

# **BIELSCHOWSKY KIT**

The kit contains:

Ammonium water Developer stock solution Silver ammonia reagent stock solution Silver nitrate, 20% solution Sodium thiosulfate, 5% solution



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Trading name:	AMMONIUM WATER				
Product code:	AV-OT-X**	Date of compilation:	21 Dec 2022	Version:	2

SECTI	ON 1: Identification of t	he subst	tance/mixture a	and of the company/undertaking		
1.1.	Product identifier	Product identifier				
	Trading name:	AMMC	NIUM WATER			
	Chemical name:	-	-			
	Catalogue number:	AV-OT	-X**			
1.2.	Relevant identified use	s of the	substance or mi	xture and uses advised against		
	Uses:		For use with B	ielschowsky kit.		
	Uses advised against:		Only the ident	ified uses are advised.		
	Reason why uses advised against:		The product is intended for use only as an <i>in vitro</i> diagnostic medical device, registered at the Agency for Medicinal Products and Medical Devices and there is no reason to use it for other purposes			
1.3.	Details of the supplier of the safety data sheet					
	Supplier:		BioGnost Ltd.			
	Address:	Address:		Medjugorska 59, Zagreb		
	Telephone number:	Telephone number:		+385 1 2409997		
	Fax no.:		+385 1 2404039			
	e-mail of competent p	erson:	msds@biognost.hr			
	National contact:		-			
1.4.	Emergency telephone	number				
	National Protection an	d Rescue	e Directorate:	112		
	Medical information:			+385 1 2348 342		
	Other information:			-		

SECTIO	SECTION 2. Hazards identification					
2.1.	Classification of the substance or	mixture				
2.1.1.	Classification according to Regula	tion (EC) No 12	272/2008 (CLP)			
	Hazard class and category	code:	Hazard statements*:			
	Not identified as hazardous subst	ance.	-			
2.1.2.	Additional information					
	-					
*For ful	l text of Hazard- and EU Hazard-sta	tements: see S	ection 16			
2.2.	Label elements					
	Product identification:	AMMONIUM	WATER			
	Identification number: -					
	Authorization no.: -					
	Hazard pictograms:	-				



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	<b>Results of PBT and vPvB assessment</b> : According to the results of its assessment, this substan PBT or a vPvB.				
	No known endocrine disruptin	g properties			
	Endocrine Disrupting Proper	ties:			
2.3.	Other hazards				
	Further information:	-			
	Precautionary statements:	-			
	Hazard statements:	-			
	Signal word:	-			

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)				
1336-21-6/ 215-647-6/ 007-001-01-2	-	< 0.5 %	Ammonia	Skin Corr. 1B; H314 Aquatic Acute 1; H400				

	ION 4. First aid measures		
4.1.	Description of first aid measures		
	General notes:		-
	Following inhalation:		No information available
	Following skin contact:		No information available
	Following eye contact:		No information available
	Following ingestion: Self-protection of the first aider:		No information available
			Treat symptomatically.
4.2.	Most important symptoms and effects, both acute and delayed		fects, both acute and delayed
	Following inhalation:	No	information available
	Following skin contact:	No	information available
	Following eye contact:	No	information available
	Following ingestion:	No	information available
4.3.	Indication of any immedia	te medi	cal attention and special treatment needed
	-		

SECTIO	N 5 Firefighting measures
5.1.	Extinguishing media



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	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 su	ubstance or mixture
	Hazardous combustion products:	No information available
5.3.	Advice for firefighters	
	Use a self-contained open-circuit Cool closed containers exposed to	compressed air breathing apparatus and fireproof clothing. fire with water spray or vapor.
5.4.	Additional information	
	Remove sources of heat and igniti Do not contaminate the environm	

SECTIO	ON 6. Accidental release meas	ures			
6.1.	Personal precautions, protective equipment and emergency procedures				
6.1.1.	For non-emergency personne	91			
	Protective equipment:	Use personal protective equipment (see Section 8).			
	Accident prevention methods	Evacuate members of all non-essential personnel and those members without protective equipment. Remove all sources of sparks and ignition. Do not smoke.			
	Emergency procedures:	Mark the area using proper signs.			
6.1.2.	For emergency responders:				
	Wear protective equipment (see Section 8).				
6.2.	Environmental precautions:				
	Do not dispose of in sewage, drainage system and waterways. In case of large spillage contact National Protection and Rescue Directorate (NPRD) on 112.				
6.3.	Methods and material for containment and cleaning up				
6.3.1.	Bunding, covering of drains; capping procedures:	Sand or clay barriers.			
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				



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

SECTION 8. Exposure controls/personal protection							
8.1.	Control parameters						
Substance		CAS No	Occupational values/short	exposure limit term values	Biological limit values		
			ppm	mg/m <sup>3</sup>	-		



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Trading na	rading name:					AMMON	IUM \	NATER	R	2
Product code: AV-OT-X**		X**		Date o	f compila	tion:	21 De	ec 2022	Version: 2	
					I			1		
Ammonia			1336-2	21-6	2	20/50	14	/36	No inform	ation available
Substance name:	-									
EC No:	-		CAS No:	-						
DNEL			·							
					Inc	lustrial				
Route of		ļ	Acute		Acut	e		Chro	nic	Chronic
exposure:		effe	ect local	ef	fect sys	temic		effect	local	effect systemic
Oral		-		-			-			-
Inhalation		-		-			-			-
Dermal		-		-			-			-
Critical phys	sical para	meters: s	olubility, fla	mmabi	ility, cor	rosivity:				
				1	Со	nsumer	1			
Route of			Acute	Acut			Chronic			Chronic
exposure:		effe	ect local	effect sys		temic	effect local		local	effect systemic
Oral		-		-			-			-
Inhalation		-		-			-			-
Dermal		-		-			-			-
PNEC										
Environmer	•	ction tar	get			PNEC				
Fresh water						No information available				
Freshwater		ts				No information available				
Marine wat						No information available				
Marine sedi	iments					No inform				
Food chain						No information available				
Microorgan		ewage tr	eatment			No inform				
Soil (agricul	ltural)					No information available				
Air						No inform	nation	availab	le	
0.0	<b>F</b>		1.							
8.2. 8.2.1.	•	re contro		atrola						
0.2.1.			ineering cou	TUOIS						
	measur		ire related vent exposu uses:	ro i		the product in well ventilated rooms. Use personal protective pment. Do not eat, drink or smoke in the workspace.				
	Structu exposu		ires to preve	ent	No information available					



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		nisational measures nt exposure:	to	Organization of work in o during work process.	rder to reduce oth	ner worker's ir	ofluence	
	Techr expos	nical measures to pr sure:	event	Secure proper workspace concentration levels in air		•		
8.2.2.	Perso	nal protection equi	oment					
8.2.2.1.	Eye aı	nd face protection:		Safety glasses that stick to visor.	o face (preventing	splashing) (E	N 166) or	
8.2.2.2.	Skin p	Skin protection						
				Protective gloves must be according to the EU Directive 2016/425/EEC and standard EN 374. Glove material: nitrile rubber Glove thickness: ≥0.50 mm Break through time: >480 min				
	Other	skin protection:	Wear antistatic clothing made of natural fibers (such as cotton) wit sleeves (EN 13034), and shoes that cover the entire foot (EN 10335					
8.2.2.3.	Respi	ratory protection:	filter fo	tive full face mask (EN 136) or organic vapors, type "A" ) used when concentration	(boiling point >65	5°C) acording		
8.2.2.4.	Thern	nal hazards:	No inf	ormation available				
8.2.3.	Enviro	onmental exposure	controls					
		ance/mixture relate ures to prevent exp		See Section 6				
	Struct expos	ural measures to pr sure:	event	Use modern equipment.				
		nisational measures nt exposure:	to	Adapt the work process to the required working conditions of the workplace.				
		Technical measures to prevent exposure:		See Section 6				

SECTION 9. Physical and chemical properties							
9.1.	Information on basic physical and chemical properties						
		Value	Method				
	Physical state:	liquid	No information available				
	Colour:	colourless	No information available				
	Odour/odour threshold:	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				



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l over and	d upper explosion limit:	No information availab	No infor	mation available			
Lover une		No information availab					

	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
9.2.	Other information		
	-		

SECTIO	SECTION 10. Stability and reactivity					
10.1.	Reactivity:	See subsections 10.3 through 10.5.				
10.2.	Chemical stability:	The product is chemically stable under standard ambient conditions of storing and using.				
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										
11.1. Informatio	11.1. Information on toxicological effects									
Acute toxic	Acute toxicity:									
Route of exposure:	Method	Species	Effective dose LD <sub>50</sub> /LC <sub>50</sub> or ATE <sub>mixture</sub>	Exposure 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>	-	-					



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Specific	target organ toxicit	ty – single expo	osure (STOT SE)	:			
	Spe	ecific effects		Target orgai	า	Note	
Oral exposure:	No informa	ation available	No infor	mation availal	ole	-	
Dermal exposure	e: No informa	ation available	No infor	mation availal	ole	-	
Inhalation expos	sure: No informa	ation available	No infor	mation availal	ole	-	
Respira	tory irritation:	Ν	lo information a	available			
Irritatio	n and corrosion		1		1	44	
	Exposure time	e Specie	es Ev	aluation	Method	Note	
Skin irritation:	-	-	-		-	-	
Eye irritation:	-	-	-		-	-	
Sensitiz	ation						
Dermal exposure	e: No information	available					
Inhalation exposure:	No information	available					
Sympto	oms related to the pl	hysical chemic	al and toxicolog	nical character	istics		
Oral exposure:	No information	•			151105		
Dermal exposure							
Inhalation exposure:	No information						
Eye exposure:	No information	available					
<u> </u>							
Repeat	ed dose toxicity (sub	oacute, subchro	onic, chronic)				
	Dose	Exposure time	Species	Method	Evaluation	n Note	
Subacute oral	No information available	No information available	No information available	No informatio n available	No inform available	ation _	
Subacute dermal	No information available	No information available	No information available	No informatio n available	No inform available	ation _	
Subacute inhalation	No information available	No information available	No information available	No informatio n available	No inform available	ation _	



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Subchronic oral	No information available	No information available	No information available	No informatio n available	No information available	-
Subchronic dermal	No information available	No information available	No information available	No informatio n available	No information available	-
Subchronic inhalation	No information available	No information available	No information available	No informatio n available	No information available	-
Chronic oral	No information available	No information available	No information available	No informatio n available	No information available	-
Chronic dermal	No information available	No information available	No information available	No informatio n available	No information available	-
Chronic inhalation	No information available	No information available	No information available	No informatio n 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	-
Chronic inhalation	No information available	No information available	-

Clink enects (carcinogenicity, mutagenicity, reproductive toxicity)					
Carcinogenicity:	No information available				
Mutagenicity in-vitro:	No information available				
Genotoxicity:	No information available				
 Mutagenicity in-vivo:	No information available				
Germ cell mutagenicity:	No information available				
Reproductive toxicity:	No information available				



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	Summary of evaluation of the CMR properties: -
11.2 11.2.1.	Information on other hazards: 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.
11.2.2.	Other informations:
	-

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	-	-
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	-	-
Crustacea:	EC <sub>50</sub>	48 hours	No information available	No information available	-	-
Algae/aquatic plants	IC <sub>50</sub>	72 hours	No information available	No information available	-	-



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Other organisr	ms	-	_	-		-		-		-
12.2. Persis	tence	and degrada	oility							
Abiot	ic deg	radation								
	De	gradation ha	f-lives		Method			Evaluatio	on	Note
Marine water	No ir	nformation av	ailable	e No in	formation availa	ble	No inform	nation av	ailable	-
Fresh water	No ir	nformation av	ailable	e No in	formation availa	ble	No inform	nation av	ailable	-
Air	No ir	nformation av	ailable	e No in	formation availa	ble	No inform	nation av	ailable	-
Soil	No ir	nformation av	ailable	e No in	formation availa	ble	No inform	nation av	ailable	-
1	grada		<u> </u>							
% Degradatio		Time (day		NI . C	Method		Evaluation		Note	
No information available		o infori /ailable	matior	availab	rmation le		No information available		No information available	
					_					
	1			1		:		1		
12.3. Bioac	cumul	ative potentia	ıl							
Partit	ion co	efficient: n-oc	tanol/	water (log	Kow):					
Value	Cond	centration	рН	°C	°C Method		Evaluation			Note
_	No i availab	information ble	-	-	No informatio available	n	No inform available	nation	-	
Bioco	ncentr	ration factor (	BCF)							
Value		Species			Method		Evaluat	ion		Note
		No inform available	ation	No infor available		No information available		on	No information available	
Chror	nic eco	otoxicity	2		1			1		
Valu	e	Dos	e	Exposure time	Species		Method	Eva	luation	Note
Chronic toxicit	y on fi	ish LC <sub>50</sub>		No	No	No	0	No info	ormation	-



