

Page 1 of 16

Trading name:	AMMONIUM WATER					
Product code:	AV-OT -X**	Date of compilation:	12 August 2021	Version:	1	

SECTI	ION 1: Identification of	the substance	/mixture	and of the company/undertaking	
1.1	Product identifier				
	Trading name:	AMMONIU	AMMONIUM WATER		
	Chemical name:	-			
	Catalogue number:	AV-OT-X**			
1.2 Relevant identified uses of the substance or mixture and u			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 advis	sed against:	The product is intended for use only as an <i>in vitro</i> diagramedical device, registered at the Agency for Medicinal Products 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:		BioGnos	t Ltd.	
	Address:	Address:		Medjugorska 59, Zagreb	
	Telephone number:		+385 1 2409997		
	Telefax.:		+385 1 2	2404039	
	e-mail of competent p	erson:	msds@biognost.hr		
	National contact:		-		
1.4	Emergency telephone	number			
	National Protection ar	nd Rescue Dire	ectorate:	112	
	Medical information:			+385 1 2348 342	
	Other information:			-	

SECTIO	SECTION 2. Hazards identification					
2.1	Classification of the substance or mixture					
2.1.1	Classification according to Reg	ulation (EC) No 1	272/2008 (CLP)			
	Hazard class and catego	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	SECTION 16			
2.2	Label elements					
	Product identification:	AMMONIUM V	VATER			
	Identification number: -					
	Authorization number: -					
	Hazard pictograms:	-				



Page 2 of 16

Trading name:		AMMONIUM WATER					
Product code:	AV-OT -X**	Date of compilation:	12 August 2021	Version:	1		

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

SECTION 3. Co	SECTION 3. Composition/information on ingredients					
CAS/ EC/ Index number	REACH Registration No	Weight % content (or range)	Identification name	Classification according to Regulation (EC) No 1272/2008 (CLP)		
1336-21-6/ 215-647-6/ 007-001-01-2	-	<= 1%	Ammonia	Skin Corr. 1B; H314 Aquatic Acute 1; H400		

4.1	Description of first aid measures		
	General notes:	-	
	Following inhalation:	Remove person to fresh air. Provide oxygen if difficult breathing occurs. If breathing stops, immediately apply artificial mouth-to-nose respiration. If that is not possible, apply artificial mouth-to-mouth respiration. Rush the afflicted person with persistent symptoms to the hospital while keeping them in lateral recumbent position in order to keep the airways clear.	
	Following skin contact:	Remove contaminated clothing. Immediately rinse with copious amounts of water. Seek medical assistance if the symptoms of irritation remain.	
	Following eye contact:	Open the eyelids with clean fingers and wash the eyes with copious amounts of water, cover with sterile gauze and seek medical advice (ophthalmologist).	
	Following ingestion:	Have the afflicted person drink 1% solution of acetic acid of copious amounts of water. Prevent vomiting. Seek medical advice.	
	Self-protection of the first aider:	Avoid direct contact with the chemical; use appropriate protective equipment described in Section 8.	
4.2	Most important symptoms and ef	fects, both acute and delayed	
	Following inhalation:	Vapor inhalation may cause nose and throat irritation followed by sore throat, cough, difficult breathing and suffocating. High concentration vapor inhalation may cause headache, malaise and fatigue, difficult breathing, chest tightness, coordination and CNS disorders.	



Page 3 of 16

Trading name:	AMMONIUM WATER					
Product code:	AV-OT -X**	Date of compilation:	12 August 2021	Version:	1	

	Following skin contact:	Causes skin irritation, redness, swelling. Prolonged or repeated contact causes defatting and dry skin.		
	Following eye contact:	Vapors irritate eyes. Splashing may cause irritation and redness, lacrimation, pain, swelling, blurred vision, photophobia.		
	Following ingestion:	Nausea, vomiting, diarrhea. May cause headache, malaise and fatigue, coordination disorder and CNS depression. Aspiration may cause pneumotitis and lung edema. Death may occur in severe cases.		
4.3	Indication of any immediate medical attention and special treatment needed			
	-			

SECTI	ECTION 5. Firefighting measures				
5.1	Extinguishing media				
	Suitable extinguishing media:	Water spray, alcohol-resistant foam, dry chemical dust or carbon dioxide.			
	Unsuitable extinguishing media:	No information available			
5.2	Special hazards arising from the sub	Special hazards arising from the substance or mixture			
	Hazardous combustion products: Nitrogen oxides (NOx)				
5.3	Advice for firefighters				
	Use a self-contained open-circuit compressed air breathing apparatus and fireproof clothing.				
5.4	Additional information				
	Remove sources of heat and ignition	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 personnel				
	Protective equipment:	Use personal protective equipment (see Section 8).			
	Accident prevention methods:	Evacuate members of all non-essential personnel and those members without protective equipment. Avoid breathing vapors and avoid contact with skin and eyes. Do not smoke. Keep away from ignition sources.			
	Emergency procedures:	Mark the area using proper signs.			
6.1.2.	For emergency responders:				
	Use protective equipment; in case of inadequate ventilation use adequate airways 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 conta	inment and cleaning up			



Page 4 of 16

Trading name:		AMMONIUM WATER					
Product code:	AV-OT -X**	Date of compilation:	12 August 2021	Version:	1		

6.3.1.	Bunding, covering of drains; capping procedures:	Sand or clay barriers.		
6.3.2.	Cleaning up:	Smaller amount of spilled ammonia is neutralized with diluted sulfuric acid solution and washed away with copious amounts of water. Detoxication of larger amounts of spilled ammonia solution is done in the same manner; it should be taken into consideration that the procedure conducted to remove the neutralized ammonia solution is in accordance with regulations regarding prevention of environmental contamination: public sewers must not be contaminated with waste water with pH value lower than 5.5 or greater than 9.5.		
6.3.3.	Other information:	-		
6.4	Reference to other sections			
	See Section 7 for information on safe handling.			
	See Section 8 for information on personal protection equipment.			
	See Section 13 for disposal in	formation.		

SECTIO	ON 7. Handling and storage		
7.1	Precautions for safe handling		
7.1.1.	Protection measures		
	Measures to prevent fire:		Use in well ventilated storage rooms. Keep away from sources of ignition and heat. Do not use tools that cause sparks. Do not smoke.
	Measures to prevent aerosol and dust generation	on:	Secure proper ventilation.
	Measures to protect the environment:		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. The	noroughly was	sh hands after work and before eating.
7.2	Conditions for safe storage, including any incon	npatibilities	
	Technical measures and storage conditions:	well ventil	ghtly closed and upright set containers in a ated storage rooms at temperatures ranging 25 °C. Protect from heat and direct sunlight.
	Packaging materials:	Manufactu	urer's original packaging.
	Requirements for storage rooms and vessels: Keep away from food and drink. Keep the contatightly closed.		
	Advices for storage equipment:	must be re	ge must be made of hard material; floors esistant to chemicals. There must be no drain ly leads into sewage system. Secure proper n.



Page 5 of 16

Trading name:		AMMONIUM W	AMMONIUM WATER		
Product code:	AV-OT -X**	Date of compilation:	12 August 2021	Version:	1

	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 Evnos	ure contr	nls/nerso	nal protec	SECTION 8. Exposure controls/personal protection				
8.1 Control pa		513, per 30	mai protec					
Substance				valu	cupational exposure limit alues/short term values		Biological limit values	
Ammonia		1330	6-21-6	· ·	pm 20	mg/m³ 14	-	
Substance name: -								
EC No:	-	CAS No	-					
DNEL								
				Indu	ustrial			
Route of exposure:	Acu effect		Acut effect sys			Chronic effect local	Chronic effect systemic	
Oral	1		-		-		-	
Inhalation	-		-		-		-	
Dermal	-		-		-		-	
Critical physical par	rameters: s	olubility,	flammabilit	ty, corre	osivity:	-		
			1	Con	sumer			
Route of exposure:		cute ct local	Acut effect sys			Chronic effect local	Chronic effect systemic	
Oral	-		-		-		-	
Inhalation			-		-		-	
Dermal			-		-		-	
PNEC					DNIEC			
Environmental protection target				PNEC				
Fresh water					No information available			
Freshwater sediments					No information available No information available			
Marine water Marine sediments					No information available			
Food chain					No information available			



Page 6 of 16

Trading name:	AMMONIUM WATER				
Product code:	AV-OT -X**	Date of compilation:	12 August 2021	Version:	1

Microorga	anisms in sewage treatment		No information available	
Soil (agric	ultural)		No information available	
Air			No information available	
8.2	Exposure controls			
8.2.1.	Appropriate engineering controls	5		
	Substance/mixture related measure prevent exposure during identified		Use the product in well ventilated rooms. Use personal protective equipment. Do not eat, drink or smoke in the workspace.	
	Structural measures to prevent exposure:		In accordance with Section 7.	
	Organisational measures to preve exposure:	ent	Organization of work in order to reduce other worker's influence during work process.	
Technical measures to prevent exposure:		rposure:	Secure proper workspace ventilation in order to keep concentration levels in air below permitted levels. Secure stations for rinsing eyes and showering.	
8.2.2.	Personal protection equipment	·		
8.2.2.1.	Eye and face protection:	Safety glasses that stick to face (EN 166) or visor in case of lower levels of concentration in air; protective gas mask that covers the entire face in case of higher levels of concentration in air.		
8.2.2.2.	Skin protection			
	Hand protection:		otective gloves have to satisfy the specification of ation (EU) 2016/425 and the related standard EN 374. Glove material: nitrile rubber Glove thickness: 0.40 mm Time until perforation: > 480 min	
	Other skin protection:	footwe entire imperr	everyday work use cotton clothing (EN 340) and suitable ear, such as rubber boots (EN 20345) or shoes that cover the foot. In case of spilling hazard, use clothing made of meable material suitable for protection from liquid chemicals PVC, himex) and footwear made from the same material.	
8.2.2.3.	Respiratory protection:	Protective full face mask (EN 136) or half mask (EN 140) equipped with a filter for organic vapors, type "A" (boiling point >65°C) acording to EN 14387) used when concentration levels exceed GVI.		
8.2.2.4.	Thermal hazards:	No info	ormation available	
8.2.3.	Environmental exposure controls			
	Substance/mixture related measures to prevent exposure:	See Se	ction 6	
	Structural measures to prevent exposure:	Use m	odern equipment.	



Page 7 of 16

Trading name:		AMMONIUM W			
Product code:	AV-OT -X**	Date of compilation:	12 August 2021	Version:	1

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

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

SECTION 10. Stability and reactivity



Page 8 of 16

Trading name:		AMMONIUM V	VATER		
Product code:	AV-OT -X**	Date of compilation:	12 August 2021 \	Version:	1

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

11.1 Inforn	nation on toxicological	effects				
	toxicity:					
Route of exposure:	Method	Species	Dose LD ₉	₅₀ /LC ₅₀ or E _{mix}	Exposure tin	ne Results
Oral:	No information available	-	LC	950	No informati available	on -
Dermal:	No information available	-	LC) ₅₀	No informati available	on -
Inhalation:	No information available	-	LC	-50	No informati available	on -
Specif	ic target organ toxicity		sure (STOT S			
	Specific effects			Target org		Note
Oral:	ral: No information available			formation ava	ailable	-
Dermal:	No information a	mation available		nformation ava	ailable	-
Inhalation:	No information	available	No ir	nformation ava	ailable	-
Aspira	tion hazard:	No	o information	available.		
Irritati	on and corrosion					
,	Exposure	time	Species	Evaluation	Method	Note
Skin corrosion/irrita	tion:	-		–	-	No information available
Serious eye damage/irritati	on -	-		-	-	No information available
Consit	ization					
Skin sensitizati		rmation availa	hle			



Page 9 of 16

Trading name:		AMMONIUM WATER						
Product code:	AV-OT -X**	Date of compilation:	12 August 2021	Version:	1			

•	ms related to the ph	•				
Oral exposure:				men and abdom	inal pains.	
Dermal exposure	J .	ons may displa				
Inhalation expos			ly irritation after	prolonged or re	epeated exposur	e.
Eye exposure:	May cause e	e irritation.				
Poposto	ed dose toxicity (sub	acuta cubebre	onic chronic)			
Repeate	ed dose toxicity (sub	Exposure	mic, chilomic)			
	Dose	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 toxicit	<u> </u>	·	-		
		Specific effec	ts	Target o	rgan	Note



Page 10 of 16

Trading name:		AMMONIUM WATER							
Product code:	AV-OT -X**	Date of compilation:	12 August 2021	Version:	1				

11.3	General notes:							
	Other observa	tions:	No information available					
	Classification o		No information available					
11.2	Practical exper							
			i.					
	Summary of properties:	evaluation of the CM	R Studies did not demonstrate CMR eff	ects.				
	Reproductive t	oxicity:	Based on available data, the classification criteria are r					
	Germ cell muta		Based on available data, the classification criteria are not met.					
	Mutagenicity i		Based on available data, the classification criteria are not met. Current in vivo tests did not indicate mutagenic effects.					
	Genotoxicity:	1						
	Mutagenicity in vitro:		Current in vitro tests did not indicate mutagenic effects.					
	Carcinogenicit	y:	Based on available data, the classification criteria are not met.					
	CMR effects (c	arcinogenicity; mutagenicity,	nicity; reproductive toxicity)					
Chronic	Cinnalation	NO INIORMATION available	NO INIORMATION AVAILABLE	-				
	c dermal c inhalation	No information available No information available	No information available	_				
Chroni		No information available	No information available	-				
	onic inhalation	No information available	No information available	-				
	onic dermal	No information available	No information available	-				
	onic oral	No information available	No information available	-				
	ite inhalation	No information available	No information available	-				
	ıte dermal	No information available	No information available	-				

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



Page 11 of 16

Trading name:		AMMONIUM WATER							
Product code:	AV-OT -X**	Date of compilation:	12 August 2021	Version:	1				

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

Abiotic degradation

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

Biodegradation

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

12.3 Bioaccumulative potential

Octanol-water partition coefficient (log Kow)

