

GRIMELIUS KIT

The kit contains:

Acetate buffer, Grimelius

Hydroquinone - sodium sulphite

Nuclear Fast Red (Kernechtrot) reagent

Silver nitrate, 1% solution

Sodium thiosulfate, 5% solution



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Trading name:	ACETATE BUFFER, GRIMELIUS				
Product code:	APG-OT-X**	Date of compilation:	21 Dec 2022	Version: 3	

SECTION	ON 1: Identification of t	the substan	ce/mixture a	and of the company/undertaking	
1.1.	Product identifier				
	Trading name:	ACETATE	BUFFER, GRIN	MELIUS	
	Chemical name:	-			
	Catalogue number:	APG-OT-	X **		
1.2.	Relevant identified use	es of the sub	ostance or mix	xture and uses advised against	
	Uses:		For use w	ith Grimelius kit.	
	Uses advised against:		Only the i	dentified uses are advised.	
	Reason why uses advised against:		The product is intended for use only as an <i>in vitro</i> diagnostic medical device, registered at the Agency for Medicinal Products and Medical Devices and there is no reason to use it for other purposes		
1.3.	Details of the supplier	of the safet	y data sheet		
	Supplier: B		BioGnost Ltd.	BioGnost Ltd.	
	Address:		Medjugorska 59, Zagreb		
	Telephone number:		+385 1 2409997		
	Fax no.:		+385 1 2404039		
	e-mail of competent person: <u>r</u>		msds@biognost.hr		
	National contact:		-		
1.4.	Emergency telephone	number			
	National Protection ar	nd Rescue D	irectorate:	112	
	Medical information:			+385 1 2348 342	
	Other information:			-	

SECTIO	SECTION 2. Hazards identification					
2.1.	Classification of the substance or mixture					
2.1.1.	Classification according to Regulation (EC) No 1272/2008 (CLP)					
	Hazard class and catego	ry code:	Hazard statements*:			
	Not identified as hazardous substance					
2.1.2.	Additional information					
	-					
*For fu	ll text of Hazard- and EU Hazard-s	tatements: see Se	ction 16			
2.2.	Label elements					
	Product identification:	ACETATE BUFI	FER, GRIMELIUS			
	Identification number: -					
	Authorization no.:					
	Hazard pictograms:	-				



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

SECTION 3. Co	SECTION 3. Composition/information on ingredients						
CAS/ EC/ Index no.	REACH Registration No	Weight % content (or range)	Identification name	Classification according to Regulation (EC) No 1272/2008 (CLP)			
-	_	-	Contains no hazardous substances	-			

SECTIO	TION 4. First aid measures				
4.1.	Description of first aid measures				
	General notes:		-		
	Following inhalation:		No information available		
	Following skin contact:		No information available		
	Following eye contact:		No information available		
	Following ingestion:		No information available		
	Self-protection of the first	aider:	Treat symptomatically.		
4.2.	Most important symptoms	and eff	ects, both acute and delayed		
	Following inhalation:	No i	nformation available		
	Following skin contact:	No i	nformation available		
	Following eye contact:	No information available			
	Following ingestion:	No i	No information available		
4.3.	Indication of any immediate medical attention and special treatment needed				
	-				

SEC	SECTION 5 Firefighting measures			
5.1.	Extinguishing media			



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

SECTIO	ON 6. Accidental release meas	ures		
6.1.	Personal precautions, protective equipment and emergency procedures			
6.1.1.	For non-emergency personnel			
	Protective equipment:	Use personal protective equipment (see Section 8).		
	Accident prevention methods	Evacuate members of all non-essential personnel and those members without protective equipment. Remove all sources of sparks and ignition. Do not smoke.		
	Emergency procedures:	Mark the area using proper signs.		
6.1.2.	For emergency responders:			
	Wear protective equipment (see Section 8).			
6.2.	Environmental precautions:			
	Do not dispose of in sewage, drainage system and waterways. In case of large spillage contact Nation Protection and Rescue Directorate (NPRD) on 112.			
6.3.	Methods and material for containment and cleaning up			
6.3.1.	Bunding, covering of drains; capping procedures:	Sand or clay barriers.		
6.3.2.	Cleaning up:	Where possible, the substance can be absorbed by using inflammable material (sand, diatomaceous earth, vermiculite). Place the waste material in tightly closed impermeable containers. Store the substance in well ventilated storage rooms until disposal. Submit for disposal to the legal persons authorized by the Ministry of Environmental and Nature Protection. After disposal of the products, wash the area and and involved materials with water.		
6.3.3.	Other information:	-		
6.4.	Reference to other sections			



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See Section 7 for information about secure handling.

See Section 8 for information about personal protective equipment.

See Section 13 for information about containment.

