.	Additional information				
	Cool endangered receptacles we not contaminate the environm	vith water spray. Collect contaminated fire fighting water separately. Do ent 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	For non-emergency personnel		
	Protective equipment:	Use personal protective equipment (see Section 8).		



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Trade name:	ALCIAN YELLOW, SOLUTION				
Product code:	AY-OT-X**	Date of compilation:	14 Nov 2022	Version:	3

	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:		
	Self-contained open-circuit con heat dissipation (fireproof cloth	npressed air breathing apparatus, a set for protecting the body from ing).	
6.2.	Environmental precautions:		
	Use sand protective barrier to prevent further spillage of chemicals. Prevent environmental pollution by not allowing the chemicals to enter the sewage system, surface water or groundwater.		
6.3.	Methods and materials for cont	ainment 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:	Sawdust, sand, mineral adsorbents	
6.3.3.	Other information:	Secure proper ventilation. Contact the responsible person; in case of larger spills and possible environmental pollution contact National Protection and Rescue (112). Do not use incompatible materials (see Section 10).	
6.4.	Reference to other sections		
	See Section 7 for information o See Section 8 for information o See Section 13 for disposal info	n personal protection equipment.	

SECTIO	CTION 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.			
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 inc	ompatibilities			



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Trade name:	ALCIAN YELLOW, SOLUTION				
Product code:	AY-OT-X**	Date of compilation:	14 Nov 2022	Version:	3

	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.		
	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. Exposure controls/personal protection						
8.1. Control para	meters					
Substance		CAS No		Occupational exposure limit values/short term values		Biological limit values
			pp	m	mg/m³	
Ethanol	64-	17-5	100	0/-	1900/-	No information available
Substance:	-					
EC No:	-		CAS No:	CAS No: -		
DNEL						
Industrial						
Route of exposure:	Acute	Acute Acu		te Chronic		Chronic
Route of exposure.	effect local	effect s	ystemic	ef	fect local	effect systemic
Oral	-	-		-		-
Inhalation	1900 mg/m³ (ethanol)	-		-		380 mg/m³ (ethanol)
Dermal	-	-		-		343 mg/kg (ethanol)
Critical physical parameters: solubility, flammability, corrosivity:						
Consumer						
Route of exposure:	Acute	Acı	ute	(	Chronic	Chronic
Route of exposure:	effect local	effect s	ystemic	ef	fect local	effect systemic
Oral	-	-		-		87 mg/kg bw/day (ethanol)



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tal protecti sediments er ments	Y-OT-X**  950 mg/m³ (ethanol) - ion target	-	<b>PNEC</b> 0.96 mg/l (	compilation:	12	1 Nov 2022 114 mg/m³ ( 206 mg/kg (		3			
sediments er ments	(ethanol)	-	0.96 mg/l (	-							
sediments er ments	ion target	-	0.96 mg/l (	ethanol)		206 mg/kg (	ethanol)				
sediments er ments	ion target		0.96 mg/l (	ethanol)							
sediments er ments	ion target		0.96 mg/l (	ethanol)							
er ments				ethanol)			PNEC				
er ments			3.6 ma/ka		0.96 mg/l (ethanol)						
ments			3.5 mg/ kg	(ethanol)							
			0.79 mg/l (	ethanol)							
sms in sew			2.9 mg/kg	(ethanol)							
sms in sew			380-720 m	g/kg (ethanol)							
	age treatment		580 mg/l (ethanol)								
tural)			0.63 mg/kg (ethanol)								
Air		no information available									
Exposure controls											
ppropriate	engineering con	trols									
neasures to	nixture related prevent exposur tified uses:	e	Do not eat, drink or smoke in the workspace. Use personal protective equipment.								
tructural m xposure:	leasures to preve	nt	No information available  Organization of work in order to reduce other worker's influence during work process.								
_							nce				
echnical m xposure:	easures to prever	nt	See Section 7.2								
ersonal pro	otection equipme	nt									
ye and face	e protection:	ction: of co		in air; protective	gas ma	ask that cover					
kin protect	ion	<u>i</u>									
Prote		otective gloves must be according to the EU Directive 2016/425/EEC d standard EN 374. Glove material: nitrile rubber Glove thickness: ≥0.50 mm			/EEC						
KI KKI KKI	ganisation event exp chnical m cosure: rsonal pro e and face	ganisational measures to event exposure: chnical measures to preveroosure: rsonal protection equipme e and face protection:	ganisational measures to event exposure: chnical measures to prevent cosure: rsonal protection equipment e and face protection: In protection  Protection	ganisational measures to event exposure:  chnical measures to prevent coosure:  chnical measures to prevent coosure:  See Section  Safety glasses that of concentration in case of higher in protection  In protection  Protective gloves and standard EN Glove ma Glove thice	ganisational measures to event exposure:  chnical measures to prevent cosure:  Chnical measures to prevent cosure:  Chnical measures to prevent cosure:  See Section 7.2  Safety glasses that stick to face (E of concentration in air; protective in case of higher levels of concent and standard EN 374.  Glove material: nitrile rubl Glove thickness: ≥0.50 mr	posure:    Continuor mation available	obsure:  ganisational measures to event exposure:  chnical measures to prevent cosure:  chnical measures to prevent cosure:  See Section 7.2  Safety glasses that stick to face (EN 166) or visor in case of higher levels of concentration in air.  In protection  Protective gloves must be according to the EU Direction and standard EN 374.  Glove material: nitrile rubber Glove thickness: ≥0.50 mm	posure:  ganisational measures to event exposure:  chnical measures to prevent posure:  resonal protection equipment  Safety glasses that stick to face (EN 166) or visor in case of lower less of concentration in air; protective gas mask that covers the entire fin case of higher levels of concentration in air.  Protective gloves must be according to the EU Directive 2016/425/ and standard EN 374.  Glove material: nitrile rubber			



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Trade name:		ALCIAN YELLOW, SOL			
Product code:	AY-OT-X**	Date of compilation:	14 Nov 2022	Version:	3

	Other skin protection:	footwear, such as ru entire foot. In case impermeable mate	During everyday work use cotton clothing (EN 340) 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:	Protective full face mask (EN 136) or half mask (EN 140) equipped wit a filter for organic vapors, type "A" (boiling point >65°C) acording to EN 14387) used when concentration levels exceed GVI.				
8.2.2.4.	Thermal hazards:	No information ava	ilable			
8.2.3.	Environmental exposure cor	ntrols				
	Substance/mixture related measures to prevent exposure:  Structural measures to prevent exposure:		See Section 6			
			Use modern equipment.			
	Organisational measures to	prevent exposure:	Adapt the work process to the required working conditions of the workplace.			
	Technical measures to preven	ent exposure:	See Section 6			

9.1.	Information on basic physical and	I chemical properties	
		Value	Method
	Physical state:	liquid	no information available
	Colour:	dark amber	no information available
	Odour/odour threshold:	ethanol like/no information available	no information available
	Melting point / freezing point:	no information available	no information available
	Boiling point or initial boiling point and boiling range:	no information available	no information available
	Flammability:	no information available	no information available
	Lover and upper explosion limit:	no information available	no information available
	Flash point:	23 °C	no information available
	Auto-ignition temperature:	no information available	no information available
	Decomposition temperature:	no information available	no information available
	pH:	no information available	no information available
	Kinematic viscosity:	no information available	no information available
	Solubility:	no information available	no information available
	Partition coefficient n- octanol/water (log value):	no information available	no information available
	Vapour pressure:	No information available	no information available