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Trading	g nam	e:			AMMONI	UM V	VATER			
Produc	ct code	e: A	V-OT-X**	X**Date of compilation:21 Dec 2022Version:2						n: 2
					information available		rmation lable	available		
Chronic crustace		•	EC <sub>50</sub>	information	No information available		rmation lable	No information available		-
12.4.	Mobi	ility in so	vil							
			edicted distributi on available	on in environme	ntal compar	tment	s:			
	-	ce tensio								
	V	alue	°C	Concentrati	on	Ν	/lethod			Note
	No inforr availa	mation able	No information available	No informatio available	on No in	format	tion avail	able	-	
Transpo	ort	-	coefficient y's constant	log Kow	Evapo	ration		Method		Note
Transpo		-	desorption coefficient	log Kow	Fyano	ration	rate	Method		Note
Soil-wa	ter	No	information	No information	No information available			No informatior	<b>1</b> –	
		available	9	available				available	-	
Water-a	air	No available	information	No information available	No inforr available	nation		No informatior available	) -	
Soil-air	air No information available			No information available	on No informat available			No informatior available	ı -	
12.5.			T and vPvB asses							
	accor	ding to	REACH Article 5	not contain comp 7(f) or Commission evels of 0.1% or	on Delegate					
					<u> </u>					
12.6.	Endo	crine dis	rupting properti	es						
				not contain comp 7(f) or Commissio					•	5
		-		evels of 0.1% or	-	uregu		5,2017/210		1111351011



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12.7.	Other adverse effects						
	No information available	No information available					
SECTIO	N 13. Disposal considerations						
13.1.	Waste treatment methods						
	÷						
13.1.1.	Product/Packaging disposal:						
	Submit for disposal to the lega Protection.	l person authorized by the Ministry of Environmental and Nature					
13.1.2.	Waste codes/waste designation	ns according to Law:					
	No information available						
13.1.3.	Waste treatment – relevant info	ormation:					
	No information available						
13.1.4.	Sewage disposal – relevant info	ormation:					
	Waste must not be disposed of	f into the sewage system.					
13.1.5.	Other disposal recommendation	ons:					
	Do not dispose of the product's remains into the sewage system. Submit the remains to the collecter authorized by the ministry in charge. Do not dispose of the packaging into the sewage system. Sub the packaging to the collectors authorized by the ministry in charge. Do not dispose of in places while ignition may occur.						
13.1.6.	Relevant Community provision	s:					
	-						
SECTIO	N 14. Transport information						
	Transporting/shipment by road (	ADR)					
UN number:		Not subject to transport regulations.					
UN prop	per shipping name:	-					
Transpo	ort hazard class(es):	-					
Packing	ı group:	-					
Environ	mentally hazardous:	-					
Special	precautions for user:	-					



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Transport	ing/shipment by rail	(PID)						
•	ing/silpment by rai							
UN number:		Not subject to transport regulations.						
UN proper shippir	ng name:	-						
Transport hazard o	class(es):	-						
Packing group:		-						
Environmentally h	azardous:	-						
Special precaution	is for user:	-						

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

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



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Trading name:				
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	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 (EC) 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 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 1999/13/EC about limitation of emissions of volatile organic compounds (VOC- guideline)				
	National legislation:	Chemicals Act, Regulation on classification, packaging and labeling of dangerous substances, Ordinance on occupational exposure limit values and on biological limit values, Regulation on categories, types and classification of waste with a waste catalog and list of hazardous waste, Ordinance on writing Material safety data sheet, Transport of Hazardous Substances Act			
15.2.	Chemical safety assessment				
	None				

SECTION 16. Other information	
16.1. Indication of changes:	-



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Trading name:			AMMONIUM WATER					
Product code: AV-OT-X**			Date of compilation: 21 Dec 2022 Version: 2					
16.2.	Abbrevia	itions and acronyms	<ul> <li>ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)</li> <li>IMDG: International Maritime Code for Dangerous Goods</li> <li>IATA: International Air Transport Association</li> <li>GHS: Globally Harmonised System of Classification and Labelling of Chemicals</li> <li>EINECS: European Inventory of Existing Commercial Chemical Substances</li> <li>CAS: Chemical Abstracts Service (division of the American Chemical Society)</li> <li>DNEL: Derived No-Effect Level (UK REACH)</li> <li>LC50: Lethal concentration, 50 percent</li> <li>LD50: Lethal dose, 50 percent</li> <li>PBT: Persistent, Bioaccumulative and Toxic</li> <li>vPvB: very Persistent and very Bioaccumulative</li> </ul>					
16.3.	Key litera source o	ature references and f data:	-					
16.4.	Classifica 1272/20	•	used to derive the classification for mixture according to Regulation (EC)					
Classification			Classification procedure					
-			-					
16.5.	Relevant	H statements (num	ber and full text)					
	H: 314 400		Causes severe skin burns and eye damage Very toxic to aquatic life.					
16.6.	Training	advice:	-					
16.7.	Further i	nformation:	<ul> <li>** "X" in the product code marks different volumes (different packagings the product)</li> <li>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.</li> </ul>					

# ANNEX:

Exposure scenario resulting to Chemical safety assessment

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Trading name:		DEVELOPER S		N	
Product code:	STR-OT-X**	Revision date:	22 Dec 2022	Version:	3

1.1.	Product identifier						
	Trading name:	DEVELOPER STOCK SOLUTION					
	Chemical name:	-					
	Catalogue number:	STR-OT-X*	STR-OT-X**				
1.2.	Relevant identified uses of the substance or mixture and uses advised against						
	Uses:		For use with B	ielschowsky kit.			
	Uses advised against:		Only the iden	tified uses are advised.			
	Reason why uses advised against: medica			he product is intended for use only as an <i>in vitro</i> diagnostic nedical device, registered at the Agency for Medicinal Products and 1edical Devices and there is no reason to use it for other purposes.			
1.3.	Details of the supplier of the safety data sheet						
	Supplier:		BioGnost Ltd.				
	Address:	N	Medjugorska 59, Zagreb				
	Telephone number:	+	+385 1 2409997				
	Fax no.:	+	+385 1 2404039				
	e-mail of competent p	erson: <u>n</u>	msds@biognost.hr				
	National contact:	National contact: -		-			
1.4.	Emergency telephone	Emergency telephone number					
	National Protection an	d Rescue Dir	ectorate:	112			
	Medical information:			+385 1 2348 342			
	Other information:			-			

SECTIO	DN 2. Hazards identification						
2.1.	Classification of the substance or mixture						
2.1.1.	Classification according to Regulation (EC) No 1	272/2008 (CLP)					
	Hazard class and category code:	Hazard statements*:					
	Acute Tox. 4	H302					
	Acute Tox. 4	H312					
	Skin Corr. 1B	H314					
	Skin. Sens. 1	H317					
	Acute Tox. 4	H332					
	Muta. 2	H341					
	Carc. 1B	H350					
2.1.2.	Additional information						



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			Page 2 d	
Trading name:			DEVELOPER STOCK SOLUTION	
Produ	ict code:	STR-OT-X**	Revision date: 22 Dec 2022 Version:	3
	No know	of PBT and vPv	Properties: rupting properties B assessment: According to the results of its assessment, this substar	nce is not a
*For fu			lazard-statements: see Section 16	
2.2.	Label ele			
		dentification:	DEVELOPER STOCK SOLUTION	
	Identifica	ition number:	-	
	Authoriza	ation no.:	-	
	Hazard p	ictograms:	GHS05 GHS08 GHS07	!>
	Signal wo	ord:	Danger	
	Hazard st	tatements:	<ul> <li>H302 + H312 + H332 Harmful if swallowed, in contact with skin or</li> <li>H314 Causes severe skin burns and eye damage.</li> <li>H317 May cause an allergic skin reaction.</li> <li>H341 Suspected of causing genetic defects.</li> <li>H350 May cause cancer.</li> </ul>	if inhaled.
	Precautic statemen	•	<ul> <li>P280 Wear protective gloves/protective clothing/eye/protection/fac protection.</li> <li>P301+P330+P331 IF SWALLOWED: rinse mouth. DO NOT induce vor P302+P352 IF ON SKIN: Wash with plenty of water and soap.</li> <li>P304+P340 IF INHALED: Remove person to fresh air and keep combreathing.</li> <li>P305+P351+P338 IF IN EYES: Rinse cautiously with water for severa Remove contact lenses, if present and easy to do. Continue rinsing.</li> <li>P308 + P313 IF exposed or concerned: Get medical advice/attentio</li> </ul>	miting. fortable for al minutes.
	Further ir	nformation:	-	
2.3.	Other ha	zards		

SECTION 3. Co	SECTION 3. Composition/information on ingredients								
CAS/ EC/ Index no.	REACH Registration No	Mass %	Identification name	Classification according to Regulation (EC) No 1272/2008 (CLP)					



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Trading name:		DEVELOPER STOCK SOLUTION						
Product code:	STR-OT-X**		Revision date:	22 Dec	2022	Version:	3	
200-001-8/	01-2119488953- 20-XXXX	15 – 18 %	formaldehyd	de, 37%	Acu Skin Skin Acu Mut	te Tox. 3; H301 te Tox. 3; H311 1. Corr. 1B; H314 1. Sens. 1; H317 te Tox. 3; H331 ta. 2; H341 c. 1B; H350		

4.1.	Description of first aid measures						
	General notes:		If the suggested first aid measures do not prove sufficient, seek medical attention.				
	Following inhalation:		Remove person to fresh air. If breathing stops, immediately apply artificial respiration. If breathing difficulties occur, use emergency breathing apparatus. If the symptoms persist, immediately consult a physician.				
	Following skin contact:		Take off immediately all contaminated clothing. Immediately wash with plenty of water and soap 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 10 minutes. If the symptoms remain, immediately call in ophthalmologist.				
	Following ingestion:		Rinse the oral cavity, drink at most 1-2 glasses of water. Do not induce vomiting. 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:	sens diffi	ation of the mucous membrane of the nose/throat may occur (burning sation, urge to sneeze, and runny nose). High concentration may cause cult breathing, coughing fits, chest tightness, headache, vertigo and wsiness.				
	Following skin contact:		ation, redness with stinging and pain, skin cracking, rash, swelling, ns, blisters and delayed onset of inflammatory processes may occur.				
	Following eye contact:	lacri	pending on concentration and exposure time, mucosa stinging, imation, redness and pain may occur, as well as bleeding, delayed onset nflammatory processes and permanent eyesight damage.				
	Following ingestion:	and	ending on concentration and exposure time, it may lead to stinging digestive mucus damage, abdominal pain, nausea, vomiting (possibly loody content).				



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Trading name:	DEVELOPER STOCK SOLUTION							
Product code: STR-OT-X**		Revision date:	22 Dec 2022	Version:	3			

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SECTI	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:	Possible liberation of toxic carbon monoxide and formaldehyde gases due to thermal decomposition (increased temperature). Explosive mixtures of formaldehyde vapors and air, and methanol and air also present danger.				
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, in order to prevent explosion.					
5.4.	Additional information					
	Remove sources of heat and ignitio	n. 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 pe	rsonnel					
	Protective equipment:		Use personal protective equipment (see Section 8).				
	Accident prevention me	ethods:	Evacuate members of all non-essential personnel and those members without protective equipment. Avoid breathing vapors and avoid contact with skin and eyes. Remove all sources of sparks and ignition. Do not smoke.				
	Emergency procedures	:	Mark the area using proper signs.				
6.1.2.	For emergency responders:						
	Use protective equipme (see Section 8).	ent; in ca	se of inadequate ventilation use adequate airways protective equipment				
6.2.	Environmental precauti	ons:					
	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.	For creating barriers, covering and sealing:	Sand or clay barriers.					