Oct	anoi-water partition	coemcien	t (log Ko	W)		
Value	Concentration	рН	°C	Method	Evaluation	Note
-	-	-	-	_	-	-



											raye	12 OT 16	3
Trading	g name:					AM	MONIL	JM WA	TER				
Produc	ct code:	AV-0	T-X**		Date	of co	mpilati	on:	12 Aug	gust 2021	Ver	sion:	1
	Bioconc	entration	n factor (BCF)									
V	'alue		Species	,	N	1ethoc		E\	/aluatic	n		Note	
No info	rmation	No	inforn	nation	No info	rmatic	n	No info	ormatic	n			
availabl	le	availa	able		availabl	e		availab	le	-			
	Chronic	ecotoxic	rity										
	i .			Ехр	osure	C:-		N 4 - ±1		Frank and a		NI-+	
	Value		Dose		ime	Spe	ecies	Meth	100	Evaluatio	on	Note	e
Chronic	Chronic toxicity on fish LC ₅₀		1.0	1		No	mation	No information		No informatio	.n		
Chronic toxicity on fish		LC50	availa	1		ailable available			available	111	-		
Chronic	toxicity o			No		No		No		No			
	ea (<i>Daphr</i>		EC ₅₀				formation inform				n ·	-	
				avaiid	able	avanc		availab	iic	available			
12.4	Mobility	in soil											
	Known	or predic	ted distribut	ion in e	environm	ental o	compart	ments:					
	No info	mation a	available										
	Surface	tension:											
	Valu	e	°C	C	oncentra	tion	1	Metho	od		١	lote	
	No		lo nformation	No	informat	ion	No inf	ormatio	n				
	informa available		vailable	ava	ilable		availal	ole		-			
	Adsorpt												
Transpo	ort		efficient constant	lc	g Kow	E۱	vaporati	on rate	ľ	Method		Note	
	No	-	information	No ir	nformatio	n N	o inform	nation	No in	formation			
Soil-wa	tor :	ilable		availa			ailable		availa		-		
Water-a	air No	nilable	information	No ir	nformatio		o inform ailable	nation	No in	formation	-		



Page 13 of 16

Trading name:				AMMONIUM W	ATER			
Produc	t code:	AV-OT -X**	Date of	compilation:	12 August 2021	Version:	1	
Soil-air	No avai	information lable	No information available	No information available	No information available	-		
	-							
12.5	Results o	f PBT and vPvB asse	ssment					
	Not appl	icable.						
	1							
12.6	Other ad	verse effects						
		ant effect. If in conta Avoid release to the		r water in high dos	es, it may endanger	drinking water		
	3							
SECTIO	N 13. Dis _l	oosal consideration	S					
13.1	Waste ⁻	treatment methods						
13.1.1.	Produc	t/Packaging disposa	l:					
	mix wit		te. Submit for disp	_	nd local rules and re erson authorized by	-	ot	
	•							
13.1.2.	Waste	codes/waste designa	ations according to	o Law:				
	15 01 1 substar		ontains residual h	azardous substanc	es or is contaminated	d with hazardou	IS	
	i							
13.1.3.	Waste	treatment – relevant	information:					
	No info	rmation available						
13.1.4.	Sewage	e disposal – relevant	information:					
	Waste	must not be dispose	d of into the sewa	ge system.				
13.1.5.	Other o	lisposal recommend	ations:					
	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.	Relevar	nt Community provis	Community provisions:					
	Directive 2009/98/EC on waste and repealing certain directives.							
SECTIO	N 14 TRA	NSPORT INFORMA	TION					
	Transpor	ting/shipment by ro	ad (ADR)					
UN number:			Not subject t	o transport regula	tions			



Page 14 of 16

Trading name:		AMMONIUM V	VATER		
Product code:	AV-OT -X**	Date of compilation:	12 August 2021	Version:	1

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



Page 15 of 16

Trading name:	AMMONIUM WATER				
Product code:	AV-OT -X**	Date of compilation:	12 August 2021	Version:	1

Further information:	-

15.1	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:	EC Regulation No. 1906/2007 and EC Regulation No. 1272/2008 of the European Parliament and the European Council; Regulation (EC) No. 1907/2006 of the European Parliament and Council on registration, evaluation, authorization and restriction of chemical substances (REACH); EC Regulation No. 2037/200 of the European Parliament and Council from 29 June 2000 on substances that damage the ozone layer; EC Regulation No. 689/2008 of the European Parliament and Council from 17 June 2008 concerning the export and import of dangerous chemicals; EC Regulation No. 850/2004 of the European Parliament and Council from 29 April 2004 about persistent organic pollutants; Directive 2008/98/EC of the European Parliament and Council of 19 November 2008 on waste and repealing certain Directives		
	Information according 19 guideline)	999/13/EC about limitation of emissions of volatile organic compounds (VOC-		
	Chemicals Act, Regulation on classification, packaging and labeling of dangerous substances, Ordinance on occupational exposure limit valuand 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 Hazardo Substances Act			
15.2	Chemical safety assessme	ent		
	None			

SECTION 16. Other information				
16.1	Indication of changes:	-		



Page 16 of 16

Trading name:	AMMONIUM WATER				
Product code:	AV-OT -X**	Date of compilation:	12 August 2021	Version:	1

		PBT	Stable, bioaccumulative and toxic		
		vPvB	Strongly stable and strongly bioaccumulative.		
		LD ₅₀	Lethal dose, 50%		
		LC ₅₀	Lethal concentration, 50%		
16.2	Abbreviations and acrony	ms: IMDG	International Maritime Dangerous Goods		
		IATA	International Air Transport Association		
		GHS	Globally Harmonized System of Classification and Labelling of Chemicals		
		STOT - SE	Specific target organ toxicity - single exposure		
16.3.	Key literature references a source of data:	nd -			
16.4. Classification and procedure 1272/2008 (CLP)		ire used to derive	the classification for mixture according to Regulation (EC)		
Classifi	cation	Classification p	procedure		
-		-			
16.5.	Relevant H statements (n	ımber and full text)		
	H: 314	Causes severe	Causes severe skin burns and eye damage		
	400	Very toxic to a	quatic life.		
16.6.	Training advice:	-			
16.7. Further information:		** "X" in the product)	roduct code marks different volumes (different packagings of		
		instructions fo	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
-



Page 1 of 16

Trading name:		SILVER NITRATE, 20%	SOLUTION	J	
Product code:	SN20-OT-X**	Date of compilation:	10 August 2021	Version:	1

SECTI	ON 1: Identification of	the substance	e/mixture	and of the company/undertaking		
1.1	Product identifier					
	Trading name: SILVER NITE		RATE, 20%	SOLUTION		
	Chemical name: -					
	Catalogue number:	SN20-OT-	X**			
1.2	.2 Relevant identified uses of the substance or mixture and uses advised against			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 shee	t		
	Supplier:		BioGnost Ltd.			
	Address:		Medjugorska 59, Zagreb			
	Telephone number:		+385 1 2409997			
	Telefax.:		+385 1 2404039			
	e-mail of competent p	person:	msds@biognost.hr			
	National contact:		-			
1.4	Emergency telephone	number				
	National Protection and Rescue Dire		ectorate:	e: 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 Regulation (EC) No 1272/2008 (CLP)			
	Hazard class and cate	gory code:	Hazard statements*:	
	Met. Corr. 1		H290	
	Skin Corr. 1B		H314	
	Aquatic Chronic 2		H411	
2.1.2.	Additional information			
	-			
*For fu	ıll text of Hazard- and EU Hazard	l-statements: see	SECTION 16	
2.2	Label elements			
	Product identification:	SILVER NITRATE, 20% SOLUTION		
	Identification number:	-		
	Authorization number: -			



Page 2 of 16

Trading name:	SILVER NITRATE, 20% SOLUTION				
Product code:	SN20-OT-X**	Date of compilation:	10 August 2021	Version:	1

Hazard pictograms:	GHS05 GHS09
Signal word:	Danger
Hazard statements:	H290 May be corrosive to metals.H314 Causes severe skin burns and eye damage.H411 Toxic to aquatic life with long lasting effects.
Precautionary statements:	P273 Avoid release to the environment. P280 Wear protective gloves/protective clothing/eye protection/face protection. P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower]. P301+P330+P331 IF SWALLOWED: rinse mouth. Do NOT induce vomiting. P405 Store locked up. P501 Dispose of contents/container in accordance with local regulations.
Supplemetal hazard information (EU):	-
2.3 Other hazards	
-	

SECTION 3. Con	SECTION 3. Composition/information on ingredients					
CAS/ EC/ Index number	REACH Registration No	Weight % content (or range)	Identification name	Classification according to Regulation (EC) No 1272/2008 (CLP)		
7761-88-8/ 231-853-9/ 047-001-00-2	-	< 25%	silver nitrate	Met. Corr. 1; H290 Skin Corr. 1B; H314 Aquatic Acute 1; H400 Aquatic Chronic 1; H410		

SECTI	SECTION 4. First aid measures			
4.1	Description of first aid measures			
	General notes:	If the suggested first aid measures do not prove sufficient, seek medical attention.		
	Following inhalation:	Carry the afflicted person out of the contaminated area into a well-ventilated area or out for fresh air. In case of difficult breathing, provide the afflicted person with oxygen.		



Page 3 of 16

Trading name:		SILVER NITRATE, 20% SOLUTION			
Product code:	SN20-OT-X**	Date of compilation:	10 August 2021	Version:	1

	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 medical attention and special treatment needed		

SECTIO	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 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 environment	ent with extinguishing media.		

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).	



Page 4 of 16

Trading name:		SILVER NITRATE, 20%	SOLUTION		
Product code:	SN20-OT-X**	Date of compilation:	10 August 2021	Version:	1

	Accident prevention methods: Evacuate members of all non-essential personnel and those without protective equipment. Avoid breathing vapors a 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 a (see Section 8).	case of inadequate ventilation use adequate airways protective equipment	
6.2	Environmental precautions:		
	Do not dispose of in sewage, drainage system and waterways. In case of large spillage contact National Protection and Rescue Directorate (NPRD) on 112.		
6.3	Methods and material for con-	tainment 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 See Section 8 for information	on safe handling. on personal protection equipment.	
	See Section 13 for disposal information.		

SECTIO	SECTION 7. Handling and storage				
7.1	Precautions for safe handling				
7.1.1.	Protection measures				
	Measures to prevent fire: Use in well ventilated storage rooms. Kee away from sources of ignition and heat.				
	Measures to prevent aerosol and dust generation:		Secure proper ventilation.		
	Measures to protect the environment:	res to protect the environment:			
	Other measures:		-		
7.1.2.	Advice on general occupational hygiene:				
	Do not eat, drink or smoke in the workspace. Thoroughly wash hands after work and before eating.				
7.2	Conditions for safe storage, including any incompatibilities				
	Technical measures and storage conditions:		htly closed and upright set containers at res ranging from +2 to +8 °C.		



Page 5 of 16

Trading name:		SILVER NITRATE, 20% SOLUTION						
Product code:	SN20-OT-X**	Date of compilation:	10 August 2021	Version:	1			

	Packaging materials:	Manufacturer's original packaging. Avoid metal containers.
	Requirements for storage rooms and vessels:	Keep away from food and drink. Keep the containers tightly closed.
	Advices for storage equipment:	The storage must be made of hard material; floors must be resistant to chemicals. There must be no drain that directly leads into sewage system. Secure proper ventilation.
	Further information on storage conditions:	Do not place the unused material in the storage room and do not use empty containers for storing other chemicals. Do not store with incompatible materials (see Section 10).
7.3	Specific end use(s)	
	Recommendations:	-
	Industrial sector specific solutions:	-

SECTION 8. Exposure controls/personal protection								
8.1 Control pa	arameters							
Substance CA		CA			Occupational exposure limit values/short term values		ı	Biological limit values
				рр	m	mg/m³		
Silver (as Ag)			-	-		0.01		-
Substance name: -								
EC No:	-	CAS No	: -					
DNEL								
Industrial								
Route of	Acı		Ad	cute	Chronic			Chronic
exposure:	effect	local	effect	systemic	effect local			effect systemic
Oral	-		-		-		-	
Inhalation	-		-		-		-	
Dermal	-		-		-		-	
Critical physical pa	rameters: s	solubility,	flammab	ility, corros	sivity:	-		
				Consi	umer			
Route of	Acı	ute	A	cute		Chronic		Chronic
exposure:	effect	local	effect	systemic		effect local		effect systemic
Oral	-		-		-		-	
Inhalation	-		-		-		-	
Dermal	-		-		-		1	



Page 6 of 16

Trading name:	SILVER NITRATE, 20% SOLUTION						
Product code:	SN20-OT-X**	Date of compilation:	10 August 2021	Version:	1		

PNEC					
Environm	ental protection target		PNEC		
Fresh wat	er		no information available		
Freshwater sediments			no information available		
Marine w	ater		no information available		
Marine se	ediments		no information available		
Food cha	in		no information available		
Microorg	anisms in sewage treatment		no information available		
Soil (agric	cultural)		no information available		
Air			no information available		
8.2	Exposure controls				
8.2.1.	Appropriate engineering contr	ols			
	Substance/mixture related mea		Use the product in well ventilated rooms. Use personal protective equipment. Do not eat, drink or smoke in the workspace.		
	Structural measures to prevent exposure:	-	In accordance with Section 7. Organization of work in order to reduce other worker's influence during work process.		
	Organisational measures to pre exposure:	event			
	Technical measures to prevent	exposure:	Secure proper workspace ventilation in order to keep concentration levels in air below permitted levels. Secure stations for rinsing eyes and showering.		
8.2.2.	Personal protection equipment	t			
8.2.2.1.	Eye and face protection:	levels	glasses that stick to face (EN 166) or visor in case of lower of concentration in air; protective gas mask that covers the face in case of higher levels of concentration in air.		
8.2.2.2.	Skin protection				
	Hand protection:	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.	Respiratory protection:		quired under normal conditions of use. Use suitable atory protective device when high concentrations are at.		
8.2.2.4.	Thermal hazards:	No info	ormation available		
8.2.3.	Environmental exposure contro	ols			
	Substance/mixture related measures to prevent exposure:	See Se	ection 6		



Page 7 of 16

Trading name:		SILVER NITRATE, 20%	6 SOLUTION	
Product code:	SN20-OT-X**	Date of compilation:	10 August 2021 Version:	1