SECTION 11. Toxicological information

Inhalation:

### SAFETY DATA SHEET According to Regulation (EC) No. 1907/2006 amended by Regulation (EU) No. 2020/878

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Trade name:	ALCIAN YELLOW, SOLUTION				
Product code:	AY-OT-X**	Date of compilation:	14 Nov 2022	Version:	3

	Density and/or relative density:	no information available	no information available		
	Relative vapour density:	no information available	no information available		
	Particle characteristics:	no information available	no information available		
9.2.	Other information				
	-				

SECTIO	SECTION 10.: Stability and reactivity					
10.1.	Reactivity:	The product is stable under normal working and storage conditions.				
10.2.	Chemical stability:	The product is chemically stable under standard ambient conditions of storing and using.				
10.3.	Possibility of hazardous reactions:	Risk of explosion after contact with strong acids, alkali metals, alkali metal oxides, nitric acid, oxidizing substances.				
10.4.	Conditions to avoid:	Avoid heat, sparks, open flames and other ignition sources.				
10.5.	Incompatible materials:	Oxidants, acids, alkali metals.				
10.6.	Hazardous decomposition products:	Non-degradable if used in the described manner.				

11.1.	Information on hazard classes as defined in Regulation (EC) No 1272/2008					
Acute toxicity:						
Route o	Met	hod	Species	Effective Dose LD <sub>50</sub> /LC <sub>50</sub> or ATE <sub>mixture</sub>	Exposure time	Results
Oral:	-		rat	LD <sub>50</sub>	-	7.060 mg/kg (ethanol)
Dermal:	-		rabbit	LD <sub>50</sub>	-	>20.000 mg/kg (ethanol)

 $LC_{50}$ 

rat

Specific target organ toxicity - single exposure (STOT-SE):						
	Specific effects	Target organ	Note			
Oral:	No information available	No information available	-			
Dermal:	No information available	No information available	-			
Inhalation:	No information available	No information available	-			

4 h (ethanol)

>8.000 mg/l (ethanol)

Aspiration hazard:	No information available
Irritation and corrosion	



available

available

information

No

Subchronic

oral

available

information

No

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Trade name:		ALCIAN YELLOW, SOLUTION								
Product code:	AY-OT-X**	Date of compilation:	14 Nov 2022	Version:	3					

Trade Harrie.				ALCIAIN II	LLOVV, JOLO	11011		••••••••••		
Product code:	A	AY-OT-X**		Date of con	npilation:	14 Nov	2022 V	Version: 3		
		Exposure time	Sp	ecies	Evaluati	ion	Metho	d No		
Skin corrosion/irritati	on	No information available	_	No information No informat available available		n No informatic available		n -		
Serious eye damage/irritatio	n	No information available	No available	information	No informatio available	n	No informatio available	on -		
Sensitization										
Skin sensitization	า:	No information	n available							
Respiratory sensitization:		No information	n available							
Symptoms rel	ated	to the physical, c	hemical and	d toxicologica	al characteristics	S				
Oral exposure:		Swallowing may sensation; higher In case of vomiti concentration m	r levels of congressions	oncentration on causes co	may cause nau	sea, abdom	inal pain a	nd vomiting		
Dermal exposure	e:	Slight irritation. A		•	•		ly. Long-tei	rm exposur		
Inhalation exposure:		Inhalation of larg	•	•		entilated pe	rimeter ma	y cause		
Eye exposure:		Direct eye contact sensation.	ct may caus	e slight to m	oderate irritatio	on, lacrimati	on and bur	rning		
Repeated dos	e tox	icity (subacute, su	ubchronic, c	chronic)						
_			sure time	Species	Method	Ev	aluation	Note		
Subacute oral		No rmation infor lable availa	mation able	No information available	No		ormation ailable	_		
Subacute dermal		No rmation infor lable availa	mation able	No information available	No informat available		ormation ailable	-		
Subacute inhalation		No rmation infor lable availa	mation able	No information available	No informat available		ormation ailable	-		

information

available

No

available

information

No

available

information

No



Summary of evaluation of the CMR properties:

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Trade name:		ALCIAN YELLOW, SOLUTION								
Product code:	AY-OT-X**	Date of compilation:	14 Nov 2022	Version:	3					

Product code: AY-OT-X**		Date of comp	oilation: 14	14 Nov 2022 Version:				
Subchronic dermal	No information available	No information available	No information available	No information available	No informatio available	on -		
Subchronic inhalation	No information available	No information available	No information available	No information available	No informatio available	on -		
Chronic oral	No information available	No information available	No information available	No information available	No informatio available	on -		
Chronic dermal	No information available	No information available	No information available	No information available	No informatio available	on -		
Chronic inhalation	No information available	No information available	No information available	No information available	No informatio available	on -		
Specific targ	et organ toxicity	/ - repeated expo	osure (STOT-RE):					
		Specifi	c effects	Target o	organ	Note		
Subacute oral		No information	available No informa		available	-		
Subacute derm	nal	No information available		No information available		-		
Subacute inhal	ation	No information available		No information available		-		
Subchronic ora	1	No information	available	No information available		-		
Subchronic der	·mal	No information	available	No information	available	-		
Subchronic inh	alation	No information	available	No information	available	-		
Chronic oral		No information	available	No information	available	-		
Chronic derma	l	No information	available	No information	available	-		
Chronic inhalat	ion	No information	available	No information	available	_		
CMR effects	(carcinogenicity	, mutagenicity, re	eproductive toxi	city)				
Carcinogeni	city:		No in	formation available				
Mutagenicit	y in-vitro:		No in	No information available				
Genotoxicity	<b>/</b> :		No in	formation available				
Mutagenicit	y in-vivo:		No in	No information available				
Germ cell m	utagenicity:		No in	No information available				

No information available



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Trade name:		ALCIAN YELLOW, SOLUTION								
Product code:	AY-OT-X**	Date of compilation:	14 Nov 2022	Version:	3					

11.2.	Information on other hazards:
11.2.1.	Endocrine disrupting properties:
	No known endocrine disrupting properties that affect human health.
11.2.2.	Other informations:
	-

SECTION 12. E	cological ii	nformation				
12.1. Toxici	ty					
Acute (short- term) toxicity	Dose	Exposure time	Species Method		Evaluation	Note
Fish	LC <sub>50</sub>	96 hours	Fish	No information available	8.140 mg/l (ethanol)	-
Crustacea:	EC <sub>50</sub>	48 hours	Daphnia magna	No information available	7.800 mg/l (ethanol)	-
Algae/aquatic plants:	IC <sub>50</sub>	72 hours	algae	No information available	5.000 mg/l (ethanol)	-
Other organisms	-	_	_	-	-	-
Chronic (long-term) toxicity	Doza	Exposure time	Species	Method	Evaluation	Note
Fish	LC <sub>50</sub>	96 hours	No information available	No information available	No information available	-
Crustacea:	EC <sub>50</sub>	48 hours	No information available	No information available	No information available	-
Algae/aquatic plants	IC <sub>50</sub>	72 hours	No information available	No information available	No information available	-
Other organisms	-	-	_	-	-	-