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Irading name: DEVELOPER S	DEVELOPER STOCK SOLUTION						
Product code: STR-OT-X** Revision date:	22 Dec 2022	Version:	3				

6.3.2.	Cleaning up:	Where possible, the substance can be absorbed by using inflammable material (sand, diatomaceous earth, vermiculite). Place the waste material in tightly closed impermeable containers. Store the substance in well ventilated storage rooms until disposal. Submit for disposal to the legal persons authorized by the Ministry of Environmental and Nature Protection. After disposal of the products, wash the area and involved materials with water.					
6.3.3.	Other information:	Do not use tools that may cause sparks.					
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	DN 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 heat and ignition. Carry out measures for preventing static electricity.			
	Measures to prevent aerosol and dust generation	on:	Secure proper ventilation.			
	Measures to protect the environment:		Prevent spilling into the sewage system and waterways.			
	Other measures:		-			
7.1.2.	Advice on general occupational hygiene:					
	Do not eat, drink or smoke in the workspace. Thoroughly wash hands after work and before eating.					
7.2.	Conditions for safe storage, including any incompatibilities					
	Technical measures and storage conditions:	Keep in tightly closed and upright set containers in a we ventilated storage rooms at temperatures ranging from 15 to 25 °C.				
	Packaging materials:	Mar	nufacturer's original packaging.			
	Requirements for storage rooms and vessels:		p away from food and drink. Keep the containers tly 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 cher	not place the unused material in the storage room do not use empty containers for storing other micals. Do not store with incompatible materials (see tion 10).			
7.3.	Specific end use(s)					



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Recommendations:	-
Industrial sector specific solutions:	-

8.1.	Control para		ols/persona	•						
0.1.	Substance		CASI			upational exposure limit lues/short term values		Bi	Biological limit values	
					ppm		mg/m <sup>3</sup>		-	
Formalo	dehyde		50-00	)-0	0.3/0.6		0.37/0.74		-	
-	1									
Substar name:	ice -									
EC No:	-		CAS No:	-						
DNEL										
					Industria	al				
Route	of exposure:		Acute ect local	effe	Acute ect systemic		Chronic effect local		Chronic effect systemic	
Oral		-		-			-		-	
Innalation		0.75 m (forma	ıg/m³ Idehyde)	-			0.375 mg/m <sup>3</sup> (formaldehyde)		9 mg/m <sup>3</sup> (formaldehyde)	
Dermal		-		-			0.037 mg/cm <sup>2</sup> (formaldehyde)		240 mg/kg (formaldehyde)	
Critical	physical para	meters: s	olubility, fla	mmabilit	ty, corrosivit	:y:	-			
					Consume	er				
Route	of exposure:		Acute ect local	effe	Acute ect systemic		Chroni effect lo		Chronic effect systemic	
Oral		-		-			-		4.1 mg/kg (formaldehyde)	
Inhalation -			-			0.1 mg/m <sup>3</sup> (formaldehyde	e)	3.2 mg/m <sup>3</sup> (formaldehyde)		
Dermal			0.012 mg/cm <sup>2</sup> (formaldehyde)			120 mg/kg (formaldehyde)				
PNEC										
Environ	mental prote	ction targ	get		PNE	C				
Fresh w	ater				0.44	0.44 mg/l (formaldehyde)				
Freshwa	ater sediment	S			2.3 r	ng/kg	(formaldehyd	e)		

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8.2.3.

Environmental exposure controls

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Trading I	name:		DEVE			DN	
Product code: STR-OT-X**		Revisio	sion date: 22 Dec 2022 Version: 3			3	
Marine wa	ater			0.44 mg	/l (formaldehyde)		
Marine se	diments			-	(formaldehyde)	)	
Food chai	in				mation available		
Microorga	anisms in	sewage treatment			/l (formaldehyde)		
Soil (agric					(formaldehyde)		
Air					mation available		
0.0	<b>F</b>						
8.2. 8.2.1.		ure controls					
0.2.1.	Appropriate engineering controls Substance/mixture related measures to prevent exposure during identified uses:			Use the product in well ventilated rooms. Use personal protective equipment. Do not eat, drink or smoke in the workspace.			
	Structural measures to prevent exposure:			No information available			
Organisational measures to prevexposure:		event	Vent Organization of work in order to reduce other worker's influence during work process.				
	Techn	ical measures to prevent	nt exposure: Secure proper workspace ventilation in order to concentration levels in air below permitted level				•
8.2.2.	Perso	nal protection equipment	t				
8.2.2.1.	Eye ar	nd face protection:	levels of	f concentr	at stick to face (EN ration in air; prote e of higher levels o	ctive gas mask t	hat covers the
8.2.2.2.	Skin p	protection					
	Hand	protection:	Protective gloves must be according to the Directive 89 and standard EN 374. Full contact: Glove material: nitrile rubber Glove thickness: 0.40 mm Time until perforation: > 480 min Splash contact: Gloves material: polychloroprene Glove thickness: 0.65 mm Time until perforation: >240 min		ve 89/686/EEC		
	Other	skin protection:	•		uit with long slee oes that cover the		t protects from
8.2.2.3.	Respi	ratory protection:	recomm	Full face mask (EN 136) or half mask (EN 140) equipped with a recommended "ABEK" (EN 14387) filter used when concentration levels exceed GVI.			
8.2.2.4.	Therm	nal hazards:	No info	rmation a	vailable		



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					·			

Substance/mixture related measures to prevent exposure:	See Section 6
Structural measures to prevent exposure:	Use modern equipment.
Organisational measures to prevent exposure:	Adapt the work process to the required working conditions of the workplace.
Technical measures to prevent exposure:	See Section 6

nformation on basic physical ar	nd chemical properties	
	Value	Method
Physical state:	liquid	No information available
Colour:	colourless	No information available
Ddour/odour threshold:	no information available	No information available
Aelting point / freezing point:	No information available	No information available
Boiling point or initial boiling point and boiling range:	No information available	No information available
lammability:	No information available	No information available
over and upper explosion imit:	No information available	No information available
lash 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
(inematic 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
/apour pressure:	No information available	No information available



Other information

9.2.

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

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Trading name: Product code: STR-OT-X**		DEVELOPER STOCK SOLUTION				
		Revision date:	22 Dec 2022 Version:		3	
Density and/or relative density		No information available	No informatic			
Relative v	Relative vapour density:		No informatio	No information available		
Particle c	haracteristics:	No information available	No information available			

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 (room temperature).
10.3.	Possibility of hazardous reactions:	Explosion hazard when in contact with: nitric acid, hydrogen peroxide, nitromethane, acids, phenol, nitrogen dioxide Exothermic reactions occur with the following substances: bases, nitrides, polymerization initiators, sodium hydroxide, potassium permanganate, furfuryl alcohol, highly oxidizing agents, perchloric acid with aniline, hydrochloric acid, magnesium carbonate.
10.4.	Conditions to avoid:	Sources of heat, sparks, ignition, and low temperature.
10.5.	Incompatible materials:	Highly oxidizing agents, acids, bases and different metals, steel manufactured by melting, copper.
10.6.	Hazardous decomposition products:	Carbon oxides.

SECTION 11. Toxicological information								
11.1. Information on toxicological effects								
Acute toxicity:								
Route of exposure:	Method	Species	Dose LD <sub>50</sub> /LC <sub>50</sub> or ATE <sub>mix</sub>	Exposure time	Results			
Oral exposure:	No informatio n available	rat	LD <sub>50</sub>	No information available	>200 mg/kg (formaldehyde)			
Dermal:	No informatio n available	rabbit	LD <sub>50</sub>	No information available	>270 mg/kg (formaldehyde)			
Inhalation exposure:	No informatio n available	rat	LC <sub>50</sub>	4 h	0.58 mg/l (formaldehyde)			



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Trading name:		DEVELOPER STOCK SOLUTION					
Product code:	STR-OT-X**	Revision date:	22 Dec 2022	Version:	3		

•		oxicity – single expo			1	
		Specific effect	S	Target o	rgan	Note
Oral exposure:	No informa	ation available		-	-	
Dermal exposure	No informa	ation available		-	-	
Inhalation exposure:	No information available			-	-	
Aspiratio	on hazard:	рс	ossible respirate	ory system irritat	ion.	
Irritation	and corrosion				Ĩ	1
	1	Exposure time	Species	Evaluation	Method	Note
Skin corrosion/irritation No informa available			-	-	-	Causes skin irritation.
Serious irritation to eyes: No information available			-		-	Causes serious eye irritation.
Sensitiza	tion					
Dermal exposure		allergic skin reactio	n			
Inhalation exposure:	-	ation available				
Symptor	ms related to th	ne physical, chemica	l and toxicolog	ical characteristi	cs	
Oral exposure:		wed it can cause seven perforation.	vere burns to n	nouth and throat	, and danger o	f esophagus and
Dermal exposure		ng on concentratio and pain may occu				sensation of
Inhalation exposu	ire: and sho	ng on concentratio rtness of breath. Inh v cause damage.	•	•		5
Eye exposure:	Causes s hazard.	erious eye damage.	Fumes may ca	use lacrimal irrit	ation (tearing),	blindness
Repeate	d dose toxicitv	(subacute, subchro	nic, chronic)			
	Dose	Exposure time	Species	Method	Evaluation	Note
Subacute oral	No information available	No information available	No information available	No information available	No information available	No information available



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

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



Chronic

dermal

Chronic

inhalation

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

Page 12 of 18 Trading name: **DEVELOPER STOCK SOLUTION** Product code: STR-OT-X\*\* Revision date: 22 Dec 2022 Version: 3 No information No information available No information available available No information No information available No information available available CMR effects (carcinogenicity; mutagenicity; reproductive toxicity) Carcinogenicity: Presumed to have carcinogenic potential for humans. Mutagenicity in vitro: No information available. No information available. Genotoxicity: No information available. Mutagenicity in vivo: Germ cell mutagenicity: Suspected of causing genetic defects. Reproductive toxicity: No information available. Summary of evaluation of the CMR No information available. properties:

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 ECOLOG	SECTION 12 ECOLOGICAL INFORMATION:							
12.1. Toxicity								
Acute (short-term) toxicity	Dose	Exposure time	Species	Method	Evaluation	Note		
Fish	LC <sub>50</sub>	96 hours	Pimephales promelas	-	24.1 – 41 mg/l (formaldehyde)	-		
Crustacea:	EC <sub>50</sub>	48 hours	water flea (Daphnia magna)	-	2 mg/l (formaldehyde)	-		
Algae/aquatic plants	IC <sub>50</sub>	72 hours	algae	-	2.5 mg/l (formaldehyde)	-		
Other organisms	-	-	-	-	-	-		
Chronic (long-term) toxicity	Dose	Exposure time	Species	Method	Evaluation	Note		
Fish	LC <sub>50</sub>	96 hours	-	-	No information available	-		



Page 13 of 18 Trading name: **DEVELOPER STOCK SOLUTION** Product code: STR-OT-X\*\* Revision date: 22 Dec 2022 Version: 3 Crustacea: EC<sub>50</sub> 48 hours \_ \_ No information available \_ Algae/aquatic plants No information available IC<sub>50</sub> \_ 72 hours \_ -Other organisms No information available \_ \_ \_ \_ \_ Persistence and degradability 12.2. Abiotic degradation Degradation half-lives Method Evaluation Note No information available No information available No information available 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 **Biodegradation** % Degradation Time (days) Method Evaluation Note No information No information available No information No information \_ available available available 12.3. **Bioaccumulative potential** Partition coefficient: n-octanol/water (log Kow): Value Concentration °C Method Evaluation pН Note No No information No information No information information available available available available **Bioconcentration factor (BCF)** Value Evaluation Species Method Note No information No information No information No information available available available available Chronic ecotoxicity



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Trading name:	DEVELOPER STOCK SOLUTION				
Product code:	STR-OT-X**	Revision date:	22 Dec 2022	Version:	3

	Value	Dose Exposure S		Speci	es Meth	od Evalı	uation	Note
Chronic	toxicity on f	ish LC <sub>50</sub>	informatio i	No informat available		availa	mation able	-
	c toxicity on ea (Daphnia)	EC <sub>50</sub>	informatio i	No informat available	No ion inform	nati inforr availa	mation able	-
12.4.	Mobility in	soil						
	Known or p	redicted distribu	tion in environm	ental cor	mpartments:			
	Surface ten	sion:	1					
	Value No	°C No	Concentrat No informat	tion 1	Methc No information			Note
	informatior available	information available				-		
	Adsorption	/ desorption	1	Î		1		1
Transpo	ort	D coefficient nry's constant	log Kow	Evap	poration rate	Meth	od	Note
Soil-wa	ter availat		No informatio available	avail	nformation lable	No inform available		-
Water-a	air No inf availat	ormation ble	No informatio available		nformation lable	No inform available	nation	-
Soil-air	No inf availat	ormation ble	No informatio available		nformation lable	No information available		-
12.5.	Results of P	BT and vPvB asse	essment					
		tion available						
12.6.	Endocrine o	lisrupting proper	ties					
	according t	o REACH Article		sion Dele	egated regulat			isrupting propertie or Commission