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

SECTIO	SECTION 8. Exposure controls/personal protection									
8.1.	Control parameters									
	Substance	CAS No	•	exposure limit term values	Biological limit values					
			ppm	mg/m³	_					



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											. age s ee
Trading na	ame:		ETATE BUFFER, GRIMELIUS								
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			1								
-			-			-		-		No infor	mation available
Substance name:	_										
EC No:	-		CAS No:	-							
DNEL											
					Inc	dustrial					
Route of		,	Acute		Acut	е			Chron	ic	Chronic
exposure:		effe	ect local	е	ffect sys	temic		(effect lo	cal	effect systemic
Oral		-		-			-				-
Inhalation		-		-			-				-
Dermal		-		-			-				-
Critical phy	sical par	ameters: s	solubility, fla	mmab	ility, cor	rosivity:		-			
					Co	nsumer					
Route of		,	Acute	te Acut		е	Chronic		ic	Chronic	
exposure:		effe	effect local effect sys		temic	emic effect local		effect systemic			
Oral		-		-		-			-		
Inhalation		-		-	-		-			-	
Dermal		-		-			-				-
PNEC											
Environmer	ntal prot	ection tar	get			PNEC					
Fresh water	•					No infor	matic	n a	availabl	е	
Freshwater	sedimer	nts				No information available					
Marine wat	er					No information available					
Marine sed	iments					No information available					
Food chain						No infor	matic	n a	availabl	е	
Microorgar	nisms in	sewage tr	eatment			No infor	matic	n a	availabl	e	
Soil (agricu	ltural)					No information available					
Air						No infor	matic	n a	availabl	e	
	:										
8.2.	Exposu	ire contro	ls								
8.2.1.	Appro	oriate eng	ineering con	ntrols							
	measu		ıre related vent exposuı 1 uses:	re		•					Jse personal protective the workspace.
	Structu		ures to preve	ent	No info	rmation av	/ailab	ole			



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	Organisational measures prevent exposure:	to	Organization of work in order to reduce other worker's influence during work process.				
	Technical measures to pr exposure:	event	Secure proper workspace ventilation in order to keep concentration levels in air below permitted levels.				
8.2.2.	Personal protection equi	pment					
8.2.2.1.	Eye and face protection:		Safety glasses that stick to face (preventing splashing) (EN 166) or visor.				
8.2.2.2.	Skin protection						
			tive gloves must be according to the EU Directive 2016/425/EEC and ard EN 374.				
	Hand protection:		Glove material: nitrile rubber				
			Glove thickness: ≥0.50 mm				
			Break through time: >480 min				
	Other skin protection:	Wear antistatic clothing made of natural fibers (such as cotton) was sleeves (EN 13034), and shoes that cover the entire foot (EN 10334).					
8.2.2.3.	Respiratory protection:	filter fo	tive full face mask (EN 136) or half mask (EN 140) equipped with a or organic vapors, type "A" (boiling point >65°C) acording to EN) used when concentration levels exceed GVI.				
8.2.2.4.	Thermal hazards:	No inf	ormation available				
8.2.3.	Environmental exposure	controls					
	Substance/mixture relate measures to prevent exp		See Section 6				
	Structural measures to prescribe exposure:	revent	Use modern equipment.				
	Organisational measures prevent exposure:	to	Adapt the work process to the required working conditions of the workplace.				
	Technical measures to prevent exposure:		See Section 6				

SECTI	SECTION 9. Physical and chemical properties								
9.1.	Information on basic physical and chemical properties								
		Value	Method						
	Physical state:	liquid	No information available						
	Colour:	colourless	No information available						
	Odour/odour threshold:	no odor/no information available	No information available						
	Melting point / freezing point:	No information available	No information available						
	Boiling point or initial boiling point and boiling range:	No information available	No information available						



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	Flammability:	No information available	No information available
	Lover and upper explosion limit:	No information available	No information available
	Flash point:	No information available	No information available
	Auto-ignition temperature:	No information available	No information available
	Decomposition temperature:	No information available	No information available
	pH:	5.5 – 5.7	No information available
	Kinematic viscosity:	No information available	No information available
	Solubility:	No information available	No information available
	Partition coefficient n-octanol/water (log value):	No information available	No information available
	Vapour pressure:	No information available	No information available
	Density and/or relative density:	No information available	No information available
	Relative vapour density:	No information available	No information available
	Particle characteristics:	No information available	No information available
9.2.	Other information		
	-		

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

SECTION 11. Toxicological information										
11.1. Informatio	Information on toxicological effects									
Acute toxic	Acute toxicity:									
Route of exposure:	Method	Species	Effective dose LD ₅₀ /LC ₅₀ or ATE _{mixture}	Exposure time	Results					
Oral exposure:	No information available	-	LD ₅₀	-	-					
Dermal exposure:	No information available	_	LD ₅₀	-	_					