12.2.	Per	sistence and degradability							
	Abiotic degradation								
		Degradation half-lives	Method	Evaluation	Note				
Marine water		No information available	No information available	No information available	-				



### SAFETY DATA SHEET

According to Regulation (EC) No. 1907/2006 amended by Regulation (EU) No. 2020/878

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Trade name	):					ALCIAN YELL	.ow, s	OLUTION	J		
Product cod	de:	AY-OT-X*	*			Date of comp	lation:	14	Nov 2022	Version:	3
Fresh water	No ir	nformation a	vailab	le		information lable	_	No information available			
Air	No ir	nformation a	vailab	le		information lable		No information available			
Soil	No ir	nformation a	vailab	le		information lable	No ir avail	nformatior able	) -		
Biodegrad	ation										
% Degradati	ion	Time (d	ays)			Method		Evaluati	on	Note	
_	-			-			-		-		
12.3. I	Bioacc	umulative po	tentia	al							
		ol-water part			ent (lo	g Kow)					
Value	Co	oncentration		рН	°C Method			Evaluat ion	Note		
-	_			-			-	-			
		–	D.C.E.\								
Value	centra	tion Factor (				Method		Ev/	aluation	Note	
No information available	N	Species  No information available			No i	No information available		No info	No information available		<u> </u>
Chronic ed		:4									
Value	JOLOXIC	Dose	Exr	oosure 1	ime	Species	M	ethod	Evaluatio	n No	te
Chronic toxic	city	LC <sub>50</sub>	No info			No information available	No	mation	No information available		
Chronic toxicity on crustacea (Daphnia)		n	No No information available available		1	No information available	ı -				
12.4. Mo	bility i	n soil									
Knc	wn or	predicted di	stribu	tion in	enviro	onmental comp	artment	s:			



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Trade name:		ALCIAN YELLOW, SOLUTION									
Product code:	AY-OT-X**	Date of compilation:	14 Nov 2022	Version:	3						

	NI - ! £ !	. ! - 1- 1 -							
	No information ava	allable							
	Surface tension:		0.6			T			N
	Value		°C	Concentration			Method		Note
	No information available	No information available		No i avail	nformation able	No inforr availa	nation ble	-	
Adam	votion / description								
Transpo	rption / desorption  A/D coeffic  Henry's cor		log Kov	v	Evaporatio	n rate	N	1ethod	Note
Soil-Wat	No inf	ormation	No informa	ation	No informat available	ion	No inf	formation ble	-
Water-A	ir No inf available	ormation	No informa available	ation	No informat available	ion	No int	formation ble	-
Soil-Air	No inf available	ormation	No information available		No information available		No information available		-
12.5.	Results of PBT and Based on available			s not c	contain any Pl	BT or vF	PvB subs	tances.	
12.6.	Endocrine disrupting Based on available			endo	crine disrupto	ors.			
12.7.	Other adverse effec	cts							
	No adverse effects	are expec	ted.						
SECTIO	N 13. Disposal cons	ideration	s						
13.1.	Waste treatment m	ethods							
13.1.1.	Product/Packagin	g disposal							
	Submit for dispose Protection.	al to the le	gal person a	uthor	ized by the M	linistry	of Enviro	onmental an	d Nature
13.1.2.	Waste codes/wast	e designa	tions accordi	ing to	Low:				
	Packaging that co	ntains resi	dual hazardo	ous su	bstances or is	contar	ninated	with hazard	ous substance



#### **SAFETY DATA SHEET**

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Trade name:		ALCIAN YELLOW, SOLUTION								
Product code:	AY-OT-X**	Date of compilation:	14 Nov 2022	Version:	3					

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 recommer	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.	
13.1.6.	Relevant Community pro	visions:	
	Disposal must be made a	ccording to official regulations.	
SECTIO	N 14. Transport information	on	
Tra	nsporting/shipment by road	(ADR)	
UN num	ber	1170	
UN prop	per shipping name:	Ethanol solution	
Transpo	rt hazard class(es):	3	
Packing	group:	III	
Environi	mental hazards:	No information available	
Special	precautions for user:	-	
	nsporting/shipment by rail (	RID)	
UN number:		1170	
UN prop	per shipping name:	Ethanol solution	
Transpo	rt hazard class(es):	3	
Packing	group:	III	
Environi	mental hazards:	No information available	
•	precautions for user:	-	
i	nsporting/shipment by inlar	nd waterways (ADN)	
UN num	iber:	1170	
UN proper shipping name:		Ethanol solution	
Transpo	rt hazard class(es):	3	
Packing	group:	III	
Environi	mental hazards:	No information available	
Special	precautions for user:	-	



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Trade name:		ALCIAN YELLOW, SOL	.UTION		
Product code:	AY-OT-X**	Date of compilation:	14 Nov 2022	Version:	3

Transporting/shipment by sea (IMDG	j)
UN number:	1170
UN proper shipping name:	Ethanol solution
Transport hazard class(es):	3
Packing group:	Ш
Environmental hazards:	No information available
Special precautions for user:	-
Transport in bulk according to Annex II of MARPOL73/78 and the IBC code:	-
Transporting/shipment by air (ICAO-	TI/IATA-DGR)
UN number:	1170
UN proper shipping name:	Ethanol solution
Transport hazard class(es):	3
Packing group:	Ш
Environmental hazards:	No information available
Special precautions for user:	-
Further - information:	

SECTIO	SECTION 15. Regulatory information		
15.1.	15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture		
	EU regulations		
	Authorisation and/or restrictions on use		
	Authorisations: -		
	Restrictions: -		



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Trade name:		ALCIAN YELLOW, SOL	UTION		
Product code:	AY-OT-X**	Date of compilation:	14 Nov 2022	Version:	3

	Other EU regulations:	Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC; Directive 2004/42/CE of the European Parliament and of the Council of 21 April 2004 on the limitation of emissions of volatile organic compounds due to the use of organic solvents in certain paints and varnishes and vehicle refinishing products and amending Directive 1999/13/EC; Council Directive 98/24/EC of 7 April 1998 on the protection of the health and safety of workers from the risks related to chemical agents at work; Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006; REACH Restrictions on the manufacturing, placing on the market and use of certain dangerous substances, mixtures and articles (Annex XVII);
	Information according guideline)	1999/13/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 assess	sment
	None	

SECTIO	ON 16. Other information	
16.1.	Indication of changes:	-
16.2.	Abbreviations and acronyms:	ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road) IMDG: International Maritime Code for Dangerous Goods IATA: International Air Transport Association GHS: Globally Harmonised System of Classification and Labelling of Chemicals EINECS: European Inventory of Existing Commercial Chemical Substances CAS: Chemical Abstracts Service (division of the American Chemical Society) DNEL: Derived No-Effect Level (UK REACH) LC50: Lethal concentration, 50 percent LD50: Lethal dose, 50 percent PBT: Persistent, Bioaccumulative and Toxic vPvB: very Persistent and very Bioaccumulative