Transporting/shipment by rail (RID)

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

Page 15 of 18 Trading name: **DEVELOPER STOCK SOLUTION** Product code: STR-OT-X\*\* Revision date: 22 Dec 2022 Version: 3 12.7. Other adverse effects No information available **SECTION 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: 15 01 10\*: 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:** \_ **SECTION 14. Transport information** 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: \_



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	1		:	1	1				
UN number:		Not	subject to transpo	ort regulations					
UN proper shipping	g name:	-							
Transport hazard cl	ass(es):	-							
Packing group:		-							
Environmentally ha	zardous:	-							
Special precautions	for user:	-							
Inland wat	erway transport (ADN	)							
UN number:		Not	subject to transpo	ort regulations					
UN proper shipping	g name:	-							
Transport hazard cl	ass(es):	-							
Packing group:		-							
Environmentally ha	zardous:	-							
Special precautions	for user:	-							
Transporti	ng/shipment by sea (I	MDG)							
UN number:		Not subject to transport regulations							
UN proper shipping	g name:	-							
Transport hazard cl	ass(es):	-							
Packing group:		-							
Environmentally ha	zardous:	-							
Special precautions	for user:	-							
Transport in bulk a of MARPOL 73/78 a	ccording to Annex II and the IBC code:	-							
Transporti	ng/shipment by air (IC	CAO-T	I/IATA-DGR)						
UN number:		333	4						
UN proper shipping name:			Aviation regulated liquid, n.o.s. (formaldehyde)						
Transport hazard class(es):			9						
Packing group:			Ш						
Environmentally hazardous:			าย						
Special precautions for user:									
Further information			ions, nonflammabl DR regulations.	e, containing less	than 25% of for	maldehyde do			

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



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Authorizations:	_
Restrictions:	_
Other EU regulations:	<ul> <li>EC Regulation No. 1906/2007 and EC Regulation No. 1272/2008 of the European Parliament and the European Council;</li> <li>The European Commission Regulation No. 453/2006 of 2010 on changes and amendments to the Regulation (EC) No. 1907/2006 of the European Parliament and Council on registration, evaluation, authorization and restriction of chemical substances (REACH);</li> <li>EC Regulation No. 2037/200 of the European Parliament and Council from 2 June 2000 on substances that damage the ozone layer;</li> <li>EC Regulation No. 689/2008 of the European Parliament and Council from 1 June 2008 concerning the export and import of dangerous chemicals;</li> <li>EC Regulation No. 850/2004 of the European Parliament and Council from 2 April 2004 about persistent organic pollutants;</li> <li>Directive 2008/98/EC of the European Parliament and Council of 19 November 2008 on waste and repealing certain Directives</li> </ul>
Information according 1 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
Chemical safety assessm	nent

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



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16.4.		Classification and procedure used to derive the classification for mixture according to Regulation (EC) 1272/2008 (CLP)					
Classifi	icatior	according to CLP	Classification procedure				
-			-				
16.5.	Rele	evant H statements (nun	nber and full text)				
	H:	301+311+331 302+312+332 314 317 341 350	Toxic if swallowed, in contact with skin or if inhaled. Harmful if swallowed, in contact with skin or if inhaled. Causes severe skin burns and eye damage May cause allergic skin reaction. Suspected of causing genetic defects. May cause cancer.				
16.6.	Trai	ning 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:	SILVE	R AMMONIA REAGENT	STOCK SOLUTION	J	
Product code:	SSAR-OT-X**	Date of compilation:	21 Dec 2022	Version:	2

SECTI	ON 1: Identification of t	he substance	e/mixture	and of the company/undertaking		
1.1	Product identifier	-				
	Trading name:	SILVER AMI	MONIA RE	IONIA REAGENT STOCK SOLUTION		
	Chemical name:	-				
	Catalogue number:	SSAR-OT-X	**			
1.2	Relevant identified use	s of the subs	tance or m	nixture and uses advised against		
	Uses:		For use v	with Bielschowsky staining kit.		
	Uses advised against:		Only the	identified uses are advised.		
	Reason why uses advised against:		The product is intended for use only as an <i>in vitro</i> diagnostic medical device, registered at the Agency for Medicinal Products and Medical Devices and there is no reason to use it for other purposes.			
1.3	Details of the supplier	of the safety	data shee	t		
	Supplier:		BioGnost Ltd.			
	Address:		Medjugorska 59, Zagreb			
	Telephone number:		+385 1 2409997			
	Telefax.:		+385 1 2404039			
	e-mail of competent p	erson:	<u>msds@b</u>	<u>biognost.hr</u>		
	National contact:		-			
1.4	Emergency telephone	number				
	National Protection an	d Rescue Dire	ectorate:	112		
	Medical information:			+385 1 2348 342		
	Other information:			-		

SECTION 2. Hazards identification					
2.1	Classification of the substance or mixture				
2.1.1	Classification according to Reg	ulation (EC) No 12	272/2008 (CLP)		
	Hazard class and catego	ory code:	Hazard statements*:		
	Aquatic Chronic 3		H412		
2.1.2.	Additional information				
	-				
*For ful	l text of Hazard- and EU Hazard-	statements: see S	ECTION 16		
2.2	Label elements				
	Product identification:	SILVER AMMON	IIA REAGENT STOCK SOLUTION		
	Identification number:	-			
	Authorization number:	-			
	Hazard pictograms:	-			



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	<b>Endocrine Disrupting Prope</b> No known endocrine disrupti	
2.3	Other hazards	
	Supplemetal hazard information (EU):	-
	Precautionary statements:	<ul><li>P273 Avoid release to the environment.</li><li>P501 Dispose of contents/container in accordance with local regulations.</li></ul>
	Hazard statements:	H412 Harmful to aquatic life with long lasting effects.
	Signal word:	-

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)				
7761-88-8/ 231-853-9/ 047-001-00-2	-	0.4 – 0.5 %	silver nitrate	Ox. Sol. 2; H272 Skin Corr. 1B; H314 Aquatic Acute 1; H400 Aquatic Chronic 1; H410				
1336-21-6/ 215-647-6/ 007-001-01-2	-	< 3 %	ammonia	Skin Corr. 1B; H314 Aquatic Acute 1; H400				

SECT	SECTION 4. First aid measures				
4.1	Description of first aid measu	ires			
	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 oral cavity, drink 1-2 glasses of water. Immediately consult a physician and show the container or label. In case of swallowing large quantities, transport the afflicted person to the hospital.			



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	Self-protection of the first aider:	-
4.2	Most important symptoms and ef	fects, both acute and delayed
	Following inhalation:	Depending on concentration and exposure time, it may lead to mucosa irritation, cough, and dyspnea.
	Following skin contact:	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:	Danger of gastric perforattion.
4.3	Indication of any immediate medi	cal attention and special treatment needed
	-	

SECTION 5. Firefighting measures				
5.1	Extinguishing media			
	Suitable extinguishing media:	Water spray, foam, dry powder, $CO_2$ or alcohol resistant foam.		
	Unsuitable extinguishing media:	Water with full jet.		
5.2	Special hazards arising from the substance or mixture			
	Hazardous combustion products:	Nitrogen oxides (NOx). During heating or in case of fire poisonous gases are produced.		
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 environm	ent with extinguishing media.		

SECTIO	ON 6. Accidental release measur	res
6.1	Personal precautions, protective	equipment and emergency procedures
6.1.1.	For non-emergency personnel	
	Protective equipment:	Use personal protective equipment (see Section 8).
	Accident prevention methods:	Evacuate members of all non-essential personnel and those members without protective equipment. Avoid breathing vapors and avoid contact with skin and eyes. Do not smoke.
	Emergency procedures:	Mark the area using proper signs.
6.1.2.	For emergency responders:	
	se of inadequate ventilation use adequate airways protective equipment	
6.2	Environmental precautions:	



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Trading name:	SILVER AMMONIA REAGENT STOCK SOLUTION						
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	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:				
6.3.2.	Cleaning up:	Where possible, the substance can be absorbed by using absorbing material. Place the waste material in tightly closed impermeable containers. Store the substance in well ventilated storage rooms until disposal. Submit for disposal to the legal persons authorized by the Ministry of Environmental and Nature Protection. After disposal of the products, wash the area and and involved materials with water.			
6.3.3.	Other information:	Do not use incompatible materials (see Section 10).			
6.4	Reference to other sections	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.	
	Measures to prevent aerosol and dust generation	on:	Secure proper ventilation.	
	Measures to protect the environment: Other measures:		Prevent spilling into the sewage system and waterways.	
			-	
7.1.2.	Advice on general occupational hygiene:			
	Do not eat, drink or smoke in the workspace. Th	noroughly was	sh hands after work and before eating.	
7.2	Conditions for safe storage, including any incom	npatibilities		
	Technical measures and storage conditions:		htly closed and upright set containers at res ranging from +2 to +8 °C.	
	Packaging materials: Manufactu containers		cturer's original packaging. Avoid metal ers.	
	Requirements for storage rooms and vessels: Keep away tightly clo		away from food and drink. Keep the containers y closed.	
	Advices for storage equipment:	The storage must be made of hard material; floors must be resistant to chemicals. There must be no drai that directly leads into sewage system. Secure proper ventilation.		



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		i I					

	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 p	arameters							
Substance	e					exposure limit term values	Biological limit values	
Silver (as Ag)		-		р	ppm mg/m <sup>3</sup>		J.	
					-	0.01	-	
Ammonia		133	6-21-6	20	0/50	14/36	-	
Substance name:	-							
EC No:	-	CAS No	: -					
DNEL								
				Indu	ustrial			
Route of exposure:	Acu effect		Acute effect systemic			Chronic effect local	Chronic effect systemic	
Oral	-		-		-		-	
Inhalation	-		-		-		-	
Dermal	-		-		-		-	
Critical physical pa	rameters: s	solubility,	flammability	y, corro	osivity:	-		
				Con	sumer			
Route of exposure:	Act		Acute effect sys		Chronic effect local		Chronic effect systemic	
Oral	-		-		-		-	
Inhalation	-		-		-		-	
Dermal	-		-		-		-	
PNEC								
Environmental pro	tection tar	get		F	PNEC			
Fresh water				r	no information available			
Freshwater sedime	ents			r	no inforn	nation available		
Marine water				r	no inforn	nation available		



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Marine sediments				no information a	vailable				
Food chai				no information a					
		sewage treatment		no information a					
Soil (agric		sewage treatment		no information a					
Air	ulturul)			no information a					
8.2	Expos	ure controls							
8.2.1.	Appro	priate engineering control	s						
		ance/mixture related meas nt exposure during identifi		•	in well ventilated ro ment. Do not eat, dr	•			
	Struct expos	ural measures to prevent ure:		In accordance with Section 7.					
	Organ expos	iisational measures to prev ure:	vent	Organization of work in order to reduce other worker's influence during work process.					
	Techn	ical measures to prevent e	Secure proper workspace ventilation in order to keep e: concentration levels in air below permitted levels. Secure stations for rinsing eyes and showering.						
8.2.2.	Persor	nal protection equipment							
8.2.2.1.	Eye ar	nd face protection:	levels of	of concentration in	o face (EN 166) or v air; protective gas r ner levels of concent	mask that covers			
8.2.2.2.	Skin p	rotection							
	Hand	protection:	Protec	ctive nitrile gloves, >0.11 mm thick (EN 374).					
	Other	skin protection:		antistatic clothing made of natural fibers (such as cotton) ong sleeves (EN 340) and shoes that cover the entire foot.					
8.2.2.3.	Respir	ratory protection:		tory protective dev	al conditions of use vice when high conc				
8.2.2.4.	Therm	nal hazards:	No info	nformation available					
8.2.3.	Enviro	nmental exposure control	S						
		ance/mixture related ures to prevent exposure:	See Se	ction 6					
	Struct expos	ural measures to prevent ure:	Use m	odern equipment.					
	-	isational measures to nt exposure:	Adapt workpl	•	o the required work	ing conditions c	f the		



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Technical measures to prevent exposure:

See Section 6

Information on basic physical and chemical properties								
		Value	Method					
	Physical state:	liquid	No information available					
	Colour:	colourless	No information available					
	Odour/odour threshold:	mild ammonia 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:	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					

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



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10.6 Hazardous decomposition products: No information available

SECTION 11. Toxic	ological info	ormation						
11.1 Information	n on hazard o	lasses as defined	d in Regu	lation (l	EC) No 127	2/2008		
Acute toxic	ity:							
Route of exposure:	Method	Species	Do	ose LD <sub>50</sub> ATE <sub>r</sub>	/LC <sub>50</sub> or	Exposure t	ime	Results
Oral:	-	No information available	n	-		No informatio available	on	-
Dermal:	-	No information available	n	-		No informatio available	on	-
Inhalation:	ation: No information - No information available - No information available		on	-				
Specific tar	get organ to	xicity – single exp	posure (S	TOT SE	):		-	
		pecific effects			Target o	-		Note
Oral:	No informa	tion available		No information a		available	-	
Dermal:	No informa	tion available	No information a					
Inhalation:	No informa	tion available		No information available -				
Aspiration	hazard:		No infor	mation	available.			
Irritation ar	nd corrosion							
	Expo	osure time	Spec	ies	Evaluati	on Method		Note
Skin corrosion/irritation:	-		-		-	-	-	
Serious eye damage/irritation	-		-		-	-	-	
Sensitizatio	n							
Skin sensitization:	-							
Respiratory sensitiza	ation: -							
Symptoms	related to th	e physical, chemi	ical and t	oxicolo	gical chara	cteristics		
Oral exposure:	No inforr	mation available.						
Dermal exposure:	No inforr	nation available.						