Structural r exposure:	measures to prevent	Use modern equipment.
Organisation prevent exp	onal measures to oosure:	Adapt the work process to the required working conditions of the workplace.
Technical n exposure:	neasures to prevent	See Section 6

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



Page 8 of 16

Trading name:	SILVER NITRATE, 20% SOLUTION						
Product code:	SN20-OT-X**	Date of compilation:	10 August 2021	Version:	1		

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

11.1	Information	on toxicolog	gical effects					
	Acute toxic		,					
Route o		Method	Species	Do	se LD ₅₀ /LC ₅₀ or ATE _{mix}	Exposure t	ime	Results
Oral: No information available		No information available	า	-	No information	n	_	
Dermal:		-	No informatior available	า	-	No information	n	-
Inhalatio	on:	-	No information available	1	-	No information	on	-
	Specific targ	get organ tox	kicity – single exp	oosure (S	TOT SE):			
		Specific effects		Target organ		organ	Note	
Oral:		No information available			No information available			
Dermal:		No informat	ion available		No information available -			
Inhalati	on:	No informat	ion available		No information available -			
	Aspiration h	nazard:		No inforr	mation available.			
	Irritation an	nd corrosion						
		Ехро	sure time	Spec	es Evaluat	tion Method		Note
Skin corrosic	on/irritation:	-	-	-	-	-	-	
Serious damage	eye e/irritation	-	-	-	-	-	-	
	Sensitizatio							
	VUNCITIZATIO							



Page 9 of 16

Trading name:	SILVER NITRATE, 20% SOLUTION						
Product code:	SN20-OT-X**	Date of compilation:	10 August 2021	Version:	1		

Respiratory sensi	tizatio	on: -							
Sympto	ms rel	ated to the ph	nysical, chemic	al and toxicolog	ical characteristi	CS			
Oral exposure:		No informati	on available.						
Dermal exposure	:	No informati	No information available.						
Inhalation exposi	ure:	No informati	on available.						
Eye exposure:		No informati	on available.						
Repeate	d dos	e toxicity (sub	acute, subchro	onic, chronic)		,			
		Dose	Exposure time	Species	Method	Evaluation	Note		
Subacute oral		information lable	No information available	No information available	No information available	No information available	-		
Subacute dermal		information lable	No information available	No information available	No information available	No information available	-		
Subacute inhalation	No avail	information lable	No information available	No information available	No information available	No information available	-		
Subchronic oral		information lable	No information available	No information available	No information available	No information available	-		
Subchronic dermal		information lable	No information available	No information available	No information available	No information available	-		
Subchronic inhalation		information lable	No information available	No information available	No information available	No information available	-		
Chronic oral		information lable	No information available	No information available	No information available	No information available	-		
Chronic dermal		information lable	No information available	No information available	No information available	No information available	-		
Chronic inhalation		information lable	No information available	No information available	No information available	No information available	-		
i i									
Specific	targe	t organ toxicit		xposure (STOT F	RE):	1			
			Specific effec	ts	Target o	rgan	Note		



Page 10 of 16

Trading name:		SILVER NITRATE, 20%	6 SOLUTION	
Product code:	SN20-OT-X**	Date of compilation:	10 August 2021 Version:	1

11.3	General notes:						
	Other Observa						
	Other observa		_				
11,4	Classification of		_				
11.2	Practical exper	iences:					
	properties:						
	,	evaluation of the CMR	No information available.				
	Reproductive t	oxicity:	No information available.				
	Germ cell muta		No information available.				
	Mutagenicity i		No information available.				
	Genotoxicity:		No information available.				
	Mutagenicity i	n vitro:	No information available.				
	Carcinogenicity:		No information available.				
	CMR effects (c	arcinogenicity; mutagenicity; re	productive toxicity)				
Chroni	c inhalation	No information available	No information available	-			
	c dermal	No information available	No information available	-			
Chroni		No information available	No information available	-			
	onic inhalation	No information available	No information available	-			
Subchr	onic dermal	No information available	No information available	-			
	onic oral	No information available	No information available	-			
Subacu	ite inhalation	No information available	No information available	-			
Subacu	ıte dermal	No information available	No information available	-			
subacu	ıte oral	No information available	No information available	-			

SECTION 12. Ecologic	SECTION 12. Ecological information					
12.1 Toxicity						
Acute (short-term) toxicity	Dose	Exposure time	Species	Method	Evaluation	Note
Fish	LC ₅₀	96 hours	Leuciscus idus (Golden orfe)	-	-	0.011 mg/l (silver nitrate)
Crustacea:	EC ₅₀	48 hours	Daphnia magna (Water flea)	-	-	0.0082 mg/l (silver nitrate)



Page 11 of 16

Trading name:		SILVER NITRATE, 20%	6 SOLUTION		
Product code:	SN20-OT-X**	Date of compilation:	10 August 2021	Version:	1

Algae/aquatic	olants	IC ₅₀	4 days	Pseudokirchner iella subcapitata (green algae)	-	-	0.19 mg/l (silver nitrate)
Other organisn	ns	-	-	-	-	-	-
Chronic (long-t	erm)	Dose	Exposur time	e Species	Method	Evaluation	on Note
Fish		LC ₅₀	96 hours	No information available	No information available	No informati available	
Crustacea:		EC ₅₀	48 hours	No information available	No information available	No informati available	
Algae/aquatic	olants	IC ₅₀	72 hours	No information available	No information available	No informati available	
Other organisn	ns	-	-	-	-	-	-
12.2 Persis	tence a	nd degradab	ility				
Abioti	c degra	adation			1	1	
	De	egradation half-lives		Method	Evaluation		Note
Marine water	No ii	nformation a	vailable	No information available	No information	on -	
Fresh water	No ii	nformation a	vailable	No information available	No information	on -	
Air	No ii	nformation a	vailable	No information available	No informatic available	on -	
Soil	No ii	nformation a	vailable	No information available	n No information available		
Biode	gradati	on					
% Degradati	on	Time (c	lays)	Method	Evaluatio	on	Note
No information available	1	No intavailable	formation	No information available	No information		o information vailable
12.3 Bioacc	umula	tive potentia					
Octan	ol-wate	er partition c	oefficient (l	og Kow)			
Value	Conce	entration	рН	°C Method	Evalu	uation	Note



Page 12 of 16

Tradin	g name:				SILV	ER NI	TRATE	, 20% 9	OLUT	ION		
Produ	ct code:	SN2	20-OT-X**		Date	of co	mpilati	on:	10 Au	gust 202	21	Version:
			_		_							
-	-		-					-			-	
	i											
	Biocon	centratio	on factor (BCF)								
١	/alue		Species		M	1ethoc	k	E	/aluatio	on		Note
No info availab	ormation lle	No avai	inforn ilable	nation	No info available		on 	No info		on	-	
	Ch											
	Value	c ecotox	Dose		osure ime	Spe	ecies	Metl	nod	Evalua	ation	Note
Chroni	c toxicity	on fish	LC ₅₀	No infor avail	mation able	No informavaila	mation able	No inform availab		No informa availabl		-
	c toxicity cea (<i>Daph</i>		EC ₅₀	No infor avail	mation able	No informavaila	mation able	No inform availab		No informa availabl		-
12.4	Mobilit	ty in soil										
	Known	or predi	icted distribut	ion in e	environme	ental d	compart	ments:				
			available									
		tension		1						Т		
	Valu		°C	С	oncentrat	tion		Metho	od			Note
	No informa availab	ation	No information available		informat ailable	ion	No inf availal	ormatio ole	n	-		
	Adsorp	otion / de	esorption									
Transp	•	A/D co	pefficient s constant	lo	og Kow	Ev	/aporati	on rate		Method		Note
Soil-wa	ater N	o ⁄ailable	information	No ir availa	nformatio able		o inform ailable	nation	No ir availa	nformatio able	on	-
Water-	∙air N∘ av	o ⁄ailable	information	No ir availa	nformatio able		o inform ailable	nation	No ir availa	nformatio able	on	-



Page 13 of 16

						Page 13 of 10	<u> 5</u>
Trading	name:		SILVER	R NITRATE, 20%	SOLUTION		
Product	code:	SN20-OT-X**	Date of	compilation:	10 August 2021	Version:	1
					h		
Soil-air	No availa	information able	No information available	No information available	No information available	-	
		PBT and vPvB asses	ssment				
	No inform	nation available					
12.6	Other adv	erse effects					
	No inform	ation available					
		osal consideration	S				
13.1	Waste tr	reatment methods					
13.1.1.	Product	/Packaging disposa	l·				
15.1.1.				rized by the Minis	stry of Environmental	and Nature	
	Protection	•	egai person damo	Tized by the Willia	or Environmental	and radare	
13.1.2.		odes/waste designa					
	Packagir	ng that contains res	idual hazardous s	ubstances or is co	ntaminated with haz	ardous substar	ices
13.1.3.	Waste tr	reatment – relevant	information:				
		mation available					
13.1.4.	Sewage	disposal – relevant	information:				
	Waste m	nust not be dispose	d of into the sewa	ge system.			
12.1.5	041		- 4 :				
13.1.5.		sposal recommend		the sewage system	m. Submit the remain	es to the collec	tors
	authoriz	ed by the ministry i	n charge. Do not	dispose of the pac	kaging into the sewa		
	· ·	aging to the collec		the ministry in ch	narge.		
13.1.6.	Relevant	t Community provis	ions:				
	<u> </u>						
SECTION	N 14 TRAN	ISPORT INFORMA	TION				
		ing/shipment by roa					
UN num	ber:		3082				
UN prop	er shippin	g name:	Environment	ally hazardous sub	ostance, liquid, n.o.s.	(silver nitrate)	
Transpor	t hazard c	lass(es):	9				



Page 14 of 16

Trading name:		SILVER NITRATE, 20%	SOLUTION		
Product code:	SN20-OT-X**	Date of compilation:	10 August 2021	Version:	1

Packing group:	III
Environmentally hazardous:	yes
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 nitrate)
Transport hazard class(es):	9
Packing group:	III
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 (II	MDG)
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:	-
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:	-



Page 15 of 16

Trading name:		SILVER NITRATE, 20%	SOLUTION		
Product code:	SN20-OT-X**	Date of compilation:	10 August 2021	Version:	1

5.1	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:	EC Regulation No. 1906/2007 and EC Regulation No. 1272/2008 of the European Parliament and the European Council; The European Commission Regulation No. 453/2006 of 2010 on changes and amendments to the Regulation (EC) No. 1907/2006 of the European Parliament and Council on registration, evaluation, authorization and restriction of chemical substances (REACH); EC Regulation No. 2037/200 of the European Parliament and Council from 29 June 2000 on substances that damage the ozone layer; EC Regulation No. 689/2008 of the European Parliament and Council from 17 June 2008 concerning the export and import of dangerous chemicals; EC Regulation No. 850/2004 of the European Parliament and Council from 29 April 2004 about persistent organic pollutants; Directive 2008/98/EC of the European Parliament and Council of 19 November 2008 on waste and repealing certain Directives
	Information according 19 guideline)	99/13/EC about limitation of emissions of volatile organic compounds (VOC-
	National legislation:	Chemicals Act, Regulation on classification, packaging and labeling of dangerous substances, Ordinance on occupational exposure limit values and on biological limit values, Regulation on categories, types and classification of waste with a waste catalog and list of hazardous waste, Ordinance on writing Material safety data sheet, Transport of Hazardous Substances Act
5.2	Chemical safety assessme	ent
	None	

SECTION 16. Other information				
16.1	Indication of changes:	-		
		PBT	Stable, bioaccumulative and toxic	
		vPvB	Strongly stable and strongly bioaccumulative.	
	Abbreviations and acronyms:	LD ₅₀	Lethal dose, 50%	
		LC ₅₀	Lethal concentration, 50%	
16.2		IMDG	International Maritime Dangerous Goods	
		IATA	International Air Transport Association	
		GHS	Globally Harmonized System of Classification and	
			Labelling of Chemicals	
		STOT - SE	Specific target organ toxicity - single exposure	



Page 16 of 16

Trading name:	SILVER NITRATE, 20% SOLUTION				
Product code:	SN20-OT-X**	Date of compilation:	10 August 2021	Version:	1

16.3.	- 1	literature references and rce of data:	-
16.4.		ssification and procedure (2/2008 (CLP)	used to derive the classification for mixture according to Regulation (EC)
Classifi	cation	1	Classification procedure
_			-
16.5.	Rele	evant H statements (numb	er and full text)
	H:	290 314 400 410 411	May be corrosive to metals. Causes severe skin burns and eye damage. Very toxic to aquatic life. Very toxic to aquatic life with long lasting effects. Toxic to aquatic life with long lasting effects.
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.