#### SAFETY DATA SHEET

### According to Regulation (EC) No. 1907/2006 amended by Regulation (EU) No. 2020/878

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Trade name:		ALCIAN YELLOW, SOLU	JTION		
Product code:	AY-OT-X**	Date of compilation:	14 Nov 2022	Version:	3

16.3.	Key literature reference data:	es and source of _	
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	(number and full text)	
	H: 225	Highly flammable liquid and vapor.	
16.6.	Training advice:	-	
		** "X" in the product code marks different volumes (different packaging 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: Exposur	e scenario resulting to Chemical safety assessment
-	



#### **SAFETY DATA SHEET**

### According to Regulation (EC) No. 1907/2006 amended by Regulation (EU) No. 2020/878

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Trading name:		BUFFER SOLUTIO	N, A.T.		
Product code:	PO-OT-X**	Date of compilation:	21 Dec 2022	Version:	3

1.1	Product identifier				
	Trading name:	BUFFER SOI	BUFFER SOLUTION, A.T.		
	Chemical name:	-			
	Catalogue number:	PO-OT-X**			
1.2	Relevant identified us	es of the subs	tance or n	nixture and uses advised against	
	Uses:		For use	with Alcian Yellow Toluidine Blue kit.	
	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 supplie	Details of the supplier of the safety data sheet			
	Supplier:		BioGnost Ltd.		
	Address:		Medjugorska 59, Zagreb		
	Telephone number:		+385 1 2409997		
	Telefax.:	Telefax.:		+385 1 2404039	
	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:			+385 1 2348 342	
	Medical Illioillation.			1	

SECTIO	ECTION 2. Hazards identification					
2.1	Classification of the substance or mixture					
2.1.1	Classification according to	Classification according to Regulation (EC) No 1272/2008 (CLP)				
	Hazard class and ca	tegory code:	Hazard statements*:			
	Repr. 1B		H36FD			
2.1.2.	Additional information					
	-					
*For fu	ıll text of Hazard- and EU Haza	ard-statements: see	SECTION 16			
2.2	Label elements					
	Product identification:	BUFFER SOLUT	TON, A.T.			
	Identification number:	-				
	Authorization number:	-				



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

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Trading name:	BUFFER SOLUTION, A.T.				
Product code:	PO-OT-X**	Date of compilation:	21 Dec 2022	Version:	3

	Hazard pictograms:	GHS08		
	Signal word:	Danger		
	Hazard statements:	H360FD May damage fertility. May damage the unborn child.		
	Precautionary statements:	P201 Obtain special instructions before use. P308+P313 IF exposed or concerned: Get medical advice/attention.		
	Supplemetal hazard information (EU):	-		
2.3	Other hazards			
	Endocrine Disrupting Properties:			
	No known endocrine disrupting properties <b>Results of PBT and vPvB assessment</b> : According to the results of its assessment, this substance is not PBT or a vPvB.			

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)		
1330-43-4/ 215-540-4/ 005-011-00-4	-	1 - 2%	sodium tetraborate	Eye Irrit. 2; H319 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.			
	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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	Following ingestion:		DO NOT induce vomiting. Rinse the oral cavity, drink 1-2 glasses of water. Immediately consult a physician and show the container or label.
	Self-protection of the first a	ider:	-
4.2	Most important symptoms a	and eff	ects, both acute and delayed
	Following inhalation:	May cause eye irritation and upper respiratory system (stinging sensation, irritation). Bronchoconstriction is possible. Possible symptoms include CNS symptoms such as headache, vertigo, intoxication and loss of consciousness after exposure to higher levels of concentration.	
	Following skin contact:	Defatti	ing, dry skin.
	FOllowing eye contact.	•	er may cause discomfort, stinging sensation, conjunctival redness, il surface lesions.
	Following ingestion:	intoxic	lead to occurrence of strong sensation of stinging, headache, vertigo, ation and loss of consciousness after exposure to higher levels of ntration. If denaturants are present, dyspepsia may occur (such as ng).
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 <sub>2</sub> Large fire - water spray or alcohol-resistant foam			
	Unsuitable extinguishing media:	No information available			
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				
	Do not contaminate the environment with extinguishing media.				

SECTIO	SECTION 6. Accidental release measures				
6.1	Personal precautions, protective	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.			



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	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, drainage system and waterways. In case of large spillage contact National Protection and Rescue Directorate (NPRD) on 112.		
6.3.	Methods and material for cor	ntainment and cleaning up	
6.3.1.	Bunding, covering of drains; capping procedures:	Sand or clay barriers.	
6.3.2.	Cleaning up:	Sawdust, sand, mineral adsorbents.	
6.3.3.	Other information:	Do not use incompatible materials (see Section 10).	
6.4.	Reference to other sections		
	-		

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.		
	Measures to prevent aerosol and dust generation	on:	Secure proper ventilation.		
	Measures to protect the environment:	ures to protect the environment:			
	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 incompatibilities				
	Technical measures and storage conditions:	well ventila	Keep in tightly closed and upright set containers in a well ventilated storage roomsat temperatures ranging from 15 to 25 °C.		
	Packaging materials:	Manufactu	ırer's original packaging.		
	Requirements for storage rooms and vessels:  Keep away from food and drink. Keep the contatightly closed.		•		
	Advices for storage equipment:	must be re	torage must be made of hard material; floors be resistant to chemicals. There must be no drain lirectly leads into sewage system. Secure proper ation.		



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	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:	-

8.1 Control pa		013, pc13c	mai protect					
8.1 Control parameters  Substance					ccupational exposure limit values/short term values			Biological limit values
		CASTVO		р	ppm mg/m³		ng/m³	
Disodium tetraborate, anhydrous; Boric acid		1330-43-4			- 5		5	-
Substance name:	-							
EC No:	-	CAS No	: -					
DNEL								
				Ind	ustrial			
Route of exposure:	Acı effect				Chronic effect local			Chronic effect systemic
Oral	-		-		-			-
Inhalation	-		-		-			-
Dermal	-		-		-			-
Critical physical pa	rameters:	solubility,	flammabilit	y, corr	osivity:		-	•
				Con	sumer			
Route of exposure:		cute ct local	Acute I effect systemic		Chronic effect local			Chronic effect systemic
Oral	-		-		-			-
Inhalation	-		-		-			-
Dermal	-		-		-			-
PNEC								
Environmental protection target					PNEC			
Fresh water				1	No information available			
Freshwater sediments				1	No information available			
Marine water			1	No information available				



Marine sediments

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No information available

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Food chain					
			No information available		
Microorganisms in sewage treatment			No information available		
Soil (agric	ultural)		No information available  No information available		
Air					
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 prevent exposure:  Technical measures to prevent exposure:		Organization of work in order to reduce other worker's influence during work process.  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				
	Hand protection:	Protect	tive nitrile gloves, 0.11 mm thick (EN 374).		
	I ITHAT CVIN NICITACTION.		ntistatic clothing made of natural fibers (such as cotton) ng sleeves (EN 340) and shoes that cover the entire foot.		
8.2.2.3.	RECUITATORY DIOTECTION:	Ensure adequate ventilation to the premises where the product stored and/or handled.			
8.2.2.4.	Thermal hazards:	No information available			
8.2.3.	Environmental exposure controls				
	Substance/mixture related measures to prevent exposure:	See Se	ction 6		
	Structural measures to prevent exposure:	Jse mo	odern equipment.		
	_	Adapt i workpl	the work process to the required working conditions of the ace.		
	Technical measures to prevent exposure:	See Section 6			