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Repeate	ed dose toxicity (sub	acute, subchro	onic, chronic)			
	Dose	Exposure time	Species	Method	Evaluation	Note
Subacute oral	No information available	No information available	No information available	No information available	No information available	-
Subacute dermal	No information available	No information available	No information available	No information available	No information available	-
Subacute inhalation	No information available	No information available	No information available	No information available	No information available	-
Subchronic oral	No information available	No information available	No information available	No information available	No information available	-
Subchronic dermal	No 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 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	-



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Subchronic inf	alation	No information	available		No in	formation available	-			
Chronic oral		No information	available		No in	formation available	-			
Chronic derma	ıl	No information	available		No in	formation available	-			
Chronic inhala	tion	No information	available		No in	formation available	-			
CMR	effects (c	arcinogenicity; mu	tagenicity; re	eproductive to	oxicity	)				
Carciı	Carcinogenicity:			No information available.						
Muta	Mutagenicity <i>in vitro</i> :			No information available.						
Geno	Genotoxicity:			No information available.						
Muta	Mutagenicity <i>in vivo</i> :			No information available.						
Germ	cell mut	agenicity:		No information available.						
Repro	Reproductive toxicity:			No informat	ion av	vailable.				
Sumr prope		evaluation of	the CMR	No informat	ion av	vailable.				
11.2. Inform	nation or	n other hazards:								
11.2.1. Endo	crine disr	upting properties:								
		docrine disrupting nan health.	properties							
11.2.2. Other	· informa	tions:								
-										

SECTION 12. Ecologi	SECTION 12. Ecological information					
12.1 Toxicity						
Acute (short-term) toxicity	Dose	Exposure time	Species	Method	Evaluation	Note
Fish	LC <sub>50</sub>	96 hours	Leuciscus idus (Golden orfe)	-	-	0.011 mg/l (silver nitrate)
Crustacea:	EC <sub>50</sub>	48 hours	Daphnia magna (Water flea)	-	-	0.0082 mg/l (silver nitrate)
Algae/aquatic plants	IC <sub>50</sub>	4 days	Pseudokirchner iella subcapitata (green algae)	-	-	0.19 mg/l (silver nitrate)
Other organisms	-	-	-	-	-	-



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L	1		1	1	

Chronic (long-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>	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	-		

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

Oct	Octanol-water partition coefficient (log Kow)					
Value	Concentration	рН	°C	Method	Evaluation	Note
-	-	_	-	-	-	-
						Ŷ



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		muation	factor (BCF)		N A	ath		Γ.	بد الم			Nota
	Value ormation	No availa	Species inform	ation	No infor available		1	Ev No info availab			-	Note
	Chronic	ecotoxici	ity									
	Value		Dose		osure ime	Spec	cies	Meth	od	Eva	luation	Note
Chronic toxicity on fish LC <sub>50</sub>		No infor availa	mation	No inform availat		No informa availab		No infori availa	mation able	-		
	ic toxicity o cea ( <i>Daphn</i>		EC <sub>50</sub>	No infor availa	mation	No inform availab		No informa availab		No infori availa	mation able	-
12.4	Mobility	in soil										
	Known o	r predict	ted distributi	on in e	environme	ntal co	mpart	ments:				
	No infor	mation a	ivailable									
	Surface t	ension:										
	Value	)	°C	C	Concentration N			Metho	Method			Note
	No informat		formation		informati iilable			ormation	۱	-		
	available	a۱	vailable		mable		availat					
	available	av	Vallable				availat					
	Adsorpti						availat					
Transp	Adsorpti	on / desi A/D coe	orption	lc	og Kow			on rate		Metho	d	Note
-	Adsorpti port No	on / des A/D coe Henry's c	orption		og Kow nformatior	Eva 1 No		on rate		nforma		
Transp Soil-w Water	Adsorpti port No ater No ava	on / dese A/D coe Henry's c ilable	orption efficient constant	No ir availa	og Kow nformatior able nformatior	Eva n No ava n No	aporatio	on rate nation	No ir avail	nforma able nforma	tion	



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

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Trading name:	SI	LVER AMMONIA REAGEN	T STOCK SOLUTIO	N	
Product code:	SSAR-OT-X**	Date of compilation:	21 Dec 2022	Version:	2

12.5	Results of PBT and vPvB assessment
	This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) 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
12.7.	
	No information available
	IN 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:
	-
SECTIO	N 14 TRANSPORT INFORMATION



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Trading name:	SILVE	R AMMONIA REAGENT	STOCK SOLUTION	l	
Product code:	SSAR-OT-X**	Date of compilation:	21 Dec 2022	Version:	2

Transporting/shipment by road (	ADR)			
UN number:	3082			
UN proper shipping name:	Environmentally hazardous substance, liquid, n.o.s. (silver ammonium)			
Transport hazard class(es):	9			
Packing group:	111			
Environmentally hazardous:	-			
Special precautions for user:	-			
Transporting/shipment by rail (R	ID)			
UN number:	3082			
UN proper shipping name:	Environmentally hazardous substance, liquid, n.o.s. (silver ammonium)			
Transport hazard class(es):	9			
Packing group:	III			
Environmentally hazardous:	-			
Special precautions for user:	-			
Inland waterway transport (ADN)				
UN number:	3082			
UN proper shipping name:	Environmentally hazardous substance, liquid, n.o.s. (silver ammonium)			
Transport hazard class(es):	9			
Packing group:	III			
Environmentally hazardous:	-			
Special precautions for user:	-			
Transporting/shipment by sea (IN	MDG)			
UN number:	3082			
UN proper shipping name:	Environmentally hazardous substance, liquid, n.o.s. (silver ammonium)			
Transport hazard class(es):	9			
Packing group:	III			
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:	3082			
UN proper shipping name:	Environmentally hazardous substance, liquid, n.o.s. (silver ammonium)			
Transport hazard class(es):	9			
Packing group:	111			
Environmentally hazardous:	-			



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Trading name:		SILVER AMMONIA REAGE	NT STOCK SOLUTI	ON	
Product code:	SSAR-OT-X**	Date of compilation:	21 Dec 2022	Version:	2
Special precaution	ns for user:	-			
Further information	on: Packages s	maller than or equal to 5 kg / L, r	not dangerous goods	of Class 9.	

15.1	ON 15. Regulatory information Safety, health and environ	nmental regulations/legislation specific for the substance or mixture			
	EU regulations				
	Authorization and/or rest	trictions of use			
	Authorizations:	-			
	Restrictions:	-			
	Other EU regulations:	<ul> <li>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;</li> <li>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 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;</li> <li>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;</li> <li>REACH Restrictions on the manufacturing, placing on the market and use of certain dangerous substances, mixtures and articles (Annex XVII);</li> </ul>			
	Information according 1999/13/EC about limitation of emissions of volatile organic compounds (Voguideline)				
	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				

SECTION 16. Other information		
16.1	Indication of changes:	-



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Tradin	ng nar	me:		SILVE	R AMMONIA REAGEN	T STOCK SOLUTI	ON		
Produ	0		SSAR-OT-X**		Date of compilation:	21 Dec 2022	Version:	2	
					•				
16.2	Abb	previat	ons and acronyms:	route Good IMD0 IATA GHS: EINE CAS:	<ul> <li>Derived No-Effect Level (U</li> <li>Lethal concentration, 50 percent</li> <li>Lethal dose, 50 percent</li> <li>Persistent, Bioaccumulative</li> </ul>	erning the Internation e for Dangerous Good Association m of Classification and sting Commercial Che (division of the Amer K REACH) ercent e and Toxic	al Carriage of Dan ls d Labelling of Cher mical Substances	gerous	
16.3.	Key literature references and source of data:								
16.4.			ion and procedure 3 (CLP)	used to	derive the classification for	mixture according	to Regulation (EC	C)	
Classifi	icatior	ו		Classifi	cation procedure				
-				-					
16.5.	Rele	evant H	l statements (numb	per and full text)					
		272		May in	tensify fire; oxidiser.				
		314		Causes	severe skin burns and eye	damage.			
	H:	400		Very to	xic to aquatic life.				
		410		Very to	xic to aquatic life with long	g lasting effects.			
		412		Harmfu	Il to aquatic life with long l	asting effects			
16.6.	Trai	ning a	dvice:	-					
16.7.	Further information:		the pro We are instruct	** "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:		SILVER NITRATE, 20%	SOLUTION		
Product code:	SN20-OT-X**	Date of compilation:	21 Dec 2022	Version:	3

1.1	Product identifier				
	Trading name: SILVER NITE		RATE, 20%	SOLUTION	
	Chemical name:	-			
	Catalogue number:	SN20-OT-X	**		
h1.2	Relevant identified us	es of the subs	tance or n	nixture and uses advised against	
	Uses:		For use	with special staining kits.	
	Uses advised against:		Only the	e identified uses are advised.	
	Reason why uses advised against:		The product is intended for use only as an <i>in vitro</i> diagnostic medical device, registered at the Agency for Medicinal Products and Medical Devices and there is no reason to use it for other purposes.		
1.3	Details of the supplier of the safety data sheet				
	Supplier:		BioGnost Ltd.		
	Address:		Medjugorska 59, Zagreb		
	Telephone number:		+385 1 2409997		
	Telefax.:		+385 1 2404039		
	e-mail of competent	person:	msds@biognost.hr		
	National contact:		-		
1.4	Emergency telephone	number			
	National Protection a	National Protection and Rescue Dire		112	
	Medical information:			+385 1 2348 342	
	Other information:			-	

SECTIO	SECTION 2. Hazards identification				
2.1	Classification of the substance	or mixture			
2.1.1	Classification according to Reg	ulation (EC) No 1	272/2008 (CLP)		
	Hazard class and catego	ory code:	Hazard statements*:		
	Met. Corr. 1		H290		
	Skin Corr. 1B		H314		
	Aquatic Chronic 2		H411		
2.1.2.	Additional information				
	-				
*For ful	ll text of Hazard- and EU Hazard-	statements: see S	SECTION 16		
2.2	Label elements				
	Product identification:	SILVER NITRATI	E, 20% SOLUTION		
	Identification number:	-			



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Trading name:	SILVER NITRATE, 20% SOLUTION				
Product code:	SN20-OT-X**	Date of compilation:	21 Dec 2022	Version:	3

	Authorization number:	-
	Hazard pictograms:	GHS05 GHS09
	Signal word:	Danger
	Hazard statements:	<ul><li>H290 May be corrosive to metals.</li><li>H314 Causes severe skin burns and eye damage.</li><li>H411 Toxic to aquatic life with long lasting effects.</li></ul>
	Precautionary statements:	<ul> <li>P273 Avoid release to the environment.</li> <li>P280 Wear protective gloves/protective clothing/eye protection/face protection.</li> <li>P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].</li> <li>P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.</li> <li>P501 Dispose of contents/container in accordance with local regulations.</li> </ul>
	Supplemetal hazard information (EU):	-
2.3	Other hazards	
	Endocrine Disrupting Prope	rties:
	No known endocrine disrupti	ng properties
	<b>Results of PBT and vPvB ass</b> PBT or a vPvB.	sessment: According to the results of its assessment, this substance is not a

SECTION 3. Con	mposition/informat	ion on ingredient	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)					
7761-88-8/ 231-853-9/ 047-001-00-2	-	20 %	silver nitrate	Met. Corr. 1; H290 Skin Corr. 1B; H314 Aquatic Acute 1; H400 Aquatic Chronic 1; H410					

SECTIO	SECTION 4. First aid measures		
4.1	Description of first aid measures		



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Trading name:		SILVER NITRATE, 20% SOLUTION				
Product code:	SN20-OT-X**	Date of compilation:	21 Dec 2022	Version:	3	

	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 oral cavity, drink 1-2 glasses of water. Immediately consult a physician and show the container or label. In case of swallowing large quantities, transport the afflicted person to the hospital.
	Self-protection of the first aider:	-
4.2	Most important symptoms and ef	fects, both acute and delayed
	Following inhalation:	Depending on concentration and exposure time, it may lead to mucosa irritation, cough, and dyspnea.
	Following skin contact:	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:	Danger of gastric perforattion.
4.3	Indication of any immediate medi	cal attention and special treatment needed
	-	

SECTIO	ON 5. Firefighting measures	
5.1	Extinguishing media	
	Suitable extinguishing media:	Water spray, foam, dry powder, CO <sub>2</sub> 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:	Nitrogen oxides (NOx). During heating or in case of fire poisonous gases are produced.
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 environm	ent with extinguishing media.