I	
	ANNEX: Exposure scenario resulting to chemical safety assessment
	-



Page 1 of 16

Trading name:	S	SODIUM THIOSULFATE, 5% SOLUTION			
Product code:	NT5-OT-X**	Date of compilation:	05 July 2019	Version:	3

SECTION	ON 1: Identification of	the substance	e/mixture	and of the company/undertaking	
1.1	Product identifier				
	Trading name:	SODIUM TH	HIOSULFA [*]	TE, 5% SOLUTION	
	Chemical name:	-			
	Catalogue number:	NT5-OT-X*			
1.2	.2 Relevant identified uses of the substance or mixture and uses advised against			nixture and uses advised against	
	Uses:		For use	with special staining kits.	
	Uses advised against:			identified uses are advised.	
	Reason why uses advi	sed against:	The product is intended for use only as an <i>in vitro</i> diagnomedical device, registered at the Agency for Medicinal Products Medical Devices and there is no reason to use it for other purpos		
1.3	Details of the supplier	of the safety	data shee	t	
	Supplier:		BioGnos	t Ltd.	
	Address:		Medjugo	orska 59, Zagreb	
	Telephone number:		+385 1 2409997		
	Telefax.:		+385 1 2404039		
	e-mail of competent p	person:	msds@b	oiognost.hr	
	National contact:		-		
1.4	Emergency telephone	number			
	National Protection ar	nd Rescue Dire	ectorate:	112	
	Medical information:				
	Medical information:			+385 1 2348 342	

SECTIO	SECTION 2. Hazards identification					
2.1	Classification of the substance	Classification of the substance or mixture				
2.1.1	Classification according to Regu	ulation (EC) No 1	272/2008 (CLP)			
	Hazard class and category code: Hazard statements*:					
	Not identified as hazardous substance					
2.1.2.	Additional information					
	-					
*For fu	ll text of Hazard- and EU Hazard-	statements: see S	SECTION 16			
2.2	Label elements					
	Product identification:	SODIUM THIOS	SULFATE, 5% SOLUTION			
	Identification number: -					
	Authorization number:	-				
	Hazard pictograms:	-				



Page 2 of 16

Trading name:	SODIUM THIOSULFATE, 5% SOLUTION			<u> </u>	
Product code:	NT5-OT-X**	Date of compilation:	05 July 2019	Version:	3

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

SECTION 3. Con	SECTION 3. Composition/information on ingredients							
CAS/ EC/ Index number	REACH Registration No	Weight % content (or range)	Identification name	Classification according to Regulation (EC) No 1272/2008 (CLP)				
7772-98-7/ 231-867-5/ -	-	< 5 %	sodium thiosulphate	not classified				

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



Page 3 of 16

Trading name:	SODIUM THIOSULFATE, 5% SOLUTION				
Product code:	NT5-OT-X**	Date of compilation:	05 July 2019	Version:	3

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

SECTION 5. Firefighting measures				
5.1	Extinguishing media			
	Suitable extinguishing media:	water spray, dry powder, CO ₂ or alcohol resistant foam		
	Unsuitable extinguishing media:	Water with full jet		
5.2	Special hazards arising from the substance or mixture			
	Hazardous combustion products:	no information available		
5.3	Advice for firefighters			
	Use a self-contained open-circuit compressed air breathing apparatus and fireproof clothing.			
5.4	Additional information Cool endangered receptacles with water spray. Collect contaminated fire fighting water separately. contaminate the environment with extinguishing media.			

SECTION 6. Accidental release measures				
6.1	Personal precautions, protective equipment and emergency procedures			
6.1.1.	For non-emergency personnel			
	Protective equipment:	Use personal protective equipment (see Section 8).		
	Accident prevention methods:	Evacuate members of all non-essential personnel and those members without protective equipment. Avoid breathing vapors and avoid contact with skin and eyes. Do not smoke. Keep away from ignition sources.		
Emergency procedures: Mark the area using proper signs.		Mark the area using proper signs.		
6.1.2.	1.2. For emergency responders:			
	Use protective equipment; in case of inadequate ventilation use adequate airways protective equip (see Section 8).			
6.2 Environmental precautions:				
	Do not dispose of in sewage, drainage system and waterways. In case of large spillage contact Natio 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 protective barrier or barriers made of similar materials.		



Page 4 of 16

Trading name:	SODIUM THIOSULFATE, 5% SOLUTION					
Product code:	NT5-OT-X**	Date of compilation:	05 July 2019	Version:	3	

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

SECTIO	SECTION 7. Handling and storage					
7.1	Precautions for safe handling					
7.1.1.	Protection measures					
	Measures to prevent fire:		Use in well ventilated storage rooms. Keep away from sources of ignition and heat. Do not use tools that cause sparks. Do not smoke.			
	Measures to prevent aerosol and dust generation	on:	Secure proper ventilation.			
	Measures to protect the environment:		Prevent spilling into the sewage system and waterways.			
	Other measures:		Protect against electrostatic charges.			
7.1.2.	Advice on general occupational hygiene:					
	Do not eat, drink or smoke in the workspace. Thoroughly wash hands after work and before eating.					
7.2	Conditions for safe storage, including any incompatibilities					
	Technical measures and storage conditions:	Keep in tightly closed and upright set containers in a well ventilated storage rooms at temperatures rangin from 15 to 25 °C. Protect from heat and direct sunlight				
	Packaging materials:	Manufactu	ırer's original packaging.			
	Requirements for storage rooms and vessels:	Keep away from food and drink. Keep the container tightly closed. The storage must be made of hard material; floors must be resistant to chemicals. There must be no dr that directly leads into sewage system. Secure proportion.				
	Advices for storage equipment:					
	Further information on storage conditions:	and do no	ice the unused material in the storage room t use empty containers for storing other Do not store with incompatible materials on 10).			



Soil (agricultural)

Air

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

Page 5 of 16

Trading name:		SODIUM THIOSULFATE	, 5% SOLUTION		
Product code:	NT5-OT-X**	Date of compilation:	05 July 2019	Version:	3

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

Industrial sector specific solutions:					-			
SECTION 8. Expos	ure contr	ols/perso	nal protec	tion				
8.1 Control pa	arameters							
Substance	<u>.</u>	CA			upational exposure limit llues/short term values			Biological limit values
					ppm	om mg/m³		
-	-		-		-	-	-	
Substance name:	-							
EC No: - CAS		CAS No	: -					
DNEL	· · · · · · · · · · · · · · · · · · ·							
				Inc	dustrial			
Route of	Route of Acute		Acut	te		Chronic		Chronic
exposure:	effect	t local effect system		stemi	С	effect local		effect systemic
Oral	-	-			-	-		-
Inhalation	-		-		-			-
Dermal	-		-		-			-
Critical physical par	rameters:	solubility,	flammabilit	ty, cor	rosivity:	_		
				Co	nsumer			
Route of	А	cute	Acu	te	Chronic			Chronic
exposure:	effe	ct local	effect sy	stemi	c effect local			effect systemic
Oral	-		-		-			-
Inhalation	-		-		-			-
Dermal	-		-		<u> </u> -			-
PNEC								
Environmental prot	nmental protection target			PNEC				
Fresh water			no information available					
Freshwater sediments			no information available					
Marine water				no information available				
Marine sediments				no information available				
Food chain					no inform	nation available		
Microorganisms in	sewage tr	eatment			no inform	nation available		

no information available

no information available



Page 6 of 16

Trading name:		SODIUM THIOSULFATE,	5% SOLUTION	<u> </u>	
Product code:	NT5-OT-X**	Date of compilation:	05 July 2019	Version:	3

8.2	Exposure controls					
8.2.1.	Appropriate engineering controls	5				
	Substance/mixture related measurevent exposure during identified		Use the product in well ventilated rooms. Use personal protective equipment. Do not eat, drink or smoke in the workspace.			
	Structural measures to prevent exposure:		In accordance with Section 7.			
	Organisational measures to preve exposure:	ent	Organization of work in order to reduce other worker's influence during work process.			
	Technical measures to prevent ex	(posure:	Secure proper workspace ventilation in order to keep concentration levels in air below permitted levels. Secure stations for rinsing eyes and showering.			
8.2.2.	Personal protection equipment	t				
8.2.2.1.	Eye and face protection:	Safety glasses that stick to face (EN 166) or visor in case of levels of concentration in air; protective gas mask that coverentire face in case of higher levels of concentration in air.				
8.2.2.2.	Skin protection					
	Hand protection:		e protective gloves have to satisfy the specification of gulation (EU) 2016/425 and the related standard EN 374. Glove material: nitrile rubber Glove thickness: 0.40 mm Time until perforation: > 480 min			
	Other skin protection:	footwe entire imperr	everyday work use cotton clothing (EN 340) and suitable ear, such as rubber boots (EN 20345) or shoes that cover the foot. In case of spilling hazard, use clothing made of meable material suitable for protection from liquid chemicals PVC, himex) and footwear made from the same material.			
8.2.2.3.	Respiratory protection:	with a	tive full face mask (EN 136) or half mask (EN 140) equipped filter for organic vapors, type "A" (boiling point >65°C) ng to EN 14387) used when concentration levels exceed GVI.			
8.2.2.4.	Thermal hazards:	No info	ormation available			
8.2.3.	Environmental exposure controls					
	Substance/mixture related measures to prevent exposure:	See Se	ction 6			
	Structural measures to prevent exposure:	Use mo	odern equipment.			
	Organisational measures to prevent exposure:	Adapt the work process to the required working conditions of workplace.				



Page 7 of 16

Trading name:	SODIUM THIOSULFATE, 5% SOLUTION				
Product code:	NT5-OT-X**	Date of compilation:	05 July 2019	Version:	3

Technical measures to prevent	See Section 6
exposure:	See Seemon o

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

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



Page 8 of 16

Trading name:		SODIUM THIOSULFATE,	5% SOLUTION	<u> </u>	
Product code:	NT5-OT-X**	Date of compilation:	05 July 2019	Version:	3

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

SECTION 11. T	nation on to	xicological e	ffects						
	toxicity:								
Route of exposure:		Method Specie		es Dose LD ₅₀ /LC ₅₀ or ATE _{mix}		Exposure time			Results
(Oral:		formation ble	_		information ilable		_		_
Dermal:	No in availa	formation ble	_		information ilable		_		_
Inhalation: No i		formation ble	_		information ilable		_		_
3									
Specif	ic target org	gan toxicity –	- single exp	osure (S	TOT SE):				
		Specific effects			Target organ			Note	
Oral:	Oral: No information available		vailable	No information availab		availab	le	-	
Dermal: No info		formation av	ormation available		No information available			-	
Inhalation:	No in	formation av	ormation available		No information available			-	
Aspira	tion hazard		١	No infor	mation available.				
Irritati	on and corr					-			
		Exposure t	ime	Spec	ies Evaluati	ion	Method		Note
Skin corrosion/irrita	tion:		-	•	-	-		-	
Serious eye - damage/irritation			-		-	_		-	
Sensit	ization								
Skin sensitization	on:	No infor	mation avai	ilable.					
Respiratory sensitization: No information ava			ilahla						



Page 9 of 16

Trading name:		SODIUM THIOSULFATE,	5% SOLUTION		
Product code:	NT5-OT-X**	Date of compilation:	05 July 2019	Version:	3

Sympto	ms rela	ated to the ph	ysical, chemic	al and toxicolog	gical characterist	ics	
Oral exposure:		Swallowing n	nay cause disc	omfort in abdo	men and abdom	inal pains.	
Dermal exposure	: :	Allergic perso	ons may displa	y irritation.			
Inhalation expos	ure:	Allergic perso	ons may displa	y irritation afte	r prolonged or re	epeated exposu	re.
Eye exposure:		May cause ey	e irritation.				
Repeate	ed dose	e toxicity (sub	acute, subchro	onic, chronic)			
, .		Dose	Exposure time	Species	Method	Evaluation	Note
Subacute oral	No avail	information able	No information available	No information available	No information available	No information available	-
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 avail	information able	No information available	No information available	No information available	No information available	-
Subchronic inhalation	No avail	information able	No information available	No information available	No information available	No information available	-
Chronic oral	No avail	information able	No information available	No information available	No information available	No information available	-
Chronic dermal	No avail	information able	No information available	No information available	No information available	No information available	-
Chronic inhalation	No avail	information able	No information available	No information available	No information available	No information available	-
i							
Specific	target	organ toxicity	y – repeated e	xposure (STOT	RE):	ī	
			Specific effec	ts	Target o	rgan	Note
Subacute oral		No informa	ation available		No information available -		
Subacute dermal		No informa	tion available		No information	n available -	



Page 10 of 16

Trading name:		SODIUM THIOSULFATE,	5% SOLUTION		
Product code:	NT5-OT-X**	Date of compilation:	05 July 2019	Version:	3

11.3	General notes:							
	Other observa	tions:	No information available					
	Classification o		No information available					
11.2	Practical exper							
	Summary of properties:	evaluation of the CM	CMR Based on available data, the classification criteria are no met.					
	Reproductive t	oxicity:	Based on available data, the classification criteria are not met. Based on available data, the classification criteria are not met.					
	Germ cell muta							
	Mutagenicity i		Based on available data, the classification criteria are not met.					
	Genotoxicity:		Based on available data, the classification					
	Mutagenicity i	n vitro: I	Based on available data, the classification criteria are not met.					
	Carcinogenicit	y: I	Based on available data, the classification criteria are not met.					
	CMR effects (c	arcinogenicity; mutagenicity;	reproductive toxicity)					
Chroni	c inhalation	No information available	No information available	-				
	c dermal	No information available	No information available	-				
Chroni		No information available	No information available	-				
Subchr	onic inhalation	No information available	No information available	-				
Subchr	onic dermal	No information available	No information available	-				
Subchr	onic oral	No information available	No information available	-				
Subacı	ute inhalation	No information available	No information available	-				

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



Page 11 of 16

Trading name:		SODIUM THIOSULFATE,	5% SOLUTION		
Product code:	NT5-OT-X**	Date of compilation:	05 July 2019	Version:	3

Product code:		NT5-OT-X**		Date of compila	tion:	05 July 2019 \		Versior	n:	3
Algae/aquatic p	olants	IC ₅₀	4 days	No information available	No inform availab		No informatio available	n -		
Other organism	าร	-	-	-		_	-	-		
Chronic (long-t	erm)	Dose	Exposure time	Species	Met	:hod	Evaluati	on	Note	
Fish		LC ₅₀	96 hours	No information available	No inform availab		No informatio available	n -		
Crustacea:		EC ₅₀	48 hours	No information available	No inform availab		No informatio available	n -		
Algae/aquatic plants		IC ₅₀	72 hours	No information available	No inform availab		No informatio available	n -		
Other organism	าร	-	-	-	-		-	-		
12.2 Persist	tence a	nd degrada	bility							
Abioti	c degra	adation							_	
	De	egradation h	alf-lives	Method	E,	Evaluation		Not	e	
		nformation a	availahla 🗀	No information available	No info	ormatio ole	n -			
				NI= :-f	NI- :£	4: _	_			

	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	-

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

12.3	Bioaccumulative potential										
	Octanol-water partition coefficient (log Kow)										
Valu	e Concentration	рН	°C	Method	Evaluation	Note					
-	-	-	-	-	-	-					