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Product code:	AP	APG-OT-X**		ate of compilation: 21		Dec 202	2	Version:	3	
			i					:		
Inhalation	N	o information	_		LC ₅₀			_		_
exposure:		available	_		LC50					
·										
Specific t	arget	organ toxicity	– single expo	osure (ST	OT SE):					
		Sp	ecific effects		Tai	rget (organ		Not	е
Oral exposure:		No informat	ion available		No inform	natio	n availabl	e -		
Dermal exposure:		No informat	ion available		No inform	natio	n availabl	e -		
Inhalation exposu	re:	No informat	ion available		No inform	natio	n availabl	e -		
Respirato	ry irrit	tation:	N	o inform	ation availab	le				
			,							
Irritation	and c	orrosion								
i		Exposure ti	me S	pecies	Evaluatio	n	Method		Note	
Skin irritation:	-	-	-		-		-	-		
Eye irritation:	-	_	_		-		_	_		
			<u> </u>		:	1		1		
Sensitizat	tion									
Dermal exposure:	No	information a	available							
Inhalation exposure:	No	information a	available							
Symptom	ns rela	ted to the phy	/sical, chemic	al and to	xicological cl	narac	teristics			
Oral exposure:		No informatio	n available							
Dermal exposure:		No informatio	n available							
Inhalation exposu	re:	No informatio	n available							
Eye exposure:		No informatio	n available							
Repeated	l dose	toxicity (suba	cute, subchro	nic, chro	nic)					
		DOSE :	Exposure time	Species	Met	hod	Ev	valuation	Note	e
Subacute oral	No i availa	ntormation ble	No information available	No informa availabl		rmat		lo nformatio vailable	n -	
Subacute dermal	No i availa	ntormation	No information available	No informa availab		rmat		lo nformatio vailable	n -	



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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

	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 (carcinogenici	CMR effects (carcinogenicity, mutagenicity, reproductive toxicity)			
Carcinogenicity:	No information available			
Mutagenicity in-vitro:	No information available			
Genotoxicity:	No information available			
Mutagenicity in-vivo:	No information available			



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	Germ cell mutagenicity:	No information available				
	Reproductive toxicity:	No information available				
	·					
	Summary of evaluation of the C	CMR properties: -				
11.2	Information on other hazards:					
11.2.1.	Endocrine disrupting properties:					
	Endocrine disrupting properties: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.					
11.2.2.	Other informations:					
	-					

SECTION 12. Ecological information

12.1. Toxicity

Acute toxicity	Dose	Exposure time	Species	Method	Evaluation	Note
Fish	LC ₅₀	96 hours	No information available	No information available	-	-
Crustacea:	EC ₅₀	48 hours	No information available	No information available	-	-
Algae/aquatic plants	IC ₅₀	8 days	No information available	No information available	-	-
Microorganisms	LC ₅₀	72 hours	-	-	_	-
Chronic toxicity	Dose	Exposure time	Species	Method	Evaluation	Note
Fish	LC ₅₀	96 hours	No information available	No information available	-	1
Crustacea:	EC ₅₀	48 hours	No information available	No information available	-	-



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Product cod							, GRIMELI			
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Algae/aquatic plants IC ₅₀		IC ₅₀	72 hou	rs	availahla		ormation ilable	_	-	
Other organis	sms	-	-		_	_		-	-	
		and degradal	oility							
Abio		radation								
	De	gradation hal	f-lives		Method			Evaluation		Note
Marine water	No ir	formation av	ailable	No	information availa	able	No inform	ation avai	lable	-
Fresh water	No ir	nformation av	ailable	No	information availa	able	No inform	ation avai	lable	-
Air	No ir	nformation av	ailable	No	information availa	able	No inform	ation avai	lable	-
Soil	No ir	nformation av	ailable	No	information availa	able	No inform	ation avai	lable	-
	egradat							1		
% Degradation		Time (day			Method		Evaluation		Note	
No information available		o infori railable		No information available			No information available		No information available	
12.3. Bioa	ccumula	ative potentia	ıl							
		efficient: n-oc					1	1		
Value		entration	рН	°C			Evaluation		No	te
-	No i availab	nformation le	-	-	No information	on	No inform available	ation	-	
Rioc	oncentr	ation factor (BCF)							
Value		Specie			Method		Evaluatio	on	Not	e
No information available available					No information available		No information available			
		avanable		av	anabic	<u> </u>	valiable			
Chrc	nic eco	toxicity								