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Trading name:	BUFFER SOLUTION, A.T.							
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1	Information on basic physical and	chemical properties	
		Value	Method
	Physical state:	liquid	No information available
	Colour:	colourless	No information available
	Odour/odour threshold:	no odor/no information available	No information available
	Melting point / freezing point:	No information available	No information available
	Boiling point or initial boiling point and boiling range:	No information available	No information available
	Flammability:	No information available	No information available
	Lover and upper explosion limit:	No information available	No information available
	Flash point:	No information available	No information available
	Auto-ignition temperature:	No information available	No information available
	Decomposition temperature:	No information available	No information available
	pH:	8.2 - 8.6	No information available
	Kinematic viscosity:	No information available	No information available
	Solubility:	No information available	No information available
	Partition coefficient n-octanol/water (log value):	No information available	No information available
	Vapour pressure:	No information available	No information available
	Density and/or relative density:	No information available	No information available
	Relative vapour density:	No information available	No information available
	Particle characteristics:	No information available	No information available

SECTIO	SECTION 10. Stability and reactivity						
10.1	Reactivity:	No information available					
10.2	Chemical stability:	No information available					
10.3	Possibility of hazardous reactions:	No information available					
10.4	Conditions to avoid:	No information available					
10.5	Incompatible materials:	Strong oxidizing agents, strong reducing agents					
10.6	Hazardous decomposition products:	No information available					



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11.1 Information	on on hazard o	lasses as defin	ed in Reau	ılation (E	C) No 1272/2	2008		
Acute toxi								
Route of exposure:	Method			Dose LD <sub>50</sub> /LC <sub>50</sub> or ATE <sub>mix</sub>		Exposure	time	Results
Oral:	-	rat (sodium tetraborate)			LD <sub>50</sub>	No informa	ation	2.500 mg/kg
Dermal:	-	rabbit (sodiu tetraborate)	ım	No info	ormation ole	No informa available	ation	>2.000 mg/kg
Inhalation:	-	rat (sodium tetraborate)			LC <sub>50</sub>	4h		>2.12 mg/l
Specific ta	rget organ to	xicity – single e	exposure (S	STOT SE)	:			
	S	pecific effects			Target orga	an		Note
Oral:	No informa	tion available		No info	ormation ava	ilable	-	
Dermal:	No informa	tion available		No info	ormation ava	ilable	-	
Inhalation:	No informa	tion available		No info	ormation ava	ilable	-	
Asniration	hazard.		No infor	mation a	wailahla			
Aspiration  Irritation a	hazard:		No infor	mation a	available.			
: ·	and corrosion	osure time	No infor		evailable.  Evaluation	Method		Note
: ·	and corrosion Expo	osure time				Method -	no s	Note skin irritation
Irritation a	and corrosion Expo	osure time	Spec		Evaluation			
Skin corrosion/irritation Serious eye	end corrosion  Expo	osure time	Spec		Evaluation	-		skin irritation
Skin corrosion/irritation Serious eye damage/irritation	end corrosion  Expo	osure time	Spec		Evaluation	-		skin irritation
Skin corrosion/irritation Serious eye damage/irritation	Expo : -	osure time	Spec		Evaluation	-		skin irritation
Skin corrosion/irritation Serious eye damage/irritation Sensitizati Skin sensitization: Respiratory sensitiz	Expo : - : - on - zation: -	e physical, che	Spec rabbit rabbit	ies	Evaluation -	-		skin irritation
Skin corrosion/irritation Serious eye damage/irritation Sensitizati Skin sensitization: Respiratory sensitiz	end corrosion  Expo  :  -  on  zation:  - s related to the		Spec rabbit rabbit	ies	Evaluation -	-		skin irritation
Skin corrosion/irritation Serious eye damage/irritation Sensitizati Skin sensitization: Respiratory sensitiz	end corrosion  Expo  : - on  zation:  related to the	e physical, che	rabbit rabbit	ies	Evaluation -	-		skin irritation
Skin corrosion/irritation Serious eye damage/irritation Sensitizati Skin sensitization: Respiratory sensitiz  Symptoms Oral exposure:	end corrosion  Expo  : - : - on  exation: No inform No inform	e physical, che nation availabl	rabbit rabbit mical and	ies	Evaluation -	-		skin irritation



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	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 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 – repeated exposure (STOT RE):							
	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	-				



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Chronic	inhalation	No information available	No information available -
	CMR effects (	carcinogenicity; mutagenicity; re	eproductive toxicity)
	Carcinogenic	ity:	No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
	Mutagenicity	in vitro:	No information available
	Genotoxicity:		No information available
	Mutagenicity	in vivo:	No information available
	Germ cell mutagenicity:		No information available
	Reproductive toxicity:		May damage the unborn child. May damage fertility.
11.2	properties:	on other hazards:	No information available
11.2.1.		srupting properties:	
	The substant components disrupting pro Article 57(f) regulation (E	ce/mixture does not contain considered to have endocrine roperties according to REACH or Commission Delegated U) 2017/2100 or Commission U) 2018/605 at levels of 0.1% or	
	Other inform	.•	

SECTION 12. Ecological information								
12.1 Toxicity	12.1 Toxicity							
Acute (short-term) toxicity	Dose	Exposure time	Species	Method	Evaluation	Note		
Fish	LC <sub>50</sub>	96 hours	No information available	No information available	No information available	-		
Crustacea:	EC <sub>50</sub>	48 hours	Daphnia magna (Water flea)	No information available	No information available	1.085-1.402 mg/l (sodium tetraborate)		



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EC <sub>50</sub>	•	No information available  No information available  No information available  -	Method  No information available  No information available  No information available  -	No inform availal No inform availal -	ble nation ble nation	- Note
LC <sub>50</sub> EC <sub>50</sub> IC <sub>50</sub>	time 96 hours 48 hours 72 hours -	No information available  No information available  No information available  -	No information available No information available No information information	No inform availal No inform availal No inform	nation ble nation ble	-
EC <sub>50</sub> IC <sub>50</sub> I degradabil	48 hours 72 hours -	available  No information available  No information available  -	information available  No information available  No information	inform availal No inform availal No inform	ble nation ble nation	
IC <sub>50</sub>	72 hours	available  No information available  -	information available No information	inform availal No inform	ble nation	
d degradabil	- lity	available -	information	inform		
l degradabil	lity		-	-		-
ation	•					
adation hair	t-lives :	N A - + l l	F l 4!			Nists
adation hair	t-lives :	Method	Evaluatio			Note
		No information	No information			11010
nformation available		available	available		-	
ormation ava	ailable	No information available	No informatio available	n	-	
ormation ava	ailable	No information available	No information available		-	
nformation available		No information available	No information available		-	
<u> </u>						
	ıys)	Method	Evaluatio	n		Note
No information available		No information available	No information available		No information available	
0	rmation average rmation averag	Time (days) o information ailable	rmation available rmation available rmation available rmation available rmation available  Time (days)  information ailable  No information available  Method No information available  Available	rmation available rmation available rmation available rmation available rmation available  rmation available  Time (days)  information available  Mo information available  No information available  Available  No information available  Available	rmation available  rmation available  rmation available  rmation available  No information available  No information available  No information available  No information available  Time (days)  Method  Evaluation  o information No information  No information available	rmation available  No information available  Time (days)  Method  Evaluation  Information No information No information Available  No information No information No information No information