Page 12 of 16

										r	age 12 of 16	
Tradin	g name:				SODIUN	л THI	OSULF	ATE, 59	% SOLU1	TION		
Produc	ct code:	NT:	5-OT-X**		Date	of co	mpilatio	on:	05 July 2	019	Version:	3
	Biocono	entratio	on factor (BCF)									
	/alue		Species		M	lethoc	<u> </u>	Εν	/aluation		Note	
	ormation	No	inform			rmatic	n	No info	ormation			
availab	le	avai	ilable		available	е		availab	le	-		
	Chronic	ecotox	icity									
	1	. ecotox	icity	Fyn	osure							
	Value		Dose		ime	Spe	ecies	Meth	nod	Evaluation	Note	
				_		No				0		
Chronic	Chronic toxicity on fish		LC ₅₀	infori availa	mation able	inforr availa	mation able	information available		formation ailable	-	
				No		No		No	N			
	c toxicity (cea (<i>Daphi</i>		EC ₅₀		mation		mation	inform	1	formation	-	
	(= v _F			availa	able	availa	ıble	availab	le a	/ailable		
12.4	Mobility	y in soil										
12.7			cted distributi	on in e	nvironme	ental c	ompart	ments:				
		··············	available	O11 111 C		Jiitai C	ompare					
		tension										
	Valu	ıe	°C	C	oncentrat	ion		Metho	od		Note	
	No		No	No	informati	ion	No inf	ormatio	1			
	informa availabl		information available		ilable	1011	availal			-		
	availabi	-	available									
				<u></u>			<u> </u>					
	Adsorp	tion / de	esorption									
Tranco	ort	A/D co	pefficient	١٨	ng Kow	E v	/aporati	on rato	NAA	thod	Note	
Transpo	OIL	Henry's	constant	iC	y KUW		αμυταιι	oniale	ivie	uiou	note	
Soil-wa	ater Av	o ailable	information	No ir availa	nformatio able		o inform ailable	nation No inform available			-	
	No		information		nformatio							
Water-	air :	ailable		availa			ailable	·	available		-	



Page 13 of 16

Trading	name:		SODIUM	THIOSULFATE,	5% SOLUTION							
Product	t code:	NT5-OT-X**	Date of	compilation:	05 July 2019	Version:	3					
Soil-air	No availa	information able	No information available	No information available	No information available	-						
12.5	Results of	PBT and vPvB asse	essment									
	Not applic											
12.6		erse effects										
	No further	r relevant informat	ion available.									
SECTIO	N 13. Disp	osal consideration	าร									
13.1	Waste tr	reatment methods										
13.1.1.		/Packaging disposa										
	Submit for disposal to the legal person authorized by the Ministry of Environmental and Nature Protection.											
13.1.2.		odes/waste design										
	15 01 10 substan		contains residual h	azardous substand	es or is contaminate	ed with hazardo	ous					
13.1.3.	Waste tr	reatment – relevan	t information:									
13.1.3.		mation available	t imormation.									
	į											
13.1.4.	Sewage	disposal – relevant	information:									
	Waste n	nust not be dispose	ed of into the sewa	ge system.								
13.1.5.		sposal recommend										
	authoriz		in charge. Do not	dispose of the pac	n. Submit the remair kaging into the sewa arge.							
13.1.6.	5. Relevant Community provisions:											
	Disposa	I must be made ac	cording to official r	egulations.								
CECTIC	N 14 TD 41	ICDODT INFORM	TION									
SECTION		ISPORT INFORMA										
UN num	······	ng/shipment by ro		o transport regula	tions							
	per shippin	a name:	- NOT SUBJECT T	o transport regula	IUUIIS							



Page 14 of 16

Trading name:	SODIUM THIOSULFATE, 5% SOLUTION						
Product code:	NT5-OT-X**	Date of compilation:	05 July 2019	Version:	3		
Transport hazard	sloss(os):						

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:	-
T	40.63
Transporting/shipment by sea (II	NDG)
UN number:	Not subject to transport regulations
UN number:	Not subject to transport regulations
UN number: UN proper shipping name:	Not subject to transport regulations -
UN number: UN proper shipping name: Transport hazard class(es):	Not subject to transport regulations
UN number: UN proper shipping name: Transport hazard class(es): Packing group:	Not subject to transport regulations
UN number: UN proper shipping name: Transport hazard class(es): Packing group: Environmentally hazardous:	Not subject to transport regulations
UN number: UN proper shipping name: Transport hazard class(es): Packing group: Environmentally hazardous: Special precautions for user: Transport in bulk according to Annex II	Not subject to transport regulations - - - - - - -
UN number: UN proper shipping name: Transport hazard class(es): Packing group: Environmentally hazardous: Special precautions for user: Transport in bulk according to Annex II of MARPOL 73/78 and the IBC code:	Not subject to transport regulations - - - - - - -
UN number: UN proper shipping name: Transport hazard class(es): Packing group: Environmentally hazardous: Special precautions for user: Transport in bulk according to Annex II of MARPOL 73/78 and the IBC code: Transporting/shipment by air (IC	Not subject to transport regulations AO-TI/IATA-DGR)
UN number: UN proper shipping name: Transport hazard class(es): Packing group: Environmentally hazardous: Special precautions for user: Transport in bulk according to Annex II of MARPOL 73/78 and the IBC code: Transporting/shipment by air (IC UN number:	Not subject to transport regulations Not subject to transport regulations
UN number: UN proper shipping name: Transport hazard class(es): Packing group: Environmentally hazardous: Special precautions for user: Transport in bulk according to Annex II of MARPOL 73/78 and the IBC code: Transporting/shipment by air (IC UN number: UN proper shipping name:	Not subject to transport regulations Not subject to transport regulations Not subject to transport regulations -
UN number: UN proper shipping name: Transport hazard class(es): Packing group: Environmentally hazardous: Special precautions for user: Transport in bulk according to Annex II of MARPOL 73/78 and the IBC code: Transporting/shipment by air (IC UN number: UN proper shipping name: Transport hazard class(es):	Not subject to transport regulations Not subject to transport regulations Not subject to transport regulations
UN number: UN proper shipping name: Transport hazard class(es): Packing group: Environmentally hazardous: Special precautions for user: Transport in bulk according to Annex II of MARPOL 73/78 and the IBC code: Transporting/shipment by air (IC UN number: UN proper shipping name: Transport hazard class(es): Packing group:	Not subject to transport regulations Not subject to transport regulations Not subject to transport regulations



Page 15 of 16

Trading name:	S				
Product code:	NT5-OT-X**	Date of compilation:	05 July 2019	Version:	3

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

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



Page 16 of 16

Trading name:					
Product code:	NT5-OT-X**	Date of compilation:	05 July 2019	Version:	3

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

ANNEX: Exposure scenario resulting to chemical safety assessment
-



Page 1 of 18

Trading name:	STOCK DEVELOPER SOLUTION					
Product code:	STR-OT-X**	Date of compilation:	11 August 2021	Version:	1	

SECTION	ON 1: Identification of t	the substance	e/mixture	and of the company/undertaking	
1.1	Product identifier				
	Trading name:	STOCK DEV	ELOPER S	OLUTION	
	Chemical name:	-			
	Catalogue number:	STR-OT-X**			
1.2	Relevant identified use	es of the subst	tance or m	nixture and uses advised against	
	Uses:		For use v	with special staining kits.	
	Uses advised against:		Only the	identified uses are advised.	
	Reason why uses advis	sed against:	medical	duct is intended for use only as an <i>in vitro</i> diagnostic device, registered at the Agency for Medicinal Products and Devices and there is no reason to use it for other purposes.	
1.3	Details of the supplier	Details of the supplier of the safety data sheet			
	Supplier:		BioGnost Ltd. Medjugorska 59, Zagreb +385 1 2404039		
	Address:				
	Telephone number:				
	Telefax.:				
	e-mail of competent p	erson:	msds@b	oiognost.hr	
	National contact:		-		
1.4	Emergency telephone	Emergency telephone number			
	National Protection an	nd Rescue Dire	ectorate:	112	
	Medical information:			+385 1 2348 342	
	Other information:			-	

	ON 2. Hazards identification					
2.1	Classification of the substance or mixture					
2.1.1	Classification according to Regulation (EC) No 1272/2008 (CLP)					
	Hazard class and category code:	Hazard statements*:				
	Acute Tox. 4	H301				
	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					
	-					



Page 2 of 18

Trading name:	STOCK DEVELOPER SOLUTION					
Product code:	STR-OT-X**	Date of compilation:	11 August 2021	Version:	1	

2.2	Label elements	
	Product identification:	STOCK DEVELOPER SOLUTION
	Identification number:	-
	Authorization number:	-
	Hazard pictograms:	GHS08 GHS08
	Signal word:	Danger
	Hazard statements:	 H302 + H312 + H332 Harmful if swallowed, in contact with skin or if inhaled. H314 Causes severe skin burns and eye damage. H317 May cause an allergic skin reaction. H341 Suspected of causing genetic defects. H350 May cause cancer.
	Precautionary statements:	P280 Wear protective gloves/protective clothing/eye/protection/face protection. P301+P330+P331 IF SWALLOWED: rinse mouth. DO NOT induce vomiting. P302+P352 IF ON SKIN: Wash with plenty of water and soap. P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing. P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P501 Dispose of contents/container in accordance with local regulations.



Page 3 of 18

Trading name:		STOCK DEVELOPER	SOLUTION		
Product code:	STR-OT-X**	Date of compilation:	11 August 2021	Version:	1

	Supplemetal hazard information (EU):	-
2.3	Other hazards	
	-	

SECTION 3. Co	SECTION 3. Composition/information on ingredients					
CAS/ EC/ Index number	REACH Registration No	Weight % content (or range)	Identification name	Classification according to Regulation (EC) No 1272/2008 (CLP)		
50-00-0/ 200-001-8/ 605-001-00-5	01-2119488953- 20-XXXX	< 20%	formaldehyde, 37%	Carc. 1B, H350 Muta. 2, H341 Acute Tox. 3, H331 Acute Tox. 3, H311 Acute Tox. 3, H301 Skin Corr. 1B; H314 Skin. Sens. 1, H317		

SECTI	ON 4. First aid measures	
4.1	Description of first aid measures	
	General notes:	Note for the person providing first aid measures/physician: in case of inhaling, due to possible onset of delayed pulmonary oedema (up to 48 hours), the afflicted person should be kept observed.
	Following inhalation:	Carry the afflicted person out of the contaminated area into a well-ventilated area or out for fresh air. In case of difficult breathing, provide the afflicted person with oxygen.
	Following skin contact:	Remove contaminated clothing. Immediately wash with plenty of water for at least 20 minutes. Seek medical assistance if the symptoms of irritation remain.
	Following eye contact:	Rinse out with plenty of water with the eyelid held wide open for at least 20 minutes. If the symptoms remain, immediately call in ophthalmologist.
	Following ingestion:	Rinse the mouth thoroughly with 1-2 glasses of water. Immediately consult a physician and show the container or label. In case of swallowing large quantities, transport the afflicted person to the hospital.
	Self-protection of the first aider:	-
4.2	Most important symptoms and effects, both acute and delayed	
	Following inhalation:	Irritation of the mucous membrane of the nose/throat may occur (burning sensation, urge to sneeze, runny nose). High concentration may cause difficult breathing, coughing fits, chest tightness, headache, vertigo and drowsiness.



Page 4 of 18

Trading name:		STOCK DEVELOPER SOLUTION			
Product code:	STR-OT-X**	Date of compilation:	11 August 2021	Version:	1

	Following skin contact:	Irritation, redness with stinging and pain, skin cracking, rash, swelling, burns, blisters and delayed onset of inflammatory processes may occur.	
	Following eye contact:	Depending on concentration and exposure time, mucosa stinging, lacrimation, redness and pain may occur, as well as bleeding, delayed onset of inflammatory processes and permanent eyesight damage.	
	Following ingestion:	Depending on concentration and exposure time, it may lead to stinging and digestive mucus damage, abdominal pain, nausea, vomiting (possibly of bloody content).	
4.3	Indication of any immediate medical attention and special treatment needed		
	-		

SECTIO	SECTION 5. Firefighting measures			
5.1	Extinguishing media			
	Suitable extinguishing media:	water, foam, dry powder, CO ₂ , water spray or alcohol resistant foam		
	Unsuitable extinguishing media:	No information available		
5.2	Special hazards arising from the su	ubstance or mixture		
	Hazardous combustion products:	Formalin solution is not flammable in itself. Gases released from the solution are flammable if the concentration of the solution is >25%. In case of combustion carbon dioxide and carbon monoxide will be released, which are heavier than air. Vapours are heavier than air and may spread along the floors. Forms explosive mixtures with air on intense heating. Development of hazardous combustion gases or vapours possible in the event of fire.		
5.3	Advice for firefighters			
	Use a self-contained open-circuit compressed air breathing apparatus and fireproof clothing.			
5.4	Additional information			
	Remove sources of heat and ignition	on. Do not contaminate the environment with extinguishing media		

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



Page 5 of 18

Trading name:	STOCK DEVELOPER SOLUTION				
Product code:	STR-OT-X**	Date of compilation:	11 August 2021	Version:	1

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

SECTIO	ECTION 7. Handling and storage				
7.1	Precautions for safe handling				
7.1.1.	Protection measures				
	Measures to prevent fire:		Use in well ventilated storage rooms. Keep away from sources of ignition and heat. Do not use tools that cause sparks. Do not smoke.		
	Measures to prevent aerosol and dust generation:		Secure proper ventilation.		
	Measures to protect the environment:		Prevent spilling into the sewage system and waterways.		
	Other measures:		Protect against electrostatic charges.		
7.1.2.	Advice on general occupational hygiene:				
	Do not eat, drink or smoke in the workspace. The	oroughly was	h hands after work and before eating.		
7.2	Conditions for safe storage, including any incom	patibilities			
	Technical measures and storage conditions: well ventil		htly closed and upright set containers in a ated storage rooms at temperatures ranging 25 °C. Protect from heat and direct sunlight.		
	Packaging materials:	Manufactu	rer's original packaging.		