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Produ	ct co	de:	APG-	-OT-X**		Date o	f con	npilatio	on: Z	21 Dec	2022		Version:	3
	Vā	alue Dose Expos			Species		Me	thod	Evaluation		ion	Note		
Chronic toxicity on fish LC ₅₀					nation ole	No information available		No information available		ation -				
Chronic toxicity on crustacea (<i>Daphnia</i>)			No informa availabl	ition ir	No n information available		No inforr availa	nation ble		inform lable	ation -			
12.4.	Мо	bility in	soil											
	Kno	own or p	redict	ed distributi	on in env	rironmen	ntal co	ompart	ments:					
	No	informa	ition a	vailable										
	Sur	face ten	sion:		1		1				1			
		Value		°C	Cond	centratio	on	Method		Note		!		
	information in			o formation vailable	No information available		n No information available				-			
	Ads	sorption	/ des	orption										
Transp		A	/D coe	efficient constant	log Kow		Eva	aporatio	on rate		Metho	od	I	Note
Soil-wa	ater	No availal	i	nformation	No info						No information available		-	
Water-	-air	No availal		nformation	No info available			inform iilable	ation	No information available		ation	-	
Soil-aiı	r	No availal		nformation	No info available		n No information No information available							
12.5.	Res	ults of F	PBT an	d vPvB asses	ssment									
	acc	ording t	o REA	ixture does i CH Article 5 2018/605 at l	7(f) or Co	mmissio	n Del	legated						
12.6.	Fnc	locrine (disrup	ting properti	es									
			J. up	g properti										

The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission

Regulation (EU) 2018/605 at levels of 0.1% or higher.



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12.7.	Other adverse effects								
	No information available								
SECTION	SECTION 13. Disposal considerations								
13.1.	Waste treatment methods								
13.1.1.	Product/Packaging disposal:								
	Submit for disposal to the lega Protection.	I person authorized by the Ministry of Environmental and Nature							
13.1.2.	Waste codes/waste designation	ns according to Law:							
	No information available								
12.12									
13.1.3.	Waste treatment – relevant info	ormation:							
	No information available								
13.1.4.	Sewage disposal – relevant information:								
	Waste must not be disposed of								
	<u>'</u>	3 7							
13.1.5.	Other disposal recommendatio	ons:							
	Do not dispose of the product's remains into the sewage system. Submit the remains to the collectors authorized by the ministry in charge. Do not dispose of the packaging into the sewage system. Submit the packaging to the collectors authorized by the ministry in charge. Do not dispose of in places where ignition may occur.								
13.1.6.	Relevant Community provisions	S:							
	-								
SECTION	N 14. Transport information								
	Transporting/shipment by road (
UN num		Not subject to transport regulations.							
	er shipping name:	-							
	rt hazard class(es):	-							
Packing -		-							
	nentally hazardous:	-							
Special precautions for user: -									



SAFETY DATA SHEET

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

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

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



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	Authorizations:	-
	Restrictions:	-
	Other EU regulations:	Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC; Directive 2004/42/CE of the European Parliament and of the Council of 21 April 2004 on the limitation of emissions of volatile organic compounds due to the use of organic solvents in certain paints and varnishes and vehicle refinishing products and amending Directive 1999/13/EC; Council Directive 98/24/EC of 7 April 1998 on the protection of the health and safety of workers from the risks related to chemical agents at work; Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006; REACH Restrictions on the manufacturing, placing on the market and use of certain dangerous substances, mixtures and articles (Annex XVII);
	Information according 199 guideline)	9/13/EC about limitation of emissions of volatile organic compounds (VOC-
	National legislation:	Chemicals Act, Regulation on classification, packaging and labeling of dangerous substances, Ordinance on occupational exposure limit values and on biological limit values, Regulation on categories, types and classification of waste with a waste catalog and list of hazardous waste, Ordinance on writing Material safety data sheet, Transport of Hazardous Substances Act
15.2.	Chemical safety assessmer	nt
	None	

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



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Trading name:	ACETATE BUFFER, GRIMELIUS				
Product code:	APG-OT-X**	Date of compilation:	21 Dec 2022	Version:	3

16.2.	Abbreviations and acronyms:	ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road) IMDG: International Maritime Code for Dangerous Goods IATA: International Air Transport Association GHS: Globally Harmonised System of Classification and Labelling of Chemicals EINECS: European Inventory of Existing Commercial Chemical Substances CAS: Chemical Abstracts Service (division of the American Chemical Society) DNEL: Derived No-Effect Level (UK REACH) LC50: Lethal concentration, 50 percent LD50: Lethal dose, 50 percent PBT: Persistent, Bioaccumulative and Toxic vPvB: very Persistent and very Bioaccumulative		
16.3.	Key literature references and source of data:	-		
16.4. Classification and procedure us 1272/2008 (CLP)		used to derive the classification for mixture according to Regulation (EC)		
Classifi	cation	Classification procedure		
_		-		
16.5.	Relevant H statements (numb	er and full text)		
	H: -	-		
16.6.	Training advice:	-		
16.7.	Further information:	** "X" in the product code marks different volumes (different packagings of the product) We are not responsible for consequences in case of failure to comply with instructions for use or improper use of the product described in this material safety data sheet.		