рΗ

Concentration

Value

°C

Method

**Evaluation** 

Note



No

available

Water-air

information

No information

available

No information

available

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Page 12 of 16 Trading name: **BUFFER SOLUTION, A.T.** Product code: PO-OT-X\*\* Date of compilation: 21 Dec 2022 Version: 3 Bioconcentration factor (BCF) Value **Species** Method **Evaluation** Note No information No information No information No information available available available available Chronic ecotoxicity Exposure Value Dose **Species** Method Evaluation Note time No No No No Chronic toxicity on fish  $LC_{50}$ information information information information available available available available Nο Nο Nο Nο Chronic toxicity on  $EC_{50}$ information information information information crustacea (Daphnia) available available available available 12.4 Mobility in soil Known or predicted distribution in environmental compartments: No information available Surface tension: °C Value Concentration Method Note Nο Nο No information No information information information available available available available Adsorption / desorption A/D coefficient Transport log Kow **Evaporation rate** Method Note Henry's constant No information No information No information No information Soil-water available available available available

No information

available



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Soil-air	No information No information available No information available No information available available					
12.5	Results of PBT and vPvB assessment					
	The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.					
12.6.	Endocrine disrupting properties					
	The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.					
12.7	Other adverse effects					
	No information available					
SECTIO	N 13. Disposal considerations					
13.1	Waste treatment methods					
13.1.1.	Product/Packaging disposal:					
	Submit for disposal to the legal person authorized by the Ministry of Environmental and Nature Protection.					
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 – relevant information:					
	No information available					
13.1.4.	Sewage disposal – relevant information:					
	Waste must not be disposed 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 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.	Relevant Community provisions:					



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-	
SECTION 14 TRANSPORT INFORMATION	ON CONTRACTOR OF THE CONTRACTO
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 (II	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	AO-TI/IATA-DGR)
UN number:	Not subject to transport regulations
UN proper shipping name:	-



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

15.1	Safety, health and enviro	nmental regulations/legislation specific for the substance or mixture					
	EU regulations						
	Authorization and/or restrictions of use						
	Authorizations:	-					
	Restrictions:	-					
	Other EU regulations:	Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC; Directive 2004/42/CE of the European Parliament and of the Council of 21 April 2004 on the limitation of emissions of volatile organic compounds due to the use of organic solvents in certain paints and varnishes and vehicle refinishing products and amending Directive 1999/13/EC; Council Directive 98/24/EC of 7 April 1998 on the protection of the health and safety of workers from the risks related to chemical agents at work; Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006; REACH Restrictions on the manufacturing, placing on the market and use of certain dangerous substances, mixtures and articles (Annex XVII);					
	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						



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SECTIO	CTION 16. Other information					
16.1	Indication of changes:	-				
16.2	Abbreviations and acronyms:	ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)  IMDG: International Maritime Code for Dangerous Goods  IATA: International Air Transport Association  GHS: Globally Harmonised System of Classification and Labelling of Chemicals EINECS: European Inventory of Existing Commercial Chemical Substances  CAS: Chemical Abstracts Service (division of the American Chemical Society)  DNEL: Derived No-Effect Level (UK REACH)  LC50: Lethal concentration, 50 percent  LD50: Lethal dose, 50 percent  PBT: Persistent, Bioaccumulative and Toxic  vPvB: very Persistent and very Bioaccumulative				
16.3.	Key literature references and source of data:	-				
16.4.	Classification and procedure u 1272/2008 (CLP)	sed to derive the classification for mixture according to Regulation (EC)				
Classif	ication	Classification procedure				
-		-				
16.5.	Relevant H statements (number	er and full text)				
	H: H360FD	May damage fertility. May damage the unborn child.				
16.6.	Training advice:	-				
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:	TOLUIDINE BLUE REAGENT				
Product code:	TBR-OT-X**	Date of compilation:	21 Dec 2022	Version: 3	

SECTI	ION 1 IDENTIFICATION	OF THE SUB	STANCE/MIX	CTURE AND OF THE COMPANY/UNDERTAKING	
1.1.	Product identifier				
	Trading name:	TOLUIDIN	E BLUE REAGE	ENT	
	Chemical name:	-			
	Catalogue number:	TBR-OT-X	**		
1.2.	Relevant identified use	es of the sub	stance or mix	ture and uses advised against	
	Uses:		For use wit	h special staining kits.	
	Uses advised against:		Only the ic	lentified 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	Details of the supplier of the safety data sheet			
	Supplier: Bi		BioGnost Ltd.		
	Address:	I	Medjugorska 59, Zagreb +385 1 2409997		
	Telephone number:				
	Fax no.:		+385 1 2404039		
	e-mail of competent p	erson: <u> </u>	msds@biognost.hr		
	National contact:	-			
1.4.	Emergency telephone number				
1.4.	Emergency telephone	number			
1.4.	Emergency telephone National Protection ar		rectorate:	112	
1.4.	3 , ,		rectorate:	112 +385 1 2348 342	

SECTIO	SECTION 2 HAZARDS INFORMATION				
2.1.	Classification of the substance or mixture				
2.1.1.	Classification (REGULATION (EC) 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	atements: see S	Section 16		
2.2.	Classification according to EC Dire	ective Nr. 1272	/2008 CLP)		
	Product identification:	TOLUIDINE E	BLUE REAGENT		
	Identification number:	-			
	Authorization no.:	-			
	Hazard pictograms:	-			



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Trading name:	TOLUIDINE BLUE REAGENT			
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	Signal word:	-	
	Hazard statements:	-	
	Precautionary statements:	-	
	Further information:	-	
2.3.	Other hazards		
	<b>Endocrine Disrupting Proper</b>	rties:	
	No known endocrine disrupting properties		
	<b>Results of PBT and vPvB assessment</b> : According to the results of its assessment, this substance is not a PBT or a vPvB.		

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)		
-	_	-	-	-		

SECTI	ECTION 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 aider:		Treat symptomatically.		
4.2.	Most important symptoms a	nd eff	ects, both acute and delayed		
	Following inhalation:		ording to our findings, chemical, physical and toxicological properties of substance have not been entirely tested.		
	Following skin contact:		ording to our findings, chemical, physical and toxicological properties of substance have not been entirely tested.		
	Following eve contact: According to our findings, chemical, physical and to		ording to our findings, chemical, physical and toxicological properties of substance have not been entirely tested.		