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Trading name:		SILVER NITRATE, 20%			
Product code:	SN20-OT-X**	Date of compilation:	21 Dec 2022	Version:	3

6.1	Personal precautions, protective	ve 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.
	Emergency procedures:	Mark the area using proper signs.
6.1.2.	For emergency responders:	
	Use protective equipment; in c (see Section 8).	ase of inadequate ventilation use adequate airways protective equipment
6.2	Environmental precautions:	
	Do not dispose of in sewage, o Protection and Rescue Directo	drainage system and waterways. In case of large spillage contact National rate (NPRD) on 112.
6.3	Methods and material for cont	ainment and cleaning up
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 absorbing material. Place the waste material in tightly closed impermeable containers. Store the substance in well ventilated storage rooms until disposal. Submit for disposal to the legal persons authorized by the Ministry of Environmental and Nature Protection. After disposal of the products, wash the area and and involved materials with water.
6.3.3.	Other information:	Do not use incompatible materials (see Section 10).
6.4	Reference to other sections	
	See Section 7 for information	on safe handling.
	See Section 8 for information	on personal protection equipment.
	See Section 13 for disposal inf	ormation

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.
	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:	Do not dry clean dust covered objects and floors. Wash thoroughly with plenty of water.



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Trading name:		SILVER NITRATE, 20%	6 SOLUTION		
Product code:	SN20-OT-X**	Date of compilation:	21 Dec 2022	Version:	3

7.1.2.	Advice on general occupational hygiene:	
	Do not eat, drink or smoke in the workspace. The	noroughly wash hands after work and before eating.
7.2	Conditions for safe storage, including any incon	npatibilities
	Technical measures and storage conditions:	Keep in a cool and well-ventilated place. Keep away from heat and direct solar radiation at temperatures ranging from +2 to +8 °C.
	Packaging materials:	Manufacturer's original packaging. Store away from flammable substances.
	Requirements for storage rooms and vessels:	Keep away from food and drink. Keep the containers tightly closed. Protected from light.
	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. Expos	ure contro	ols/perso	nal prote	ction			
8.1 Control pa	arameters						
Substance	9	CAS	S No			exposure limit term values	Biological limit values
				рр	m	mg/m <sup>3</sup>	
Silver nitrate (as Ag	g)	7761	-88-8	-		0.01	-
Substance name:	-						
EC No:	-	CAS No:	. –				
DNEL							
				Indus	strial		
Route of	Αςι	ıte	Ac	ute		Chronic	Chronic
exposure:	effect	local	effect s	ystemic		effect local	effect systemic
Oral	-		-		-		-
Inhalation	-		-		-		-
Dermal	-		-		-		-



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Trading name:		SILVER NITRATE, 20%	6 SOLUTION		
Product code:	SN20-OT-X**	Date of compilation:	21 Dec 2022	Version:	3

			c	onsumer	
Route of exposure		Acute effect local	Acute effect system	Chronic nic effect local	Chronic effect systemic
Oral		-	-	-	-
Inhalatio	n	-	-	-	-
Dermal		-	-	-	-
PNEC					
Environm	nental prot	ection target		PNEC	
Fresh wat	ter			no information available	<u>j</u>
Freshwat	er sedimer	nts		no information available	9
Marine w	vater			no information available	9
Marine se	ediments			no information available	2
Food cha	ain			no information available	2
Microorg	ganisms in	sewage treatment		no information available	2
Soil (agri	cultural)			na information available	
<b>N</b> <sup>2</sup> <b>D</b> <sup>1</sup>	cultural)			no information available	2
Air	cultural)			no information available	
Air 8.2	Exposu	ire controls	controls		
Air 8.2	Exposu Approp Substa	ire controls priate engineering nce/mixture relate it exposure during	d measures to	no information available Use the product in well	
Air 8.2	Exposu Approp Substa preven	priate engineering nce/mixture relate it exposure during ural measures to pr	d measures to identified uses:	Use the product in well protective equipment. D	e ventilated rooms. Use personal Do not eat, drink or smoke in the
	Exposu Approp Substa preven Structu exposu	priate engineering nce/mixture relate it exposure during ural measures to po ure: isational measures	d measures to identified uses: revent	no information available Use the product in well protective equipment. E workspace. In accordance with Sect	e ventilated rooms. Use personal Do not eat, drink or smoke in the ion 7. order to reduce other worker's
Air 8.2	Exposu Approp Substa preven Structu exposu Organi exposu	priate engineering nce/mixture relate it exposure during ural measures to po ure: isational measures	d measures to identified uses: revent to prevent	no information available         Use the product in well         protective equipment. D         workspace.         In accordance with Sect         Organization of work in         influence during work p         Secure proper workspace	e ventilated rooms. Use personal Do not eat, drink or smoke in the ion 7. order to reduce other worker's rocess. ce ventilation in order to keep air below permitted levels. Secure
Air 8.2 8.2.1.	Exposu Approp Substa preven Structu exposu Organi exposu Techni	priate engineering nce/mixture relate it exposure during ural measures to pr ure: isational measures ure:	d measures to identified uses: revent to prevent event exposure:	no information available         Use the product in well         protective equipment. D         workspace.         In accordance with Sect         Organization of work in         influence during work p         Secure proper workspace         Secure proper workspace	e ventilated rooms. Use personal Do not eat, drink or smoke in the ion 7. order to reduce other worker's rocess. ce ventilation in order to keep air below permitted levels. Secure
Air 8.2	Exposu Approp Substa preven Structu exposu Organi exposu Techni	priate engineering nce/mixture relate it exposure during ural measures to pr ure: isational measures ure: cal measures to pr	d measures to identified uses: revent to prevent event exposure: pment Safety levels	no information available Use the product in well protective equipment. D workspace. In accordance with Sect Organization of work in influence during work p Secure proper workspac concentration levels in a stations for rinsing eyes	e ventilated rooms. Use personal Do not eat, drink or smoke in the ion 7. order to reduce other worker's rocess. te ventilation in order to keep air below permitted levels. Secure and showering. (EN 166) or visor in case of lower otective gas mask that covers the



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

					Page 7 of 17	
Trading name: Product code:			SILVER NITRATE, 209	<b>6 SOLUTION</b>		
Product code:		SN20-OT-X**	Date of compilation:	21 Dec 2022	Version:	3
	Hand	protection:	Protective gloves must be 2016/425/EEC and stands full contact: Glove material: nit Glove thickness: 0 Break through tim splash contact: Glove material: nit Glove thickness: 0 Break through tim	ard EN 374. rile rubber .11 mm e:> 480 min rile rubber .11 mm	EU Directive EU	
	Other	skin protection:	Wear antistatic clothing r with long sleeves (EN 340			
8.2.2.3.	Respi	ratory protection:	Not required under norm respiratory protective dev present. Recommended I	vice when high con	centrations are	<b>'</b> ).
8.2.2.4.	Therm	nal hazards:	No information available			
8.2.3.	Envirc	nmental exposure controls				
		ance/mixture related ures to prevent exposure:	See Section 6			
	Struct expos	ural measures to prevent ure:	Use modern equipment.			
	-	iisational measures to nt exposure:	Adapt the work process t workplace.	o the required worl	king conditions of	f the
	Techn expos	ical measures to prevent ure:	See Section 6			

9.1	Information on basic physical and chemical properties					
		Value	Method			
	Physical state:	liquid	No information available			
	Colour:	colourless	No information available			
	Odour/odour threshold:	odourless/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			



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Trading name:	SILVER NITRATE, 20% SOLUTION						
Product code:	SN20-OT-X**	Date of compilation:	21 Dec 2022	Version:	3		

.2	Other information		
	Particle characteristics:	No information available	No information available
	Relative vapour density:	No information available	No information available
	Density and/or relative density:	No information available	No information available
	Vapour pressure:	No information available	No information available
	Partition coefficient n- octanol/water (log value):	No information available	No information available
	Solubility:	No information available	No information available
	Kinematic viscosity:	No information available	No information available
	pH:	No information available	No information available
	Decomposition temperature:	No information available	No information available
	Auto-ignition temperature:	No information available	No information available

SECTION 10. Stability and reactivity					
10.1	Reactivity:	See subsections 10.3 through 10.5.			
10.2	Chemical stability:	The product is chemically stable if used according to specifications. Sensitivity to light.			
10.3	Possibility of hazardous reactions:	Reacts with alkali and metals, with light metals, with acids, alkalis and oxidising agents.			
10.4	Conditions to avoid:	Strong heating (decomposition). Exposure to light.			
10.5	Incompatible materials:	Acids, aluminium, mild steel.			
10.6	Hazardous decomposition products:	Nitrogen oxides.			

SECTION 11	I. Toxicological info	ormation					
11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008							
Αςι	ute toxicity:						
Route of exposure:	Method	Species	Dose LD <sub>50</sub> /LC <sub>50</sub> or ATE <sub>mix</sub>	Exposure time	Results		
Oral:	_	No information available	-	No information available	-		
Dermal:	-	No information available	-	No information available	-		
Inhalation:	-	No information available	-	No information available	-		



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Trading name:	SILVER NITRATE, 20% SOLUTION						
Product code: SN20-OT-X**		Date of compilation:	21 Dec 2022	Version:	3		

		Speci	ific effects			Target	organ			Note
Oral:	No inf	ormation	available		No information available		-	•		
Dermal:	No inf	ormation	available		No infor	mation	available	-	•	
Inhalation:	No inf	ormation	available		No infor	mation	available	-	•	
Aspirati	ion hazard:		1	No inform	nation ava	ailable.				
Irritatio	n and corro									
	E	xposure t	time Sp	pecies	Evalua	ation	Met	hod		Note
Skin corrosion/irritati	on:		in vit	ro study	-		OECD TE	ST 431	cause	es burns
Serious eye damage/irritatio	n -		rabbi	it	-		-		cause	es burns
Sensitiz	ation									
Skin sensitizatio	n:	No inf	ormation ava	ilable.						
Respiratory sens	sitization:	No inf	ormation ava	ilable.						
		1								
Sympto	oms related	to the ph	ysical, chemi	cal and to	xicologia	al char	acteristic	s		
July			-		-				r of nei	foration of the
Oral exposure:		-	and the stom			mout, t		u uungei	or per	
Dermal exposure	e: No	informati	on available.							
Inhalation expos	sure: Mu		tations, cough, shortness of breath, possible damages: damage of respiratory							
Eye exposure:	No	informati	on available.							
	8									
Repeate	ed dose tox	icity (sub	acute, subchr	onic, chro	onic)					
	Do	se	Exposure time	Specie	S	Metho	od	Evaluatio	on	Note
Subacute oral	No info available	rmation	No information available	No inform availab		No inform availat		No informa available		-
Subacute	No info	rmation	No information	No inform		No inform availat		No informa available		_
dermal	available		available	availab		avanai	•••			



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Trading name:	SILVER NITRATE, 20% SOLUTION							
Product code:	SN20-OT-X**	Date of compilation:	21 Dec 2022	Version:	3			

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):
speeme target organ	toxicity repeated	

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

CMR effects (carcinogenicity; mutagenicity; reproductive toxicity)			
Carcinogenicity:	No information available.		
Mutagenicity in vitro:	No information available.		
Genotoxicity:	No information available.		
Mutagenicity in vivo:	No information available.		
Germ cell mutagenicity:	No information available.		
 Reproductive toxicity:	No information available.		