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Exposure scenario resulting to Chemical safety assessment

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Trade name:	HYDROQUINONE - SODIUM SULPHITE				
Product code:	HNS-15-X**	Date of compilation:	21 Dec 2022	Version:	3

SECTI	ON 1: Identification of t	the substan	ce/mixture a	nd of the company/undertaking
1.1.	Product identifier			
	Trade name:	HYDROQI	JINONE – SOI	DIUM SULPHITE
	Chemical name:	-		
	Catalogue number:	HNS-15-X	(**	
1.2.	Relevant identified use	es of the sub	stance or mix	ture and uses advised against
	Uses:		For use with	Grimlius kit.
	Uses advised against:		Only the ide	ntified uses are advised
	Reason why uses advis	sed	The product is intended for use only as an <i>in vitro</i> diagnostic medical device and there is no reason to use it for other purposes	
1.3.	Details of the supplier	of the safet	y data sheet	
	Supplier:		BioGnost Ltd.	
	Address:		Medjugorska 59, Zagreb +385 1 2409997 +385 1 2404039	
	Telephone number:			
	Telefax:			
	e-mail of competent p	erson:	msds@biognost.hr	
	National contact:		_	
1.4.	Emergency telephone	numbers		
	National Protection an	nd Rescue D	irectorate:	112
	Medical information:			+385 1 2348 342
	Other information:			-

SECTIO	SECTION 2. HAZARDS IDENTIFICATION					
2.1.	Classification of the substance or mixture					
2.1.1.	Classification according to Regulation (EC) No 1272/2008 (CLP)					
	Hazard class and category code:	Hazard statement*:				
	Acute Tox. 4	H302				
	Skin Sens. 1	H317				
	Eye Dam. 1	H318				
	Muta. 2	H341				
	Carc. 2	H351				
	Aquatic Acute 1	H400				
2.1.2.	Additional information					
	-					
* For fu	ull text of Hazard- and EU Hazard-statements: se	e SECTION 16				
2.2.	Label elements					



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Trade name:		HYDROQUINONE - SODIUM SULPHITE			
Product code:	HNS-15-X**	Date of compilation:	21 Dec 2022	Version:	3

	Product identification:	HYDROQUINONE, SOLUTION		
	Identification number:	-		
	Authorisation number:	-		
	Hazard pictograms:	GHS05 GHS07 GHS08 GHS09		
	Signal word:	Danger		
	Hazard statement:	H302 Harmful if swallowed. H317 May cause an allergic skin reaction. H318 Causes serious eye damage. H341 Suspected of causing genetic defects. H351 Suspected of causing cancer. H400 Very toxic to aquatic life.		
	Precautionary statements:	P273 Avoid release to the environment. P280 Wear protective gloves/protective clothing/eye protection/face protection. P302+P352 IF ON SKIN: Wash with plenty of soap and water. P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P308+P313 IF exposed or concerned: Get medical advice/attention.		
	Supplemetal hazard information (EU):	-		
2.3.	Other hazards			
	Endocrine Disrupting Proper	rties:		
	No known endocrine disrupting properties Results of PBT and vPvB assessment : According to the results of its assessment, this substance is not a PBT or a vPvB.			

SECTION 3. Composition/information on ingredients



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Trade name:	HYDROQUINONE - SODIUM SULPHITE				
Product code:	HNS-15-X**	Date of compilation:	21 Dec 2022	Version:	3

CAS/ EC/ Index number	REACH Registration No	Weight % content (or range)	Identification name	Classification according to Regulation (EC) No 1272/2008 (CLP)
123-31-9/ 204-617-8/ 604-005-00-4	-	30 %	hydroquinone	Acute Tox. 4; H302 Skin Sens. 1; H317 Eye Dam. 1; H318 Muta. 2; H341 Carc. 2; H351 Aquatic Acute 1; H400
7757-83-7/ 231-821-4/ -	-	70 %	sodium sulphite, anhydrous	not classsified

4.1.	Description of first aid measures			
	General notes:	Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident. Immediately remove any clothing soiled by the product.		
	Following inhalation:	Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist. In case of unconsciousness place patient stably in side position for transportation.		
	Following skin contact:	Remove contaminated clothing. Immediately wash with plenty of water and soap and rinse thoroughly. If symptoms persist, consult a doctor.		
	Following eye contact:	Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.		
	Following ingestion:	DO NOT induce vomiting. If symptoms persist, consult a doctor.		
	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 a	and effects, both acute and delayed		
	Following inhalation:	High concentration vapor inhalation may cause headache, dizziness, difficult breathing and unconsciousness.		
	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.		
	Following ingestion:	Nausea, vomiting (danger of aspiration), diarrhoea. Aspiration may cause headache, vertigo, nausea, dazed feeling-unconsciousness/coma, possible hypothermia, reactions to the heart/circulatory system such as vasodilation (flush), hypotension, arrhythmia (possible ventricular fibrillation through cardiac sensitization), danger of central respiratory paralysis or of cardiac arrest; functional disturbance to the liver and kidneys and persistent disturbance to the CNS as sequelae.		