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Trading name:	TOLUIDINE BLUE REAGENT			
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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		
	-		

SECTION	SECTION 5 FIREFIGHTING MEASURES			
5.1.	Extinguishing media			
	Suitable extinguishing media:  Small fire - water spray, dry powder, CO <sub>2</sub> 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, 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. 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 (s	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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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 generat	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. T	horo	roughly wash hands after work and before eating.		
7.2.	Conditions for safe storage, including any incompatibilities				
	Technical measures and storage conditions:	ven	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:	Ма	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 EXPOSU		TROLS/PER	SONAL	PROT	ECTION			
8.1. Control para	meters			I			I	
Substance		CAS I	No		•	exposure limit term values	Bio	ological limit values
					ppm	mg/m³		
-		-			-	-	No infor	mation available
				•				
Substance - name:								
EC No: -		CAS No:	-					
DNEL								
				Inc	dustrial			
		Acut	e	Chron	ic	Chronic		
exposure:	effe	ect local	effe	ct sys	temic			effect systemic
Oral	-		-			-		-
Inhalation	-		-			-		-
Dermal					-			
Critical physical parar	meters: s	olubility, fla	ımmabili	ty, cor	rosivity:	-		
	1		•	Co	nsumer			
Route of		Acute		Acut	e	Chron	ic	Chronic
exposure:	effe	ect local	effe	ct sys	temic	effect lo	ocal	effect systemic
Oral	-		-			-		-
Inhalation	-		-			-		-
Dermal	-		-			-		-
PNEC					T			
Environmental protect	tion tar	get			PNEC			
Fresh water					No infor	mation availabl	е	
Freshwater sediments	S				No infor	mation availabl	е	
Marine water					No infor	mation availabl	е	
Marine sediments					No infor	mation availabl	е	
Food chain					No infor	mation availabl	е	
Microorganisms in se	wage tr	eatment			No infor	mation availabl	е	
Soil (agricultural)					No infor	mation availabl	е	
Air					No infor	mation availabl	е	



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8.2.	Exposure controls						
8.2.1.	Engineering measures						
	Substance/mixture related measures to prevent expoduring 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	ment					
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						
	Hand protection:		ard 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 f	ctive 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 expo		See Section 6				
	Structural measures to pr exposure:	event	Use modern equipment.				
	Organisational measures prevent exposure:	to	Adapt the work process to the required working conditions of the workplace.				
	Technical measures to pro	event	See Section 6				

SECTI	ON 9 PHYSICAL AND CHEMICAL PROPE	ERTIES	
9.1.	Information on basic physical and chen	nical properties	
		Value	Method



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Trading name:		TOLUIDINE BLUE	REAGENT	
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	Physical state:	liquid	No information available
	Colour:	dark blue	No information available
	Odour/odour threshold:	no odor/no information available	No information available
	Melting point / freezing point:	No information available	No information available
	Boiling point or initial boiling point and boiling range:	No information available	No information available
	Flammability:	No information available	No information available
	Lover and upper explosion limit:	No information available	No information available
	Flash point:	No information available	No information available
	Auto-ignition temperature:	No information available	No information available
	Decomposition temperature:	No information available	No information available
	рН:	No information available	No information available
	Kinematic viscosity:	No information available	No information available
	Solubility:	No information available	No information available
	Partition coefficient n-octanol/water (log value):	No information available	No information available
	Vapour pressure:	No information available	No information available
	Density and/or relative density:	No information available	No information available
	Relative vapour density:	No information available	No information available
	Particle characteristics:	No information available	No information available
.2.	Other information		

SECTIO	ON 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:	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.

SECTI	ON 11 TOXICOLOGICAL INFORMATION
11.1.	Information on hazard classes as defined in Regulation (EC) No 1272/2008
	Acute toxicity:



Inhalation exposure:

Eye exposure:

#### **SAFETY DATA SHEET** According to Regulation (EC) No. 1907/2006 amended by Regulation (EU) No. 2020/878

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Trading name.	TOLOIDINE BLOC REAGENT						
Product code:	TBR-OT-X**	Date of	compilation:	21 Dec 2022		Version:	3
Route of exposure:	Method	Species	Effective dos LD <sub>50</sub> /LC <sub>50</sub> or ATE <sub>mixture</sub>		e time	Re	esults
Oral exposure:	No information available	_	LD <sub>50</sub>	-			_
Dermal exposure:	No information		LD <sub>50</sub>	-			-
Inhalation exposure:	nhalation No information		LC <sub>50</sub>	-		-	
Specific ta	rget organ toxicity – s						
	Speci	fic effects	Taro	Target organ			te
Oral exposure:	No information	available	No informa	No information available -			
Dermal exposure:	No information	available	No informa	No information available -		-	
Inhalation exposure	e: No information	available	No informa	No information available -			
Respirator	y irritation:	No info	rmation available	е			
Irritation a	and corrosion						
	Exposure time	Species	Evaluation	Method		Note	
Skin irritation:	-	rabbit	-	-	-		
Eye irritation:	-	rabbit	-	-	-		
Sensitizati	on						
Dermal exposure:	No information ava	ilable					

Scrisicization			
Dermal exposure:	No information available		
nhalation exposure:  No information available			
Symptoms	related to the physical, chemical and toxicological characteristics		
Oral exposure:	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.		
Dermal exposure:	Slight irritation. After short exposure, resorption effects are not likely. Long-term exposure may cause drying, cracking and tingling sensation of skin.		

coughing, sneezing, headache and nausea.

sensation.

Inhalation of large amounts of vapors in inadequately ventilated perimeter may cause

Direct eye contact may cause slight to moderate irritation, lacrimation and burning



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Repeate	d dose toxicity (	subacute, subchro	onic, chronic	:)			
	Dose	Exposure time	Species		Method	Evaluatio	n Note
Subacute oral	No information	No information available	No informatio available	on	No information available	No information available	on -
Subacute dermal	No information	No information available	No informatio available	on	No information available	No information	on -
Subacute inhalation	No information	No information available	No informatio available	on	No information available	No information	on -
Subchronic oral	No information	No information available	No informatio available	on	No information available	No information available	on -
Subchronic dermal	No information	No information available	No informatio available	on	No information available	No information available	on -
Subchronic inhalation	No information	No information available	No informatio available	on	No information available	No information available	on -
Chronic oral	No information	No information available	No informatio available	on	No information available	No information	on -
Chronic dermal	No information	No information available	No informatio available	on	No information available	No information	on -
Chronic inhalation	No information	No information available	No informatio available	on	No information available	No information	on -
				•			
Specific	target organ tox	icity – repeated e	exposure (ST	OT RE			
<u> </u>		Specific effects			Target orga		Note
		mation available			formation avai		-
Subacute dermal Subacute inhalati		mation available		No information available  No information available		-	
Subacute innaiati		mation available			formation avai		_
Subchronic derm		mation available			formation avai		_
Subchronic inhala		mation available			formation avai		



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Trading name:	TOLUIDINE BLUE REAGENT						
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Chronic oral	c oral No information available		No information available	-
Chronic dermal	No informa	tion available	No information available	-
Chronic inhalation	No informa	tion available	No information available	-
CMR effe	cts (carcinogenicity	, mutagenicity, re	eproductive toxicity)	
Carcinog	enicity:	Current stud	ies on test animals did not indicate ca	arcinogenic effects.
Mutagen	icity <i>in-vitro</i> :	Current in	vitro tests did not indicate mutageni	ic effects.
Genotoxi	city:	No informat	on available	
Mutagen	icity <i>in-vivo</i> :	Current <i>in</i> v	rivo tests did not indicate mutageni	c effects.
Germ cel	l mutagenicity:	No informat	on available	
Reprodu	ctive toxicity:	No toxicity organs.	on reproductive organs was deter	mined in reproductive
Summars	of evaluation of th	o CMP proportio	5: -	
Jummary	or evaluation of the	e ewin propertie	<b>.</b> .	
11.2 Informat	on on other hazard	S:		
11.2.1. Endocrin	e disrupting proper	ties:		
contain have en according Commiss 2017/210	bstance/mixture components con docrine disrupting to REACH Articion Delegated region or Commission 8/605 at levels of	properties le 57(f) or ulation (EU) Regulation		
11.2.2. Other inf	ormations:	;		
_				

SECTION	12 ECOLOGICAL INFO	RMATION:

12.1.