Page 6 of 18

Trading name:		STOCK DEVELOPER	SOLUTION	J	
Product code:	STR-OT-X**	Date of compilation:	11 August 2021	Version:	1

	Requirements for storage rooms and vessels:	Keep away from food and drink. Keep the containers tightly closed.
	Advices for storage equipment:	The storage must be made of hard material; floors must be resistant to chemicals. There must be no drain that directly leads into sewage system. Secure proper ventilation.
	Further information on storage conditions:	Do not place the unused material in the storage room and do not use empty containers for storing other chemicals. Do not store with incompatible materials (see Section 10).
7.3	Specific end use(s)	
	Recommendations:	-
	Industrial sector specific solutions:	-

SECTION 8. I	xposu	re contro	ols/perso	nal pr	otection				
8.1 Cont	rol par	ameters							
Substance		CA	CAS No		Occupational exposure limit values/short term values		Biolo	Biological limit values	
				рр	m	mg/m³			
Formaldehyd	е		50-	-00-0	2)	2.5	-	
		1							
Substance na	me:	-	T		:				
EC No:		-	CAS No	:	-				
DNEL									
					Indu	strial			
Route of		Acı	ite	Acute			Chronic		Chronic
exposure:		effect	local	effe	ct systemic	ystemic effect local			effect systemic
Oral		-		ı		-		-	
Inhalation		1 mg/m ³		_		0.5 mg		9 mg,	/m³
iiiiaiatioii		(formalde	ehyde)			(forma	aldehyde)	(form	aldehyde)
Dermal		_		_			0.037 mg/cm ²		ng/kg
Definal						(formaldehyde)		(formaldehyde)	
Critical physic	al para	ameters: s	olubility,	flamm	ability, corro	sivity:	_		
					Cons	umer			
Route of		Ad	cute		Acute		Chronic		Chronic
exposure:		effec	t local	effe	ct systemic		effect local		effect systemic
Oral		-		-		-		4.1 m (form	g/kg aldehyde)



Page 7 of 18

						Page 7 of 18	
Trading n	name:		STC	СК	DEVELOPER SOLUTION	I	
Product o	ode:	STR-OT-X**	Date	rate of compilation: 11 August 2021 Version: 1			
Inhalation		_	_		0.1 mg/m ³	3.2 mg/m ³	
					(formaldehyde)	(formaldehyde)	
Dermal		-	-		0.012 mg/cm ² (formaldehyde)	120 mg/kg (formaldehyde)	
PNEC							
Environme	ental prote	ction target		P	NEC		
Fresh wate	er			0.	47 mg/l (formaldehyde)		
Freshwate	r sediment	:S		2.	44 mg/kg (formaldehyde)		
Marine water				0.	47 mg/l (formaldehyde)		
Marine sed	diments			2.	44 mg/kg (formaldehyde)		
Food chair	n			N	o information available		
Microorga	inisms in se	ewage treatment		0.19 mg/l (formaldehyde)			
Soil (agricultural)			0.21 mg/kg (formaldehyde)				
Air				N	o information available		
8.2	Exposur	e controls					
8.2.1.	Appropi	riate engineering (controls				
		ce/mixture related exposure during i		Use the product in well ventilated rooms. Use personal protective equipment. Do not eat, drink or smoke in the workspace.			
	Structur exposur	ral measures to pre	event	In accordance with Section 7.			
	Organis exposur	ational measures [.] e:	to prevent	Organization of work in order to reduce other worker's influence during work process.			
	Technica	al measures to pre	event exposure:	Secure proper workspace ventilation in order to keep concentration levels in air below permitted levels. Secure stations for rinsing eyes and showering.			
8.2.2.	Persona	l protection equip	ment				
8.2.2.1.	Eye and	face protection:	levels	y glasses that stick to face (EN 166) or visor in case of lower of concentration in air; protective gas mask that covers the e face in case of higher levels of concentration in air.			
8.2.2.2.	Skin pro	tection	k				
	Hand pr	rotection:	•	protective gloves have to satisfy the specification of lation (EU) 2016/425 and the related standard EN 374 Glove material: nitrile rubber Glove thickness: 0.40 mm Time until perforation: > 480 min			



Page 8 of 18

Trading name:		STOCK DEVELOPER S	OLUTION		
Product code:	STR-OT-X**	Date of compilation:	11 August 2021	Version:	1

	Other skin protection:	During everyday work use cotton clothing (EN 340) and suitable footwear, such as rubber boots (EN 20345) or shoes that cover the entire foot. In case of spilling hazard, use clothing made of impermeable material suitable for protection from liquid chemicals (Viton, PVC, himex) and footwear made from the same material.
8.2.2.3.	Respiratory protection:	Protective full face mask (EN 136) or half mask (EN 140) equipped with a filter for organic vapors, type "A" (boiling point >65°C) acording to EN 14387) used when concentration levels exceed GVI.
8.2.2.4.	Thermal hazards:	No information available
8.2.3.	Environmental exposure controls	
	Substance/mixture related measures to prevent exposure:	See Section 6
	Structural measures to prevent exposure:	Use modern equipment.
	Organisational measures to prevent exposure:	Adapt the work process to the required working conditions of the workplace.
	Technical measures to prevent exposure:	See Section 6

.1	Information on basic physical and	chemical properties	
		Value	Method
	Physical state:	liquid	No information available
	Colour:	colourless	No information available
	Odour:	No information available	No information available
	Odor threshold:	No information available	No information available
	рН:	No information available	No information available
	Melting point / freezing point;	No information available	No information available
	Initial boiling point and boiling range:	No information available	No information available
	Flash point:	No information available	No information available
	Evaporation rate:	No information available	No information available
	Flammability (solid, gas):	No information available	No information available
	Upper/lower flammability or explosive limits:	No information available	No information available
	Vapour pressure:	No information available	No information available
	Vapour density:	No information available	No information available
	Relative density:	No information available	No information available
	Bulk density:	No information available	No information available



Page 9 of 18

Trading name:		STOCK DEVELOPER S	OLUTION	_	
Product code:	STR-OT-X**	Date of compilation:	11 August 2021	Version:	1

	Solubility(ies):	No information available	No information available
	Partition coefficient: n- octanol/water (log Kow):	No information available	No information available
	Auto-ignition temperature:	No information available	No information available
	Decomposition temperature:	No information available	No information available
	Viscosity:	No information available	No information available
	Explosive properties:	No information available	No information available
	Oxidising properties:	No information available	No information available
9.2	Other information		
	-		

SECTIO	SECTION 10. Stability and reactivity			
10.1	Reactivity:	See subsections 10.3 through 10.5.		
10.2	Chemical stability:	The product is chemically stable under standard ambient conditions of storing and using (room temperature).		
10.3	Possibility of hazardous reactions:	No 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 Information on toxicological effects						
Acute toxi	Acute toxicity:					
Route of exposure:	Method	Species	Dose LD ₅₀ /LC ₅₀ or ATE _{mix}	Exposure time	Results	
Oral:	No information available	rat	LD ₅₀	No information available	>200 mg/kg (formaldehyde)	
Dermal:	No information available	rabbit	LD ₅₀	No information available	>270 mg/kg (formaldehyde)	
Inhalation:	No information 0.58 mg/l					
Specific ta	Specific target organ toxicity – single exposure (STOT SE):					

	Specific effects	Target organ	Note
Oral:	No information available	No information available	-
Dermal:	No information available	No information available	-
Inhalation:	No information available	No information available	-



Page 10 of 18

Trading name:		STOCK DEVELOPER SOLUTION							
Product code:	STR-OT-X**	Date of compilation:	11 August 2021	Version:	1				

Aspiration	on hazard:		ľ	No information available.					
Irritation	n and corro	sion							
	1 4114 20110	Exposur	e time	Species	Evaluation	Method	Note		
Skin corrosion/irritatio					-	-	strong corrosive effect on skin surface and mucous membrane		
Serious eye damage/irritation	i -				-	-	strong irritative effect on the eyes, can cause serious eye damage		
Sensitiza	ation								
Skin sensitization	1:	No inf	ormation avai	lable.					
Respiratory sensi	tization:	No inf	ormation avai	lable.	_		_		
Sympto	ms related	to the ph	nysical, chemic	cal and toxicolo	gical characteri	stics			
Oral exposure:	Swal	lowing r	nay cause dis	comfort in abd	omen and abdo	minal pains.			
Dermal exposure	: Aller	gic perso	ons may displ	ay irritation.					
Inhalation exposi	ure: Aller	gic perso	ons may displ	ay irritation aft	er prolonged or	repeated exp	posure.		
Eye exposure:	May	cause ev	ye irritation.						
			<u> </u>						
Repeate	ed dose toxi	city (sub	acute, subchr	onic, chronic)					
; -	Dos	е	Exposure time	Species Method		Evaluatio	on Note		
Subacute oral	No infor available	mation	No information available	No information available	No information available	No informat available			
Subacute dermal	No infor available	mation	No information available	No information available	No information available	No informat available			
Subacute inhalation	No information available		No information available	No information available	No information available	No informat available			
Subchronic oral	No information available		No information available	No information available	No information available	No informat available			
Subchronic dermal	No infor available	mation	No information available	No information available	No information available	No informat available			



Page 11 of 18

Trading name:		STOCK DEVELOPER SOLUTION							
Product code:	STR-OT-X**	Date of compilation:	11 August 2021	Version:	1				

Subchronic inhalation	No availa	information Ible	No information available	No informat available		No information available	No information available	on -
Chronic oral	No availa	information Ible	No information available	No informat available		No No information available available		on -
Chronic dermal	No availa	information Ible	No information available	No informat available		No information available	No information available	on -
Chronic inhalation	No availa	information ıble	No information available	No informat available		No information available	No information available	on -
Specific	target	organ toxicity	y – repeated e	exposure (STOT F	SE).		
Specific	target	organ toxicit	Specific effection	•	31011	Target o	rgan	Note
Subacute oral		No informa	tion available			No information		-
Subacute derma			tion available			No information		_
Subacute inhalat			tion available			No information	_	
Subchronic oral		No informa	tion available		No information available -			_
Subchronic derm	nal		tion available			No information		_
Subchronic inhal	ation	No informa	tion available		No information available -			_
Chronic oral		No informa	tion available		No information available -			-
Chronic dermal		No informa	tion available			No information	n available	-
Chronic inhalatio	n	No informa	tion available			No information	n available	-
CMD of	fosts (se		" mutaganisit		etive t	ovicity)		
			/; mutagenicit	· ·		<u> </u>	esification s	criteria are not met.
Carcino								
Mutage Genoto:	·····	T VIITO.		Based on available data, the classification criteria are not met. Based on available data, the classification criteria are not met.				
Mutage	······································	o vivo:						criteria are not met.
		genicity:						criteria are not met.
Reprodu								criteria are not met.
Reprodu		-mercy.		24304 011	avana	data, the cla		
Summa propert	,	evaluation	of the CN	MR Based met.	d on a	available data, t	the classifica	ation criteria are not
11.2 Practica	l experi	iences:						
Classific	Classification observations:					ation available		



Page 12 of 18

Trading name:		STOCK DEVELOPER SOLUTION						
Product code:	STR-OT-X**	Date of compilation:	11 August 2021	Version:	1			

	Other observations:	No information available
11.3	General notes:	
	-	

SECTION 12. Ecological information								
12.1 Toxicity								
Acute (short-term) toxicity	Dose	Exposure time	Species	Method	Evaluation	Note		
Fish	LC ₅₀	96 hours	Pimephales promelas	-	24.1 - 41 mg/l (formaldehyde)	-		
Crustacea:	EC ₅₀	48 hours	Daphnia magna	-	2 mg/l (formaldehyde)	-		
Algae/aquatic plants	IC ₅₀	8 days	algae	-	2.5 mg/l (formaldehyde)	-		
Other organisms	-	-	_	_	-	-		
Chronic (long-term) toxicity	Dose	Exposure time	Species	Method	Evaluation	Note		
Fish	LC ₅₀	96 hours	No information available	No information available	No information available	-		
Crustacea:	EC ₅₀	48 hours	No information available	No information available	No information available	-		
Algae/aquatic plants	IC ₅₀	72 hours	No information available	No information available	No information available	-		
Other organisms	-	-	-	-	-	-		

12.2 Persistence and degradability

Abioti	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	-					



Page 13 of 18

		7								Ра	ge 15 01 1	O
Trading	g name:				ST	OCK DEVELO	OPER	SOLUTI	ON			
Produc	ct code:	STR-OT-X	* *		Date	e of compilat	ion:	11 Au	gust 202	.1 \	Version:	1
					•			·				
	Biodegrad	dation			1	1						
% De	egradation	Tim	e (days	5)	N	Лethod		Evaluatio	n		Note	
No information No available availab		No available	information ble				No ir availa	nformatio able		No info	ormation ole	
12.3	Bioaccum	ulative poter	ntial									
	Octanol-v	vater partitio	n coef	ficient (log Kow	<i>'</i>)				1		
Valu	ie Co	ncentration	ŗ	Н	°C	Method		Evalu	ation		Note	
-	-		-		-	-		-		-		
		ntration facto)								
	/alue	•	ecies		Method		Evaluation				Note	
No info availabl	ormation le	No available	No information available		No information available		No information available			_		
	Chronic e	cotoxicity					-					
	Value		Oose		osure ime	Species	N	1ethod	Evalua	ition	Not	е
Chronic	c toxicity on	fish LC	50	No infor availa	mation able	No information available		ormation ilable	No informa available		–	
Chronic toxicity on crustacea (<i>Daphnia</i>)		: F(50	No infor availa	mation able	No information available	_	information		No information available		
12.4	Mobility i	n soil										
	Known or	predicted di	stribut	ion in e	environn	nental compar	tment	ts:				
	No inform	nation availal	ole									
	Surface te	ension:							1			
	Value	c			on contr	ation	1.4.	sthod			Noto	



Page 14 of 18

Trading name:						STOCK DEVELOPER SOLUTION							
Produc	t coc	le:	STR	-OT-X**		Date of	COI	mpilation:	1	1 August	2021	Version:	1
		rmatio lable	n i	intormation		nformation able	1	No information available		-			
	Ads	orption	n / de	sorption									
Transpo	ort	t A/D coefficient Henry's constant			log	Kow	Εv	aporation rat	te	Method		Note	
Soil-wa	ter	No availa	able	information No informa ble available				o information ailable		No inform available	nation	-	
Water-a	air	No availa			No infavailab	ormation le		o information ailable		No inform available	nation	-	
Soil-air		No availa	able	information	No infavailab			No inform available	nation	-			
12.5				ind vPvB asses	sment								
	Not	applic	able.										
12.6	Oth	er adve	erse e	effects									
					ct with s	oil and/or	wa	ter in high do	oses,	it may en	danger	drinking water	
	sour	rces. A	void r	release to the	environ	ment.							
CECTIO	NI 12	D:											
13.1				onsiderations ent methods	5								
15.1	• •	aste ti	Catill	ent methods									
13.1.1.	Pr	oduct/	'Packa	aging disposal	:								
	Waste material must be disposed of according to the national and local rules and regulations. Do not mix with other sorts of waste. Submit for disposal to the legal person authorized by the Ministry of Environmental and Nature Protection.												
12.1.2		. ,											
13.1.2.				waste designa					nces é	or is conta	minato	d with hazardou	ıc
		bstanc		raying that C	Jiitail 15	i csidudi Ha	ı∠ai	aous subsidii	ices (oi is CUIIla	iiiiiale	a with hazardou	13
13.1.3.	\٨/	acto tr	aatma	ent – relevant	informa	tion:							
13.1.3.				on available	iiiioiiiid	uon.							