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Trading name:	SILVER NITRATE, 20% SOLUTION					
Product code:	SN20-OT-X**	Date of compilation:	21 Dec 2022	Version:	3	

	· · · · · · · · · · · · · · · · · · ·
	Summary of evaluation of the CMR No information available.
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. Ecologi	cal informat	ion				
12.1 Toxicity						
Acute (short-term) toxicity	Dose	Exposure time	Species	Method	Evaluation	Note
Fish	LC <sub>50</sub>	96 hours	Leuciscus idus (Golden orfe)	OECD Test 203	-	0.011 mg/l (silver nitrate)
Crustacea:	EC <sub>50</sub>	48 hours	Daphnia magna (Water flea)	OECD Test 202	_	0.0082 mg/l (silver nitrate)
Algae/aquatic plants	IC <sub>50</sub>	4 days	Pseudokirchner iella subcapitata (green algae)	-	-	0.19 mg/l (silver nitrate)
Other organisms	-	-	-	-	-	-
Chronic (long-term) toxicity	Dose	Exposure time	Species	Method	Evaluation	Note
Fish	LC <sub>50</sub>	96 hours	No information available	No information available	-	-
Crustacea:	EC <sub>50</sub>	48 hours	No information available	No information available	-	-
Algae/aquatic plants	IC <sub>50</sub>	72 hours	No information available	No information available	-	-
Other organisms	-	-	-	-	-	-
12.2 Downieto		:1:+				
12.2 Persistence a	-	inty				
Abiotic degra	gradation ha	16.15	Method	Evaluation		Note



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												Pag	ge 12 of 17	
Tradin	g nan	ne:					SILV	/ER NITRAT	E, 20'	% SOLUT	ION			
Product code: SN20-OT-X**		Date	Date of compilation: 21 Dec 2022			c 2022		Version:	3					
Marine	Marine water I No information available			No information No information available available		ו	-							
Fresh w	vater	N	o inform	nation a	ivaila	ble	No info availab	ormation ole	No ir availa	nformatior able	ו	-		
Air		N	o inform	nation a	availa	ble	No info availab	ormation ole	No ir availa	nformation able	ו	-		
Soil		N	o inform	nation a	ivaila	ble	No info availab	ormation de	No ir availa	nformatior able	ו	-		
	1													
	Biod	egrad	ation				:							
% De	egrada	tion		Time (	days)		N	1ethod		Evaluatio	n		Note	
No info availab		on	No availa		form	ation	No info availat	ormation ble	No ir availa	nformation able	ו	No in availa	formation ble	
12.3	Bioa	ccumı	ulative p	otentia	I									
	Octa	nol-w	ater par	tition c	oeffi	cient (	log Kow	)				:		
Valu	ie	Cor	ncentrat	ion	pł	4	°C	Method		Evalu	ation		Note	
-		-			-	-	-	-		-		-		
	Bioc	oncen	tration f	factor (l	BCF)									
V	/alue			Specie	es		Method		Evaluation		Note			
No information No information available		No information available		No information available		on	-							
	Chro	nic ec	otoxicit	V										
Chronic ecotoxicity Value		Dos	se		osure me	Species	N	lethod	Evalu	uation	Note	9		
Chronic toxicity on fish		LC <sub>50</sub>		No	mation	No information available		ormation ilable	No inform availat		-			



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Trading name: SILVER NITRATE, 20% SOLUTION					ION	<u> </u>							
Produc	ct code:	: 5	5N20-	OT-X**		Date	of co	mpilatio	on:	21 Dec	2022	Version:	3
Chronic toxicity on crustacea ( <i>Daphnia</i> ) EC <sub>50</sub>		information in			ormation information i		No information available	-					
12.4	Mobili	ity in s	oil										
	1			d distributi	on in er	vironm	ental c	ompart	ments:				
	No inf	ormat	ion av	ailable				•					
	Surfac	e tens	ion:										
	Va	lue		°C	Co	ncentra	tion		Meth	od		Note	
	No inform availat			ormation ilable		nformat able	tion	No info availab	ormatio ble	on	-		
	Adsor	ption /	deso	rption									
Transpo	ort	-	D coeff ry's cc	ficient onstant	log Kow		Εv	Evaporation rate		N	lethod	Note	
Soil-wa	iter	lo vailab		formation	No information available					No in <sup>.</sup> availa	formation ble	-	
Water-a	air	lo vailab		formation	No information available			No information available		No in <sup>.</sup> availa	formation ble	-	
Soil-air		lo vailab		formation	No information available			No information No info available available		formation ble	-		
12.5	Desult	( D											
12.5.	2.5.       Results of PBT and vPvB assessment         This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.												
12.6.	Endoc	rine di	srunti	ng properti	ec								
12.0.				• • •		ain con	nponer	nts cons	idered t	to have	endocrine di	srupting prop	erties
	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	advers	se effe	cts									
	Biolog must k			Forms corro	osive mi	xtures v	vith wa	ater ever	n if dilut	ted. Disc	harge into th	he environmei	nt



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Trading name:		SILVER NITRATE, 20%	6 SOLUTION		
Product code:	SN20-OT-X**	Date of compilation:	21 Dec 2022	Version:	3

13.1	Waste treatment method	ds			
13.1.1.	Product/Packaging dispo	osal:			
	Protection. Do not dispo	the legal person authorized by the Ministry of Environmental and Nature ose of the product's remains into the sewage system. Submit the remains to the the ministry in charge. Do not dispose of the packaging into the sewage system.			
13.1.2.	Waste codes/waste desi	gnations according to Law:			
	The allocation of waste i the industry and process	dentity waste descriptions must be carried out according to the EEC, specific to			
1212					
13.1.3.	Waste treatment – releva				
	No information available				
13.1.4.	Sewage disposal – releva	ant information:			
		osed of into the sewage system.			
13.1.5.	Other disposal recomme	endations:			
	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.				
13.1.6.	Relevant Community pro	ovisions:			
	-				
SECTIO	N 14 TRANSPORT INFOR	ΜΑΤΙΟΝ			
	Transporting/shipment by	road (ADR)			
UN num	nber:	3082			
UN prop	per shipping name:	Environmentally hazardous substance, liquid, n.o.s. (silver nitrate)			
Transpo	ort hazard class(es):	9			
Packing	group:	Ш			
Environ	mentally hazardous:	yes			
Special	precautions for user:	-			
	Transporting/shipment by	rail (RID)			
UN num	ıber:	3082			
UN prop	per shipping name:	Environmentally hazardous substance, liquid, n.o.s. (silver nitrate)			
Transpo	ort hazard class(es):	9			



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Trading name:	SILVER NITRATE, 20% SOLUTION				
Product code:	SN20-OT-X**	Date of compilation:	21 Dec 2022	Version:	3

Packing group:	11				
Environmentally hazardous:	yes				
Special precautions for user:	-				
Inland waterway transport (ADN)					
UN number:	3082				
UN proper shipping name:	Environmentally hazardous substance, liquid, n.o.s. (silver nitrate)				
Transport hazard class(es):	9				
Packing group:	III				
Environmentally hazardous:	yes				
Special precautions for user:	-				
Transporting/shipment by sea (IN	MDG)				
UN number:	3082				
UN proper shipping name:	Environmentally hazardous substance, liquid, n.o.s. (silver nitrate)				
Transport hazard class(es):	9				
Packing group:	Ш				
Environmentally hazardous:	yes				
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:	3082				
UN proper shipping name:	Environmentally hazardous substance, liquid, n.o.s. (silver nitrate)				
Transport hazard class(es):	9				
Packing group:	III				
Environmentally hazardous:	yes				
Special precautions for user:	-				
Further information: Packages smal	ler than or equal to 5 kg / L, not dangerous goods of Class 9.				

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



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Trading name:		SILVER NITRATE, 209	<b>% SOLUTION</b>		
Product code:	SN20-OT-X**	Date of compilation:	21 Dec 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 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 1999, guideline)	/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 assessment	
	None	

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



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Trading name:	SILVER NITRATE, 20% SOLUTION				
Product code:	SN20-OT-X**	Date of compilation:	21 Dec 2022	Version:	3

16.4.	Classification and procedure used to derive the classification for mixture according to Regulation (EC) 1272/2008 (CLP)				
Classification			Classification procedure		
-			-		
16.5.	Rele	evant H statements (num	per and full text)		
		290	May be corrosive to metals.		
		314	Causes severe skin burns and eye damage.		
	H:	400	Very toxic to aquatic life.		
		410	Very toxic to aquatic life with long lasting effects.		
		411	Toxic to aquatic life with long lasting effects.		
16.6.	Trai	ning advice:	-		
			** "X" in the product code marks different volumes (different packagings of the product)		
16.7.	5.7. Further information:		We are not responsible for consequences in case of failure to comply with instructions for use or improper use of the product described in this material safety data sheet.		

# ANNEX: Exposure scenario resulting to chemical safety assessment



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Trading name:	SODIUM THIOSULFATE, 5% SOLUTION				
Product code:	NT5-OT-X**	Date of compilation:	21 Dec 2022	Version: 4	

SECTI	ON 1. Identification of t	he substa	ince/mixture a	and of the company/undertaking	
1.1.	Product identifier				
	Trading name:	SODIUM	1 THIOSULFATE	THIOSULFATE, 5% SOLUTION	
	Chemical name:	-			
	Catalogue number:	NT5-OT	-X**		
1.2.	Relevant identified use	s of the su	ubstance or mix	xture and uses advised against	
	Uses:		For use with	special staining kits.	
	Uses advised against:		Only the ider	ntified uses are advised.	
			is intended for use only as an <i>in vitro</i> diagnostic medical rered at the Agency for Medicinal Products and Medical there is no reason to use it for other purposes		
1.3.	Details of the supplier of the safety data sheet				
	Supplier:		BioGnost Ltd.		
	Address:		Medjugorska 59, Zagreb		
	Telephone number:		+385 1 2409997		
	Fax no.:		+385 1 2404039		
	e-mail of competent p	erson:	msds@biognost.hr		
	National contact:		-		
1.4.	Emergency telephone	number			
	National Protection an	d Rescue	Directorate:	112	
	Medical information:			+385 1 2348 342	
	Other information:			-	

SECTIO	DN 2. Hazards identification					
2.1.	Classification of the substance or mixture					
2.1.1.	Classification according to Reg	Classification according to Regulation (EC) No 1272/2008 (CLP)				
	Hazard class and categ	ory code:	Hazard statements*:			
	Not identified as hazardous substance					
2.1.2.	Additional information					
	-					
*For fu	ll text of Hazard- and EU Hazard-	-statements: see S	ection 16			
2.2.	Label elements					
	Product identification:	SODIUM THIC	OSULFATE, 5% SOLUTION			
	Identification number: -					
	Authorization no.:	Authorization no.: -				
	Hazard pictograms:	-				



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Trading name:	SODIUM THIOSULFATE, 5% SOLUTION					
Product code:	NT5-OT-X**	Date of compilation:	21 Dec 2022	Version: 4		

	Signal word:	-
	Hazard statements:	-
	Precautionary statements:	-
	Further information:	-
2.3.	Other hazards	
	Endocrine Disrupting Proper	ties:
	<b>Endocrine Disrupting Proper</b> No known endocrine disruptin	

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)			
7772-98-7/ 231-867-5/ -	-	5 %	sodium thiosulphate	not classified			

4.1.	Description of first aid meas	ures			
	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: Following eye contact:		Remove contaminated clothing. Immediately wash with plenty of water and soap. Seek medical assistance if the symptoms of irritation remain.		
			Rinse out with plenty of water with the eyelid held wide open using clean fingers. If the symptoms remain, immediately call a physician.		
	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 a	ider:	Treat symptomatically.		
4.2.	Most important symptoms a	and effe	ects, both acute and delayed		
	Following inhalation:		rding to our findings, chemical, physical and toxicological properties of ubstance have not been entirely tested.		
	Following skin contact:		rding to our findings, chemical, physical and toxicological properties of ubstance have not been entirely tested.		