Toxicity

#### Exposure Acute toxicity Dose **Species** Method Evaluation Note time No No information Fish 96 hours information $LC_{50}$ available available

				avaliable		
Crustacea:	EC <sub>50</sub>	48 hours	No information available	No information available	-	-



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Algae/aquatic plants	IC <sub>50</sub>	8 days	No information available	No information available	-	-
Microorganisms	LC <sub>50</sub>	72 hours	-	-	-	-
Chronic toxicity	Dose	Exposure time	Species	Method	Evaluation	Note
Fish	LC <sub>50</sub>	96 hours	No information available	No information available	No information available	-
Crustacea:	EC <sub>50</sub>	48 hours	No information available	No information available	No information available	-
Algae/aquatic plants	IC <sub>50</sub>	72 hours	No information available	No information available	No information available	-
Other organisms	-	-	-	-	-	-

#### 12.2. Persistence and degradability

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	-

Biodegradation							
% 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	<b>-</b>



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Trading name:		<b>:</b>	TOLUIDINE BLUE REAGENT											
Produc	ct code	: ТЕ	BR-OT-X**		Date of compilation:		on: 2	n: 21 Dec 2022		Versio	n:	3		
		į						•					i	
	Biocor	ncentrat	ion f	actor (BCF)										
V	/alue			Species		١	Лetho	t	E	valuatio	on		Note	9
No info			o ailab	inform le	ation	No info		on	No inf availal	ormatic ole	on	No inforn available	natio	on
	Chron	ic ecoto	xicity	/										
	Value	e		Dose		osure ime	Spo	ecies	Met	hod	Eva	luation		Note
Chronic toxicity on fish LC <sub>50</sub>			LC <sub>50</sub>	information i		No infori availa	mation able	No information available		No information available		-		
Chronic toxicity on crustacea ( <i>Daphnia</i> )		EC <sub>50</sub>	No information available			No ormation information ilable available			No information available					
12.4.	Mobil	ity in so	il											
				d distributi	on in e	environm	ental o	compart	ments:					
		ormatio		ailable										
		e tensio	n:		_									
		lue		°C	Concentration		tion	n Method			Note			
			info	ormation ilable	No informat available		ation No info availab		formation ble		-			
	Adsor	ption / d	desor	ption										
Transpo	ort			icient nstant	lc	og Kow	E۱	vaporatio	on rate		Method		N	ote
Soil-wa	ıt∆r :	No Ivailable		formation	No ir availa	nformation able		o inform vailable	ation	ation No information available		on -		
Water-a	air	No Ivailable		formation	No ir availa	nformation able		o inform vailable	ation	No ir availa	nformation able	on -		



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Soil-air	No available	information	No information available	No information available	No information available	-
12.5.	Results of PBT a	nd vPvB asses	ssment			
	according to RE	ACH Article 5		n Delegated regula	to have endocrine d tion (EU) 2017/2100	
12.6.	Endocrine disru	pting properti	es			
	according to RE	ACH Article 5	•	n Delegated regula	to have endocrine d tion (EU) 2017/2100	
12.7.	Other adverse e	ffects				
	No information					
i						
SECTIO	N 13 DISPOSAL	CONSIDERA <sup>-</sup>	ΓΙΟΝS			
13.1.	Waste treatmo	ent methods				
13.1.1.	Product/Packa	<del> </del>				
	Submit for dis Protection.	posal to the l	egal person autho	rized by the Minist	ry of Environmental	and Nature
13.1.2.	Waste codes/	waste designa	itions according to	o Law:		
	No information	n available				
13.1.3.	Waste treatme	ent – relevant	information:			
	No information	n available				
13.1.4.	Sewage dispo	sal – relevant	information:			
			d of into the sewa	ge system.		
13.1.5.	Other disposa	l recommend	ations:			
	authorized by	the ministry i to the collect	n charge. Do not o	dispose of the pack	n. Submit the remain caging into the sewa arge. Do not dispose	ge system. Submit
13.1.6.	Relevant Com	munity provis	ions:			



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-	
SECTION 14 TRANSPORT INFORM	MATION
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 (RID)
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 (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 (ICAO-TI/IATA-DGR)
UN number:	Not subject to transport regulations.
UN proper shipping name:	-
Transport hazard class(es):	-



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Trading name:				
Product code:	TBR-OT-X**	Date of compilation:	21 Dec 2022	Version: 3

Packing group:	-
Environmentally hazardous:	-
Special precautions for user:	-
Further information: -	

SECTI	ON 15 REGULATORY INFO	RMATION
15.1.		nmental regulations/legislation specific for the substance or mixture
	EU regulations	
	Authorization and/or rest	rictions of use
	Authorizations:	-
	Restrictions:	-
	Other EU regulations:	Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC; Directive 2004/42/CE of the European Parliament and of the Council of 21 April 2004 on the limitation of emissions of volatile organic compounds due to the use of organic solvents in certain paints and varnishes and vehicle refinishing products and amending Directive 1999/13/EC; Council Directive 98/24/EC of 7 April 1998 on the protection of the health and safety of workers from the risks related to chemical agents at work; Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006; REACH Restrictions on the manufacturing, placing on the market and use of certain dangerous substances, mixtures and articles (Annex XVII);
	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	nt
_	None	



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

amended by Regulation (EU) No. 1907/2006

amended by Regulation (EU) No. 2020/878

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Trading name:	TOLUIDINE BLUE REAGENT					
Product code:	TBR-OT-X**	Date of compilation:	21 Dec 2022	Version:	3	

SECTIO	ON 16 Other information				
16.1.	Indication of changes:	-			
16.2.	Abbreviations and acronyms:	ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)  IMDG: International Maritime Code for Dangerous Goods  IATA: International Air Transport Association  GHS: Globally Harmonised System of Classification and Labelling of Chemicals EINECS: European Inventory of Existing Commercial Chemical Substances  CAS: Chemical Abstracts Service (division of the American Chemical Society)  DNEL: Derived No-Effect Level (UK REACH)  LC50: Lethal concentration, 50 percent  LD50: Lethal dose, 50 percent  PBT: Persistent, Bioaccumulative and Toxic  vPvB: very Persistent and very Bioaccumulative			
16.3.	Key literature references and source of data:	-			
16.4.	Classification and procedure ( 1272/2008 (CLP)	used to derive the classification for mixture according to Regulation (EC)			
Classifi	ication	Classification procedure			
-		-			
16.5.	Relevant H statements (numb	er and full text)			
	H: -	-			
16.6.	Training advice:	-			
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.			

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**Exposure scenario resulting to Chemical safety assessment** 

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