Page 15 of 18

Trading name:		STOCK DEVELOPER SOLUTION							
Product code:	STR-OT-X**	Date of compilation:	11 August 2021	Version:	1				

13.1.4.	Sewage disposal – relevant information:						
	Waste must not be disposed	d of into the sewage system.					
	•						
13.1.5.	Other disposal recommenda	ations:					
	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 provisi	ions:					
	Directive 2009/98/EC on wa	ste and repealing certain directives.					
SECTION	N 14 TRANSPORT INFORMAT	TION					
	Transporting/shipment by roa	nd (ADR)					
UN num	ber:	Not subject to transport regulations					
UN prop	er shipping name:	-					
Transport hazard class(es):		-					
Packing	group:	-					
Environn	nentally hazardous:	-					
Special p	recautions for user:	-					
	Transporting/shipment by rail	(RID)					
UN num	ber:	Not subject to transport regulations					
UN prop	er shipping name:	-					
Transpor	t hazard class(es):	-					
Packing (group:	-					
Environn	nentally hazardous:	-					
Special p	recautions for user:	-					
	Inland waterway transport (AD	ON)					
UN numl	ber:	Not subject to transport regulations					
UN prop	er shipping name:	-					
Transpor	t hazard class(es):	-					
Packing	group:	-					
Environm	nentally hazardous:	-					
Special p	precautions for user:	-					
	Transporting/shipment by sea	a (IMDG)					
UN numl	ber:	Not subject to transport regulations					
UN prop	er shipping name:	-					
Transpor	t hazard class(es):	-					
Packing (group:	-					



Page 16 of 18

Trading name:		STOCK DEVELOPER SOLUTION				
Product code:	STR-OT-X**	Date of compilation:	11 August 2021	Version:	1	

Environmentally hazardous:		-
Special precautions for user	•	-
Transport in bulk according of MARPOL 73/78 and the li		-
Transporting/shipn	nent by air (ICA	AO-TI/IATA-DGR)
UN number:		3334
UN proper shipping name:		Aviation regulated liquid, n.o.s. (formaldehyde)
Transport hazard class(es):		9
Packing group:		III
Environmentally hazardous:		no
Special precautions for user		-
Further information: Formaldehyde solutions from 10% to 24.9% are regulated by IATA as Aviation regulated, N.O.S. (10%-24.9% Formaldehyde solution)		

15.1	Safety, health and environmental regulations/legislation specific for the substance or mixture					
	EU regulations					
	Authorization and/or rest	rictions of use				
	Authorizations: -					
	Restrictions: -					
	Other EU regulations:	EC Regulation No. 1906/2007 and EC Regulation No. 1272/2008 of the European Parliament and the European Council; Regulation (EC) No. 1907/2006 of the European Parliament and Council on registration, evaluation, authorization and restriction of chemical substances (REACH); EC Regulation No. 2037/200 of the European Parliament and Council from 29 June 2000 on substances that damage the ozone layer; EC Regulation No. 689/2008 of the European Parliament and Council from 17 June 2008 concerning the export and import of dangerous chemicals; EC Regulation No. 850/2004 of the European Parliament and Council from 29 April 2004 about persistent organic pollutants; Directive 2008/98/EC of the European Parliament and Council of 19 November 2008 on waste and repealing certain Directives				
	Information according 19 quideline)	November 2008 on waste and repealing certain Directives 99/13/EC about limitation of emissions of volatile organic compounds (VOC-				



Page 17 of 18

Trading name:		STOCK DEVELOPER SOLUTION					
Product code:	STR-OT-X**	Date of compilation:	11 August 2021	Version:	1		

	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 assessmer	nt
	None	

SECTIO	ON 16	i. Other information			
16.1	Indi	ication of changes:	-		
16.2	Abk	previations and acronyms:	PBT vPvB LD ₅₀ LC ₅₀ IMDG IATA GHS STOT - SE	Stable, bioaccumulative and toxic Strongly stable and strongly bioaccumulative. Lethal dose, 50% Lethal concentration, 50% International Maritime Dangerous Goods International Air Transport Association Globally Harmonized System of Classification and Labelling of Chemicals Specific target organ toxicity - single exposure	
16.3.	Key literature references and source of data:		-		
16.4.	6.4. Classification and procedure 1272/2008 (CLP)		used to derive th	ne classification for mixture according to Regulation (EC)	
Classifi	Classification		Classification procedure		
_			-		
16.5.	Rele	evant H statements (numb	er and full text)		
	H: 301+311+331 To 302 + 312 + 332 Ho 314 Ca 317 M 341 Su		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 an allergic skin reaction. Suspected of causing genetic defects. May cause cancer.		
16.6.	Trai	ning advice:	-		
16.7.	Further information:		the product) We are not resp	coduct code marks different volumes (different packagings of consible for consequences in case of failure to comply with use or improper use of the product described in this data sheet.	



Page 18 of 18

Trading name:	STOCK DEVELOPER SOLUTION				
Product code:	STR-OT-X**	Date of compilation:	11 August 2021	Version:	1

A	ANNEX: Exposure scenario resulting to chemical safety assessment
-	



Page 1 of 16

Trading name:	STOCK SOLUTION OF SILVER AMMONIUM REAGENT				
Product code:	SSAR-OT-X**	Date of compilation:	12 August 2021	Version:	1

SECTI	ON 1: Identification of t	he substance	e/mixture	and of the company/undertaking			
1.1	Product identifier						
	Trading name:	STOCK SOL	UTION OF	SILVER AMMONIUM REAGENT			
	Chemical name:	-					
	Catalogue number:	SSAR-OT-X	SSAR-OT-X**				
1.2	Relevant identified use	es of the subs	tance or n	nixture and uses advised against			
	Uses:	For use with special staining kits.					
	Uses advised against:		e identified uses are advised.				
	Reason why uses advis	The product is intended for use only as an <i>in vitro</i> diagnossed against: medical device, registered at the Agency for Medicinal Prometical Devices and there is no reason to use it for other					
1.3	Details of the supplier	Is of the supplier of the safety data sheet					
	Supplier:		BioGnos	t Ltd.			
	Address:		Medjugo	orska 59, Zagreb			
	Telephone number:		+385 1 2	2409997			
	Telefax.:		+385 1 2	2404039			
	e-mail of competent p	erson:	msds@b	<u>piognost.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:			-			

SECTIO	CTION 2. Hazards identification						
2.1	Classification of the substance or mixture						
2.1.1	Classification according to Regulation (EC) No 1272/2008 (CLP)						
	Hazard class and cate	egory code:	Hazard statements*:				
	Aquatic Chronic 3	H412					
2.1.2.	Additional information						
	-						
*For fu	ll text of Hazard- and EU Hazar	d-statements: see S	ECTION 16				
2.2	Label elements						
	Product identification:	STOCK SOLUTION	ON OF SILVER AMMONIUM REAGENT				
	Identification number:	-					
	Authorization number:						
	Hazard pictograms:	-					
	Signal word:	-					



Page 2 of 16

Trading r	name:	STOCK SOLUTION OF SILVER AMMONIUM REAGENT				
Product of	code: SSAR-C	Date	of compilation: 1	12 August 2021	Version:	1

	Hazard statements:	H412 Harmful to aquatic life with long lasting effects.
	Precautionary statements:	P273 Avoid release to the environment P501 Dispose of contents/container in accordance with local regulations.
	Supplemetal hazard information (EU):	-
2.3	Other hazards	
	-	

SECTION 3. Co.	SECTION 3. Composition/information on ingredients									
CAS/ EC/ Index number	REACH Registration No	Weight % content (or range)	Identification name	Classification according to Regulation (EC) No 1272/2008 (CLP)						
7761-88-8/ 231-853-9/ 047-001-00-2	-	< 3 %	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						

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



Page 3 of 16

Trading name:	STOCK S	STOCK SOLUTION OF SILVER AMMONIUM REAGENT								
Product code:	SSAR-OT-X**	Date of compilation:	12 August 2021	Version:	1					

	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 perforation.			
4.3	Indication of any immediate medical attention and special treatment needed				
	-				

SECTI	SECTION 5. Firefighting measures							
5.1	Extinguishing media	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	SECTION 6. Accidental release measures					
6.1	Personal precautions, protective	Personal precautions, protective equipment and emergency procedures				
6.1.1.	For non-emergency personnel					
	Protective equipment: Use personal protective equipment (see Section 8).					
	Accident prevention methods: Evacuate members of all non-essential personnel and those members without protective equipment. Avoid breathing vapors and avoid contact with skin and eyes. Do not smoke.					
	Emergency procedures: Mark the area using proper signs.					
6.1.2.	For emergency responders:					
	Use protective equipment; in case of inadequate ventilation use adequate airways 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.				



Page 4 of 16

Trading name:	STO	STOCK SOLUTION OF SILVER AMMONIUM REAGENT								
Product code:	SSAR-OT-X**	Date of compilation:	12 August 2021	Version:	1					

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 involved materials with water.				
6.3.3.	Other information:	Do not use incompatible materials (see Section 10).				
6.4	Reference to other section	ons				
	See Section 7 for information on safe handling. See Section 8 for information on personal protection equipment.					
	See Section 13 for dispos	sal information.				

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:		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. Th	oroughly wa	sh hands after work and before eating.		
7.2	Conditions for safe storage, including any incon	npatibilities			
	Technical measures and storage conditions:		ghtly closed and upright set containers at ures ranging from +2 to +8 °C.		
	Packaging materials:	Manufactu containers	urer's original packaging. Avoid metal s.		
	Requirements for storage rooms and vessels:	Keep away	y from food and drink. Keep the containers sed.		
	Advices for storage equipment:	must be re	ge must be made of hard material; floors esistant to chemicals. There must be no drain tly leads into sewage system. Secure proper n.		
	Further information on storage conditions:	and do no	ace the unused material in the storage room of use empty containers for storing other. Do not store with incompatible materials on 10).		
7.3	Specific end use(s)				
	Recommendations:	-			



Air

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

										Page 5 of 10	6
Trading name:		S	тоск	SOLUT	ION	OF SII	LVER	AMMOI	NIUM REAG	ENT	
Product code:	SSAR-O	T-X**	Date of compilation: 12 Augus		ugust 2021	Version:	1				
Industrial	sector spe	cific solut	tions:		1	-					
CECTION O. F.	_	1.7									
SECTION 8. Expos		ols/perso	onal pr	otection							
8.1 Control pa	arameters			00	cun	ational	ovnoc	ure limit			
Substance CAS No					es/short	•		Biolog	ical limit values	;	
Substance					рр	m	n	ng/m³	2.0.09		
Silver (as Ag)	Silver (as Ag)		-		-			0.01		-	
Ammonia		133	6-21-6		20/	′50	1	14/36			
Substance name:	-										
EC No: -		CAS No):	-							
DNEL											
				lı	ndus	strial					
Route of	Acute			Acute		Chronic			Chronic		
exposure:	effect local effe		ect systemic		effect local		(effect systemic			
Oral	-		-			-		-			
Inhalation	-		-			-			-		
Dermal	-					-		-			
Critical physical pa	rameters: s	solubility,	flamm					-			
			1		onsı	umer					
Route of	Act			Acute	Chronic					Chronic	
exposure:		: local		ct systen	nic				effect systemic		
Oral	-		-			-			-		
Inhalation Dermal	-		-			-		-			
PNEC	-		-								
Environmental pro	toction tar	got			В	NEC					
Fresh water	tection tar	get					nation	, available			
Freshwater sedime	ntc				no information available no information available						
Marine water	1115				+			available available			
Marine water					-			available available			
Food chain					-			available available			
Microorganisms in	sewage tr	eatment			-			available available			
Soil (agricultural)	Jenrage a					no information available					

no information available



Page 6 of 16

Trading name:	STOCK S	STOCK SOLUTION OF SILVER AMMONIUM REAGENT								
Product code:	SSAR-OT-X**	Date of compilation:	12 August 2021	Version:	1					

8.2	Exposure controls				
8.2.1.	Appropriate engineering controls				
	Substance/mixture related measure prevent exposure during identified		Use the product in well ventilated rooms. Use personal protective equipment. Do not eat, drink or smoke in the workspace.		
	exposure: Organisational measures to prevent		In accordance with Section 7.		
			Organization of work in order to reduce other worker's influence during work process.		
	Technical measures to prevent exp	osure:	Secure proper workspace ventilation in order to keep concentration levels in air below permitted levels. Secure stations for rinsing eyes and showering.		
8.2.2.	Personal protection equipment				
8.2.2.1.	Eye and face protection:	Safety glasses that stick to face (EN 166) or visor in case of low levels of concentration in air; protective gas mask that covers entire face in case of higher levels of concentration in air.			
8.2.2.2.	Skin protection	entire lace in case of higher levels of concentration in air.			
	Hand protection:	Protect	tive nitrile gloves, >0.11 mm thick (EN 374).		
	Other skin protection:		antistatic clothing made of natural fibers (such as cotton) ng sleeves (EN 340) and shoes that cover the entire foot.		
8.2.2.3.	Respiratory protection:		quired under normal conditions of use. Use suitable tory protective device when high concentrations are t.		
8.2.2.4.	Thermal hazards:	No info	ormation available		
8.2.3.	Environmental exposure controls				
	Substance/mixture related measures to prevent exposure:	See Se	ction 6		
	Structural measures to prevent exposure:	Use mo	odern equipment.		
	Organisational measures to prevent exposure:	Adapt workpl	the work process to the required working conditions of the ace.		
	Technical measures to prevent exposure:	See Se	ction 6		