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Trading name:		S	SODIUM THIOSULFATE	, 5% SOLUTION			
Produc	ct code:	NT5-OT-X**		Date of compilation:	21 Dec 2022	Version:	4
Following eye contact: Following ingestion:		the sub Accord	ing to our findings, chemi- ostance have not been ent ing to our findings, chemi- ostance have not been ent	irely tested. cal, physical and to:	<b>.</b> .	•	
4.3.	Indication	tion 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 (s	ee 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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# SAFETY DATA SHEET According to Regulation (EC) No. 1907/2006 amended by Regulation (EU) No. 2020/878

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Trading name: Product code:		SODIUM THIOSULFATE, 5% SOLUTION					
		NT5-OT-X**		Date of compilation:	21 Dec 2022	Version:	4
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 info	ormation:	-				
6.4.	Reference	e to other sections					

SECTION 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 generation:	Secure proper ventilation.					
	Measures to protect the environment: Other measures:	Prevent spilling into the sewage system and waterways.					
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:	Keep in tightly closed and upright set containers in a well ventilated storage rooms, and away from sources of heat, sunlight, and other incompatible substances.					
	Packaging materials:	Manufacturer's original packaging.					
	Requirements for storage rooms and vessels:	Keep away from food and drink. Keep the containers tightly closed.					
	Advices for storage equipment:	The storage must be made of hard material; floors must be resistant to chemicals. There must be no drain that directly leads into sewage system. Secure proper ventilation.					
	Further information on storage conditions:	Do not place the unused material in the storage room and do not use empty containers for storing other chemicals. Do not store with incompatible materials (see Section 9).					
7.3.	Specific end use(s)						
	Recommendations:	-					
	Industrial sector specific solutions:	-					



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Trading name:	SODIUM THIOSULFATE, 5% SOLUTION						
Product code:	NT5-OT-X**	Date of compilation:	21 Dec 2022	Version:	4		

SECTION 8. Exposu	re contr	ols/persona	al protec	tion			
8.1. Control par	ameters						
Substance				al exposure limit ort term values	Biological limit values		
				ppm	mg/m <sup>3</sup>		
-		-		-	-	No information available	
Substance _ name: _							
EC No: -		CAS No:	CAS No: -				
DNEL							
				Industrial			
Route of exposure:		Acute ect local	effe	Acute ect systemic	Chronic effect local	Chronic effect systemic	
Oral	-		-		-	-	
Inhalation	-		-		-	-	
Dermal	I			-	-		
Critical physical para	meters: s	solubility, fla	ammabilit	ty, corrosivity:	-		
				Consumer			
Route of exposure:		Acute ect local	effe	Acute ect systemic	Chronic effect local	Chronic effect systemic	
Oral	-		-		-	-	
Inhalation	-		-		-	-	
Dermal	-		-		-	-	
PNEC							
Environmental prote	ction tar	get		PNEC	PNEC		
Fresh water				No info	No information available		
Freshwater sedimen	ts			No info	No information available		
Marine water				No info	rmation available		
Marine sediments				No info	rmation available		
Food chain			No info	rmation available			
Microorganisms in s	ewage tr	eatment		No info	rmation available		
Soil (agricultural)				No info	rmation available		
					No information available		



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Trading name:	SODIUM THIOSULFATE, 5% SOLUTION						
Product code:	NT5-OT-X**	Date of compilation:	21 Dec 2022	Version: 4			

8.2.	Exposure controls					
8.2.1.	Engineering measures	Engineering measures				
	magginac to provent even cline		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:	revent	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 equi	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:		tive gloves must be according to the EU Directive 2016/425/EEC and 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	tive full face mask (EN 136) or half mask (EN 140) equipped with a or organic vapors, type "A" (boiling point >65°C) acording to EN ) used when concentration levels exceed GVI.			
8.2.2.4.	Thermal hazards:	No inf	ormation available			
8.2.3.	Environmental exposure controls					
	Substance/mixture relate measures to prevent exp	-	See Section 6			
	Structural measures to pr exposure:	revent	Use modern equipment.			
	Organisational measures prevent exposure:	to	Adapt the work process to the required working conditions of the workplace.			
	Technical measures to pr exposure:	event	See Section 6			

SECTION 9. Physical and chemical properties				
9.1.	Information on basic physical and chem	nical properties		
Value Method				



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	Physical state:	liquid	No information available
	Colour:	colourless	No information available
	Odour/odour threshold:	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
9.2.	Other information		

SECTIO	SECTION 10. Stability and reactivity				
10.1.	Reactivity:	See subsections 10.3 through 10.5.			
10.2.	Chemical stability:	The product is chemically stable under standard ambient conditions of storing and using.			
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			

SECTIO	SECTION 11. Toxicological information			
11.1.	Information on hazard classes as defined in Regulation (EC) No 1272/2008			
	Acute toxicity:			



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Product code:	NT5-OT-X**	Date of	f compilation: 21 Dec 202		2022	Version: 4
						1
Route of exposure:	Method	Species	Effective dose LD <sub>50</sub> /LC <sub>50</sub> or ATE <sub>mixture</sub>		Exposur time	e Results
Oral exposure:	No information available	-	LD <sub>50</sub>		-	-
Dermal exposure:	No information		LD <sub>50</sub>		-	-
Inhalation exposure:	No information		LC <sub>50</sub>		-	-
Specific tar	get organ toxicity – s	single exposure	(STOT SE):			
	Specific	effects	Target or	gan		Note
Oral exposure:	No information	available	No information available		-	
Dermal exposure: No information		ı available	No information available		-	
Inhalation exposure: No information		ı available	No information		-	
Respiratory	rirritation:	No info	ormation availab	le		
Irritation ar	nd corrosion					
	Exposure time	Species	Evaluatio	on	Meth od	Note
Skin irritation:	-	-	-			
Eye irritation:	-	-	-			
Sensitizatio	n					
Dermal exposure:	No information ava	ilable				
Inhalation exposure:	No information available					
Symptoms	related to the physic	al, chemical and	d toxicological cl	naracterist	ics	
Oral exposure:	No information a	available				
Dermal exposure:	No information a	available				
Inhalation exposure	: No information a	available				
Eve exposure:	No information a	available				

Repeated dose toxicity (subacute, subchronic, chronic)



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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 expo	osure (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 informat	ion available	No information available	-
	CMR effects (	carcinogenicity,	, mutagenicity, r	eproductive toxicity)	
	Carcinogenic	ity:	Based on av	ailable data, the classification criter	a are not met.
	Mutagenicity	in-vitro:	Based on av	ailable data, the classification criter	ia are not met.
	Genotoxicity:		Based on av	ailable data, the classification criter	a are not met.
	Mutagenicity	in-vivo:	Based on av	vailable data, the classification criter	a are not met.
	Germ cell mu	tagenicity:	Based on av	vailable data, the classification criter	ia are not met.
	Reproductive	toxicity:	Based on av	ailable data, the classification criter	a are not met.
11.2	Information of	on other hazard	s:		
11.2		srupting propert			
	The substa contain con have endocr according to Commission 2017/2100 o		does not sidered to properties le 57(f) or Jation (EU) Regulation		
11.2.2.	Other inform	ations:			
	5				

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	-	-			
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	-	-	-	-			



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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 No No information No information No information information available available available available available

12.3.	Bioaccumulative poten	tial				
	Partition coefficient: n-	octanol/wa	ater (log	Kow):		
Valu	e Concentration	рН	°C	Method	Evaluation	Note
-	No informatior available	ו –	-	No information available	No information available	-
	·					
	Bioconcentration facto	r (BCF)				



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Va	alue		Species	M	ethod		Evaluation		Note	
No infor available		No availat	informati ble	on No inform available	nation		No information available	No inf	ormation av	ailable
	Chronic e	cotoxicit	у							
2	Value		Dose	Exposure time	Spe	ecies	Method	Eva	luation	Note
Chronic	onic toxicity on fish LC <sub>50</sub>		LC <sub>50</sub>	No information available	No infori availa	mation able	No information available	No inf availat	ormation ble	-
	hronic toxicity on rustacea ( <i>Daphnia</i> )		No information available	No infori availa	mation able	No information available	No info availat	ormation ble	-	
	No inform Surface te	nation av		on in environm		Lompart	ments.			
	Value		°C	Concentra	tion		Method			lote
	No informatio available		ormation ailable	No informa available	tion	No inf	ormation avail	able	-	
	Adsorptic	on / deso	rption							
		/D coof	ficient	log Kow		Evapo	ration rate		Method	Note
Transpo	rt	enry's co	onstant	- 5 -						
Transpo Soil-wat	rt F	lenry's co in	onstant formation	No informatio available		o inform ⁄ailable	nation	No info availab	ormation ble	-
	rt H er No avail	lenry's co in able in		No information	av on No			availab	ole ormation	-



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		PBT and vPvB assessr			
			t contain components considere		
		to REACH Article 57(1 n (EU) 2018/605 at lev	) or Commission Delegated reginals of 0.1% or higher	ulation (EU) 2017/2	Too or Commission
	rtegulation	1 (20) 2010,000 at lev			
12.6.	Endocrino	dicrupting properties			
		disrupting properties		al ta barra an da arin	
			t contain components considere ) or Commission Delegated regi		
		n (EU) 2018/605 at lev			
	5		5		
12.7.	Other adv	erse effects			
		ation available			
	-	osal considerations			
13.1.	Waste tr	eatment methods			
	N.				
13.1.1.	Product	/Packaging disposal:			
			al person authorized by the Mir	nistry of Environme	ntal and Nature
	Protectio	on.			
	£				
13.1.2.	Waste c	odes/waste designatio	ons according to Law:		
	No infor	mation available			
13.1.3.	Waste tr	eatment – relevant in	formation:		
	No infor	mation available			
	1				
13.1.4.	Sewage	disposal – relevant in	formation:		
		•	of into the sewage system.		
	waste II	last not be disposed (	or mo the sewage system.		
121г	Otheral	coocal recommendation	onc		
13.1.5.		sposal recommendati			· · · · · · · · · · · · · · · · · · ·
			t's remains into the sewage syst charge. Do not dispose of the pa		
			rs authorized by the ministry in o		
	•	may occur.		= = = = = = = = = = = = = = = =	
	Polovant				
13.1.6.	Relevant	t Community provisio	ns:		



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Trading name:	SODIUM THIOSULFATE, 5% SOLUTION					
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SECTION 14. Transport information				
Transporting/shipment by road (	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:	-			
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:	-			



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Trading name:	SODIUM THIOSULFATE, 5% SOLUTION			
Product code:	NT5-OT-X**	Date of compilation:	21 Dec 2022	Version: 4
Special precaution	ns for user:	-		
Further information	on: -			

Further information:

15.1.	Safety, health and enviror	nmental regulations/legislation specific for the substance or mixture		
	EU regulations			
	Authorization and/or rest	rictions of use		
	Authorizations: -			
	Restrictions:	-		
	Other EU regulations:	<ul> <li>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;</li> <li>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 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;</li> <li>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;</li> <li>REACH Restrictions on the manufacturing, placing on the market and use of certain dangerous substances, mixtures and articles (Annex XVII);</li> </ul>		
	Information according 1999/13/EC about limitation of emissions of volatile organic compounds (VOC- guideline)			
	National legislation:	Chemicals Act, Regulation on classification, packaging and labeling of dangerous substances, Ordinance on occupational exposure limit values and on biological limit values, Regulation on categories, types and classification of waste with a waste catalog and list of hazardous waste, Ordinance on writing Material safety data sheet, Transport of Hazardous Substances Act		
15.2.	Chemical safety assessme	ent		
	None			

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



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Tradin	ng name:		SODIUM THIOSULFATE, 5% SOLUTION		
Produ	ct code:	NT5-OT-X**	Date of compilation: 21 Dec 2022 Version: 4		
16.2.	Abbreviat	ions and acronyms:	<ul> <li>ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)</li> <li>IMDG: International Maritime Code for Dangerous Goods</li> <li>IATA: International Air Transport Association</li> <li>GHS: Globally Harmonised System of Classification and Labelling of Chemicals</li> <li>EINECS: European Inventory of Existing Commercial Chemical Substances</li> <li>CAS: Chemical Abstracts Service (division of the American Chemical Society)</li> <li>DNEL: Derived No-Effect Level (UK REACH)</li> <li>LC50: Lethal concentration, 50 percent</li> <li>LD50: Lethal dose, 50 percent</li> <li>PBT: Persistent, Bioaccumulative and Toxic</li> <li>vPvB: very Persistent and very Bioaccumulative</li> </ul>		
16.3.	Key literat source of	ture references and data:	-		
16.4.	Classificat 1272/200	•	used to derive the classification for mixture according to Regulation (EC)		
Classification			Classification procedure		
_	-				
16.5.	Relevant H statements (number and full text)				
	H: -		-		
16.6.	Training a	idvice:	-		
16.7.	Further in	formation:	<ul> <li>** "X" in the product code marks different volumes (different packagings of the product)</li> <li>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.</li> </ul>		

### ANNEX:

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Exposure scenario resulting to Chemical safety assessment