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Trade name:	HYDROQUINONE - SODIUM SULPHITE				
Product code:	HNS-15-X**	Date of compilation:	21 Dec 2022	Version:	3

4.3.	Indication of any immediate medical attention and special treatment needed
	No further relevant information available.

SECTIO	SECTION 5. Firefighting measures				
5.1.	Extinguishing media				
	Suitable extinguishing media:	CO ₂ , powder or water spray. Fight larger fires with water spray or alcohol resistant foam.			
	Unsuitable extinguishing media:	water with full jet			
5.2.	Special hazards arising from the sub	stance or mixture			
	Hazardous by products of fire:	Incomplete combustion of the product.			
5.3.	Advice for firefighters				
	Use a self-contained open-circuit compressed air breathing apparatus and fireproof clothing.				
5.4.	Additional information				
	Collect contaminated firefighting was Do not contaminate the environmen	· , ,			

SECTIO	SECTION 6. Accidental release measures					
6.1.	Personal precautions, protective equipment and emergency procedures					
6.1.1.	For non-emergency personn	el				
	Protective equipment:		Use personal protective equipment (see Section 8). Keep unprotected persons away.			
	Accident prevention methods:		Evacuate members of all non-essential personnel and those members without protective equipment. Do not breathe in vapor, ensure adequate ventilation and avoid contact with skin and eyes. Remove all sources of sparks and ignition. Do not smoke.			
	Emergency procedures: Mark the area using proper signs.					
6.1.2.	For emergency responders:					
	Use protective 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 materials for containment and cleaning up					
6.3.1.	Bunding, covering of drains; capping procedures:	Sand or clay barriers.				



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Trade name:	HYDROQUINONE - SODIUM SULPHITE				
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6.3.2.	Cleaning up:	Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and 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 tools that may cause sparks.		
6.4.	Reference to other secti	ons		
	See Section 7 for information on safe handling. See Section 8 for information on personal protection equipment. See Section 13 for disposal 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 heat and ignition. Carry out measures for preventing static electricity.		
	Measures to prevent aerosol and dust generation	n:	Secure proper ventilation.		
	Measures to protect the environment:		Prevent spilling into the sewage system and waterways.		
	Other measures:	-			
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 incom	npatibilities			
	Technical measures and storage conditions:	well ven	n tightly closed and upright set containers in a entilated storage rooms, and away from sources t, sunlight, and other incompatible substances.		
	Packaging materials:	Manufad	acturer's original packaging.		
	Requirements for storage rooms and vessels:	Keep aw tightly c	way from food and drink. Keep the containers closed.		
	Advices for storage equipment:	The storage must be made of hard material; floors must be resistant to chemicals. There must be no drain that directly leads into sewage system. Secure proper ventilation.			
	Further information on storage conditions:	and do	place the unused material in the storage room not use empty containers for storing other Is. Do not store with incompatible materials tion 10).		



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Trade name:		HYDROQUINONE	- SODIUM SULP	HITE		
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7.3.	Specific end use(s)	
	Recommendations:	-
	Industrial sector specific solutions:	-

	1								
SECTIO	N 8. Exposur	e contr	ols/persona	l protect	tion				
8.1.	Control para	meters							
Substance				•	upational exposure limit lues/short term values		Bio	ological limit values	
Substance				ppm	1	mg/m³			
Hydroquinone		123-3	1-9	-/0,5	5	-/-	-		
Substar	nce: -								
EC No: - CAS N		CAS No:	_						
DNEL									
					Industi	rial			,
Route o	of exposure:		Acute effect		Acute effect		Chronic effect		Chronic effect
Noute	эт схрозите.		local	al syster			local		systemic
Oral		-		-			-		-
Inhalati	ion	-		-			-		-
Dermal		-		-			-		-
Critical	physical parar	meters: s	solubility, fla	mmability	y, corrosiv	vity:	-		
		1		1	Consun	ner			
Route o	of exposure:	Acu	te effect		ute effect	ffect Chronic effec		effect	Chronic effect
			local	S	ystemic	local		1	systemic
Oral		-		-			-		-
Inhalation				-		-			
Dermal					-		-		
PNEC									
Environ	mental protec	tion tar	get		PN	PNEC			
Fresh w	/ater				No	No information available			
Freshw	ater sediments	5			No	No information available			

	_ _		
Environmental protection target	PNEC		
Fresh water	No information available		
Freshwater sediments	No information available		
Marine water	No information available		
Marine sediments	No information available		
Food chain	No information available		
Microorganisms in sewage treatment	No information available		
Soil (agricultural)	No information available		