SECTIO	ON 9. Physical and chemical propert	ies				
9.1	Information on basic physical and chemical properties					
		Value	Method			
	Physical state:	liquid	No information available			



Page 7 of 16

Trading name:	STOCK SOLUTION OF SILVER AMMONIUM REAGENT							
Product code:	SSAR-OT-X**	Date of compilation:	12 August 2021	Version:	1			

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

SECTION	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:	No dangerous reactions known.
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



								Pag	ge 8 of 16	5
Trading na	ame:		STOCK S	SOLUTION	OF SILVE	R AMMO	NIUM REA	AGENT		
Product co	ode: S	SSAR-OT-X	(**	Date of c		n: 12 A	12 August 202		rsion:	1
	·					i				
11.1 In	formation	on toxicol	ogical effects							
Ad	cute toxicit	y:								
Route of exposure:		Method	Specie	s Do	ose LD ₅₀ /LC ATE _{mix}	.D ₅₀ /LC ₅₀ or Expo		Exposure time		ts
Oral:		-	-		-		-		-	
Dermal:		-	-		-		-		-	
Inhalation:		-	-		-		-		-	
	i .		·					i		
Sp	pecific targ	et organ to	oxicity – single	exposure (S	STOT SE):					
;		-	Specific effects	·	Т	arget orga	n		Note	
Oral:		No inform	ation available		No inform	nation avail	able	-		
Dermal:		No inform	ation available		No inform	nation avail	able	_		
Inhalation:		No inform	ation available		No information available -					
	į.				i.		į			
As	spiration h	azard:		No infor	mation avai	lable.				
:	·									
Irr	ritation and	d corrosior	1							
		Exp	osure time	Spec	ies E	valuation	Method		Note	
Skin		-		_	_		_	_		
corrosion/i	rritation:	-		_	_		_	-		
Serious eye		-		_	_		_	-		
damage/irr	ritation									
Se	ensitization	1								
Skin sensiti										
Respiratory		ion: -								
	,	1								
Sy	mptoms re	elated to t	ne physical, che	emical and t	toxicologica	al character	istics			
Oral expos	ure:	No info	rmation availab	ole.						
Dermal exp	oosure:	No info	rmation availab	ole.						
Inhalation (exposure:	No info	rmation availab	ole.						
Eye exposu	ıre:	No info	rmation availab	ole.						
Re	epeated do	se toxicity	(subacute, sub	ochronic, ch	ronic)		:		-	
		Dose	Exposure time	e Speci	es I	Method	Evalua	tion	Note	



Page 9 of 16

Trading name:	STOCK SOLUTION OF SILVER AMMONIUM REAGENT							
Product code:	SSAR-OT-X**	Date of compilation:	12 August 2021	Version:	1			

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

Specific target organ toxicity – repeated exposure (STOT RE): Specific effects Target organ Note Subacute oral No information available No information available Subacute dermal No information available No information available Subacute inhalation No information available No information available Subchronic oral No information available No information available Subchronic dermal No information available No information available Subchronic inhalation No information available No information available Chronic oral No information available No information available Chronic dermal No information available No information available Chronic inhalation No information available No information available

CMR effects (carcinogenicity; mutagenicity; reproductive toxicity)



Page 10 of 16

Trading name:	STOCK SOLUTION OF SILVER AMMONIUM REAGENT							
Product code:	SSAR-OT-X**	Date of compilation:	12 August 2021	Version:	1			

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

SECTION 12. Ecological information									
12.1 Toxicity									
Acute (short-term) toxicity	Dose	Exposure time	Species	Method	Evaluation	Note			
Fish	LC ₅₀	96 hours	Leuciscus idus (Golden orfe)	-	-	0.011 mg/l (silver nitrate)			
Crustacea:	EC ₅₀	48 hours	Daphnia magna (Water flea)	-	-	0.0082 mg/l (silver nitrate)			
Algae/aquatic plants	IC ₅₀	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 ₅₀	96 hours	No information available	No information available	No information available	-			
Crustacea:	EC ₅₀	48 hours	No information available	No information available	No information available	-			



Page 11 of 16

Trading name: STOCK SOLUTION OF SILVER AMMONIUM REAGENT							NT		
Product code	: S	SAR-OT-X**		Г	Date of compilation: 12 August 2021 Version: 1				
Algae/aquatic	plants	IC ₅₀	72 hours		No information available	No information available	No informatior available	-	
Other organisr	ns	-	-		-	-	_	-	
		:				i i			
12.2 Persis	tence a	ınd degradab	ility						
Abiot	ic degra	adation							
	De	egradation ha	lf-lives		Method	Evaluation	1	Note	
Marine water	No i	nformation av	/ailable		information ailable	No information available	-		
Fresh water	No i	nformation av	/ailable		information ailable	No information available	-		
Air	No i	nformation av	/ailable		information ailable	No information available	-		
Soil	No i	nformation av	wailahla :		information ailable	No information available			
Biode	gradati	on							
% Degradati	on	Time (d	ays)	Method		Evaluation		Note	
		No inf available	ormation	No information available		No information available		nformation lable	
12.3 Bioac	cumula	tive potential							
Octar	ol-wate	er partition co	efficient (log l	Kow)				
Value	Conce	entration	рН	°C	Method	Evalua	ition	Note	
-	-			-	-	-	-		
	ncentra	ation factor (B							
Value	_	Specie			Method	Evaluation		Note	
No information available		lo info vailable	ormation		information ailable	No information available	on -		



Page 12 of 16

Trading name:	STOCK SOLUTION OF SILVER AMMONIUM REAGENT				
Product code:	SSAR-OT-X**	Date of compilation:	12 August 2021	Version:	1

		onic ecotox		Exposure	Ci	N 4 - +1		F	_14:	NI-1-
	Va	alue	Dose	time	Species	Meth	nod	ΕV	aluation	Note
~ 1				i i	No	No		No		
Chron	ic toxi	city on fish	LC ₅₀		information available	inform availab			rmation lable	-
Chroni	ic toxi	city on		1	No	No		No		
		aphnia)	EC ₅₀	1	information available	inform availab			rmation lable	-
12.4	Мо	bility in soil								
	-	<u>- </u>	icted distributi	on in environme	ntal compa	rtments:				
		information			•					
	Sur	face tensior	1:							
		Value	°C	Concentrati	on	Metho	od			Note
	No		No information	No information	on No ir	nformatio	n			
			available	available	available				-	
	Ads	sorption / de	-				\$			
Transp	ort		oefficient s constant	log Kow	Evapora	tion rate	ľ	Metho	od	Note
Soil-w	ater	No available	information	No information available	No infor available		No ir availa		ation .	-
Water-	-air	No available	information	No information available	No infor available		No ir availa		ation	-
Soil-ai	r	No available	information	No information available	No infor		No ir availa		ation .	_
12.5	Res	ults of PBT	and vPvB asses	ssment						
	No	information	n available							
126	O+1-	ner adverse	offocts							
12.6		information								
	INO	mnomiduor	ı avallable							
SECTION	ON 13	3. Disposal	consideration	s						
		_	ent methods							



Page 13 of 16

Trading name:	STOCK SOLUTION OF SILVER AMMONIUM REAGENT				
Product code:	SSAR-OT-X**	Date of compilation:	12 August 2021	Version:	1

13.1.1.	Product/Packaging dispo	osal:
	Submit for disposal to the Protection.	e legal person authorized by the Ministry of Environmental and Nature
13.1.2.	Waste codes/waste design	gnations according to Law:
	Packaging that contains	residual hazardous substances or is contaminated with hazardous substances
13.1.3.	Waste treatment – releva	ant information:
	No information available	<u> </u>
13.1.4.	Sewage disposal – releva	ant information:
	Waste must not be dispo	osed of into the sewage system.
13.1.5.	Other disposal recomme	ndations:
	Do not dispose of the product's remains into the sewage system. Submit the remains to the collector authorized by the ministry in charge. Do not dispose of the packaging into the sewage system. Subthe packaging to the collectors authorized by the ministry in charge.	
13.1.6.	Relevant Community pro	ovisions:
13.1.6.	Relevant Community pro	ovisions:
	Relevant Community pro	
SECTION	-	ЛАТІON
SECTION	- N 14 TRANSPORT INFORM	ЛАТІON
SECTION UN num	- N 14 TRANSPORT INFORM	MATION road (ADR)
SECTION UN num UN prop	Transporting/shipment by ber:	MATION road (ADR) 3082
SECTION UN num UN prop Transpor	Transporting/shipment by ber: er shipping name: rt hazard class(es):	MATION road (ADR) 3082 Environmentally hazardous substance, liquid, n.o.s. (silver ammonium)
SECTION UN num UN prop Transpor Packing	Transporting/shipment by ber: er shipping name: rt hazard class(es):	road (ADR) 3082 Environmentally hazardous substance, liquid, n.o.s. (silver ammonium) 9
SECTION UN num UN prop Transpor Packing Environn	Transporting/shipment by ber: per shipping name: rt hazard class(es): group:	road (ADR) 3082 Environmentally hazardous substance, liquid, n.o.s. (silver ammonium) 9 III
UN num UN prop Transpor Packing Environn Special p	Transporting/shipment by ber: per shipping name: rt hazard class(es): group: mentally hazardous:	road (ADR) 3082 Environmentally hazardous substance, liquid, n.o.s. (silver ammonium) 9 III
SECTION UN num UN prop Transpor Packing Environn Special p	Transporting/shipment by ber: oer shipping name: rt hazard class(es): group: mentally hazardous: orecautions for user: Transporting/shipment by	road (ADR) 3082 Environmentally hazardous substance, liquid, n.o.s. (silver ammonium) 9 III
SECTION UN num UN prop Transpor Packing Environn Special p	Transporting/shipment by ber: oer shipping name: rt hazard class(es): group: mentally hazardous: orecautions for user: Transporting/shipment by	road (ADR) 3082 Environmentally hazardous substance, liquid, n.o.s. (silver ammonium) 9 III - - rail (RID)
UN num UN prop Transpor Packing Environn Special p UN num UN prop	Transporting/shipment by ber: oer shipping name: rt hazard class(es): group: mentally hazardous: orecautions for user: Transporting/shipment by ber:	MATION road (ADR) 3082 Environmentally hazardous substance, liquid, n.o.s. (silver ammonium) 9 III - rail (RID) 3082
UN num UN prop Transpor Packing Environn Special p UN num UN prop Transpor	Transporting/shipment by ber: per shipping name: rt hazard class(es): group: mentally hazardous: precautions for user: Transporting/shipment by ber: per shipping name: rt hazard class(es):	MATION road (ADR) 3082 Environmentally hazardous substance, liquid, n.o.s. (silver ammonium) 9 III rail (RID) 3082 Environmentally hazardous substance, liquid, n.o.s. (silver ammonium)
SECTION UN num UN prop Transpor Packing Environn Special p UN num UN prop Transpor Packing	Transporting/shipment by ber: per shipping name: rt hazard class(es): group: mentally hazardous: precautions for user: Transporting/shipment by ber: per shipping name: rt hazard class(es):	road (ADR) 3082 Environmentally hazardous substance, liquid, n.o.s. (silver ammonium) 9 III rail (RID) 3082 Environmentally hazardous substance, liquid, n.o.s. (silver ammonium) 9



Page 14 of 16

Trading name:	STOCK SOLUTION OF SILVER AMMONIUM REAGENT		NT		
Product code:	SSAR-OT-X**	Date of compilation:	12 August 2021	Version:	1

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 (II	MDG)
UN number:	3082
UN proper shipping name:	Environmentally hazardous substance, liquid, n.o.s. (silver ammonium)
Transport hazard class(es):	9
Packing group:	Ш
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:	Ш
Environmentally hazardous:	-
Special precautions for user:	-

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



Page 15 of 16

Trading name:	STOCK SOLUTION OF SILVER AMMONIUM REAGENT		NT		
Product code:	SSAR-OT-X**	Date of compilation:	12 August 2021	Version:	1

	None	
15.2	Chemical safety assessmer	nt
	National legislation:	Chemicals Act, Regulation on classification, packaging and labeling of dangerous substances, Ordinance on occupational exposure limit values and on biological limit values, Regulation on categories, types and classification of waste with a waste catalog and list of hazardous waste, Ordinance on writing Material safety data sheet, Transport of Hazardous Substances Act
	Information according 199 guideline)	9/13/EC about limitation of emissions of volatile organic compounds (VOC-
	Other EU regulations:	EC Regulation No. 1906/2007 and EC Regulation No. 1272/2008 of the European Parliament and the European Council; The European Commission Regulation No. 453/2006 of 2010 on changes and amendments to the Regulation (EC) No. 1907/2006 of the European Parliament and Council on registration, evaluation, authorization and restriction of chemical substances (REACH); EC Regulation No. 2037/200 of the European Parliament and Council from 29 June 2000 on substances that damage the ozone layer; EC Regulation No. 689/2008 of the European Parliament and Council from 17 June 2008 concerning the export and import of dangerous chemicals; EC Regulation No. 850/2004 of the European Parliament and Council from 29 April 2004 about persistent organic pollutants; Directive 2008/98/EC of the European Parliament and Council of 19 November 2008 on waste and repealing certain Directives

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



Page 16 of 16

Trading name:	STOCK SOLUTION OF SILVER A		MMONIUM REAG	ENT	
Product code:	SSAR-OT-X**	Date of compilation:	12 August 2021	Version:	1

	H272	May intensify fire; oxidiser.
	H314	Causes severe skin burns and eye damage.
	H: H400	Very toxic to aquatic life.
	H410	Very toxic to aquatic life with long lasting effects.
	H412	Harmful to aquatic life with long lasting effects
16.6.	Training advice:	
16.7.	Further information:	** "X" in the product code marks different volumes (different packagings of the product) We are not responsible for consequences in case of failure to comply with
		instructions for use or improper use of the product described in this material safety data sheet.

ANNEX: Exposure scenario resulting to chemical safety assessment