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Air		No information available			
8.2.	Exposure controls				
8.2.1.	Appropriate engineering control	S			
	Substance/mixture related measures to prevent exposure during identified uses:	Use personal protective equipment. Do not eat, drink or smoke in the workspace.			
	Structural measures to prevent exposure:	No information available			
	Organisational measures to prevent exposure:	Organization of work in order to reduce other worker's influence during work process.			
	Technical measures to prevent exposure:	Secure proper workspace ventilation in order to keep concentration levels in air below permitted levels.			
8.2.2.	Personal protection equipment:	ent:			
8.2.2.1.	Eye and face protection:	Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as EN 166(EU)			
8.2.2.2.	Skin protection				
	Hand protection:	Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it. Full contact: Glove material: Viton Glove thickness: 0.7 mm Break through time: 480 min Splash contact: Glove material: Nitrile rubber Glove thickness: 0.4 mm Break through time: 35 min			
	Other skin protection:	Complete suit protecting against chemicals, flame retardant antistatic protective clothing (EN 13688). The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.			
8.2.2.3.	Respiratory protection:	Where risk assessment shows air-purifying respirators are appropriate use type ABEK (EN 14387) respirator cartridges as a backup to engine protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as CEN (EU).			
8.2.2.4.	Thermal hazards:	No information available			



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Trade name:	HYDROQUINONE - SODIUM SULPHITE				
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8.2.3.	Environmental exposure controls	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	al properties		
		Value	Method	
	Physical state:	solid	No information available	
	Physical state:	white	No information available	
	Colour:	No information available	No information available	
	Odour/odour threshold:	No information available	No information available	
	Melting point / freezing point:	No information available	No information available	
	Boiling point or initial boiling point and boiling range:	No information available	No information available	
	Flammability:	No information available	No information available	
	Lover and upper explosion limit:	No information available	No information available	
	Flash point:	No information available	No information available	
	Auto-ignition temperature:	No information available	No information available	
	Decomposition temperature:	No information available	No information available	
	рН:	No information available	No information available	
	Kinematic viscosity:	No information available	No information available	
	Solubility:	No information available	No information available	
	Partition coefficient n-octanol/water (log value):	No information available	No information available	
	Vapour pressure:	No information available	No information available	
	Density and/or relative density:	No information available	No information available	
	Relative vapour density:	No information available	No information available	
	Particle characteristics:	No information available	No information available	
.2.	Other information			



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Trade name:	HYDROQUINONE - SODIUM SULPHITE					
Product code:	HNS-15-X**	Date of compilation:	21 Dec 2022	Version:	3	

SECTIO	SECTION 10.: Stability and reactivity				
10.1.	Reactivity:	No relevant information available.			
10.2.	Chemical stability:	The product is chemically stable under recommended storage conditions.			
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. Infori	Toxicological inform mation on hazard clas		ed in Regula	ation (EC) No 127	72/2008			
Acute	e toxicity:							
Route of exposure:	Method	od Species		Effective Dose LD ₅₀ /LC ₅₀ or ATE _{mixture}	Exposure	time	Results	
Oral:	No information available	n rat		LD ₅₀	No informa	ation	367.3 mg/kg (hydroquinone)	
Dermal:	No information available	า -		-	No informa	ation	367.3 mg/kg (hydroquinone)	
Inhalation:	No information available	1 -		_	No informa	ation	No information available	
	Specific target organ toxicity - single exposu		•	Target organ		Note		
Oral:	No information			No information available		_		
Dermal:	No information			No information available		-		
Inhalation:		mation available		No information available		No information available		
Aspir	ation hazard:		-					
Irritat	ion and corrosion							
		posure time	Species	Evaluation	Method		Note	
Skin corrosion	/irritation -	_		-	-	No inf	ormation available	
Serious eye damage/irritation								



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Trade name:	HYDROQUINONE - SODIUM SULPHITE				
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Sensitiz	ation					
Skin sensitization	n: No informa	ation available				
Respiratory sensitization:	No informa	ation available				
Sympto	ms related to physic	cal, chemical, a	nd toxicologica	properties		
Oral exposure: nausea, dazed fineart/circulator ventricular fibri		feeling-uncons y system such llation through t; functional di	ciousness/coma as vasodilation cardiac sensitiz	hoea. Aspiration a, possible hypot (flush), hypotens ation), danger o e liver and kidne	hermia, reaction sion, arrhythmia f central respira	s to the (possible
Dermal exposure	Causes skin irrit dry skin.	tation, redness,	, swelling. Prolo	nged or repeate	d contact causes	defatting and
Inhalation exposure:	breathing and suttocating. High concentration vapor inhalation may cause headach				adache, malaise	
Eye exposure:	Vapors irritate of blurred vision, p		may cause irrit	ation and redne	ss, lacrimation, p	pain, swelling,
1						
Repeate	ed dose toxicity (sub	acute, subchro	onic, chronic)			ï
	Dose	Exposure time	Species	Method	Evaluation	Note
Subacute oral	No information available	No information available	No information available	No information available	No information available	-
Subacute dermal	No information available	No information available	No information available	No information available	No information available	-
Subacute inhalation	No information available	No information available	No information available	No information available	No information available	-
Subchronic oral	No information available	No information available	No information available	No information available	No information available	-
Subchronic dermal	No information available	No information available	No information available	No information available	No information available	-
Subchronic inhalation	No information available	No information available	No information available	No information available	No information available	-



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Trade name:	HYDROQUINONE - SODIUM SULPHITE				
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Chronic oral	No informat available	ion No information available	No information available	No information available	No information available	٦ -	
Chronic derma	No informat available	ion No information available	No information available	No information available	No informatior available	ן –	
Chronic inhalation	No informat available	ion No information available	No information available	No information available	No information available	n -	
C	*		(CTO)	, DE).			
Speci	ic target organ to				gan	Note	
Subacute oral		Specific No information		Target or No information a		- Note	
Subacute derm	nal	No information		No information a		_	
Subacute inhal		No information		No information a		_	
Subchronic ora		No information		No information a		_	
Subchronic de	rmal	No information available		No information available		_	
Subchronic inh	alation	No information	n available	No information a	ıvailable	-	
Chronic oral		No information	n available	No information a	ıvailable	_	
Chronic derma	 	No information	No information available No information available		ıvailable	_	
Chronic inhala	ion	No information	n available	No information a	vailable	-	
	effects (carcinoge	nicity, mutagenici	ty, reproductive	e toxicity)			
	nogenicity:			causing cancer.			
	genicity <i>in-vitro</i> :		No information available				
	coxicity:		No information available				
	genicity <i>in-vivo</i> :		No information		.		
	cell mutagenicity	•	1	causing genetic d	erects.		
Kepro	ductive toxicity:		No information	on avallable			
Sumn prope	nary of evaluation	on of the CMR	No information	on available			
11.2. Inform	nation on other h	azards:					
11.2.1. Endo	crine disrupting p	operties:					
	nown endocrine ffect human healt		erties				
11.2.2. Other	informations:						



SECTION 12. Ecological information

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

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Trade name:	HYDROQUINONE - SODIUM SULPHITE				
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12.1. Toxic Acute (short-t		_	Exposure				
toxicity	,	Dose	time	Species	Method	Evaluation	Note
Fish		LC ₅₀	96 hours	fish	No information available	0.638mg/l (hydroquinone)	-
Crustacea:		EC ₅₀	48 hours	Daphnia magna	No information available	0.134 mg/l (hydroquinone)	-
Algae/aquatic plants:		IC ₅₀	72 hours	algae	No information available	0.33 mg/l (hydroquinone)	-
Other organis	ms:	-	-	-	-	-	-
Chronic (long- toxicity	-term)	Doza	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 organis	ms:	-	-	-	-	-	-
		-	•	·		•	
12.2. Persi	stence a	nd degradab	oility				
Abio	tic degra	dation					
	Deg	gradation ha	lf-lives	Method		Evaluation	Note
Marine water	No info	ormation ava	ailable	No information available	e No inforn	nation available	_
Fresh water	No info	ormation ava	ailable	No information available	e No inforn	nation available	-
Air	No info	ormation ava	ailable	No information available	e No inforn	nation available	-
Soil	No information available			No information available No information available		nation available	_



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Trade name:		HYDROQUINONE	E - SODIUM SULPHITE		
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% Deg	radation	Time	(days)		М	ethod	Eval	uation	Not	te
		No available			No information available		No information available		Extremely biodegradable.	
12.3.	Bioaccı	umulative po	tential							
	Octano	ol-water parti	tion coef	ficient	(log Pow))				
Valu	ıe	Concentration	n p	эΗ	°C	Method	E	valuation	No	ote
log Pov 0.59		o informa vailable	tion -		_ :	No information available	No ir availa	formation ble	-	
	D:		-t/DCI	-\						
	/alue	centration Fa		-)		Method	Evo	luation	No	+0
No info	ormation	No infor			No info	ormation	No infor	mation	-	te
availab	iie	available	2		availab	le available				

	Chroni	c ecotoxicity								
	Value		Dose	Ex	xposure time	Species	Me	ethod	Evaluation	Note
Chronic	c toxicity	on fish	LC ₅₀		rmation ilable	No information available	No inforr availa	mation	No information available	-
Chronic toxicity on crustacea (Daphnia)		EC ₅₀		rmation ilable	No information available	No No information in		No information available	-	
12.4	N 4 - l- : l : d			•			·	:		·
12.4.	1	ty in soil	dictribut	ion in	onvironm	ontal comparts	monts:			
		or predicted ormation avai		ion in	environm	nental compartr	nents:			
	INO INTO		iable							
	Surface	e tension:								



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Trade name:	HYDROQUINONE - SODIUM SULPHITE				
Product code:	HNS-15-X**	Date of compilation:	21 Dec 2022	Version:	3

	No information available		No information available	No information available	No information	available -
	Adso	rption / desorption	1	:	:	:
Transpo	ort	A/D coefficient Henry's constant	log Kow	Evaporation rate	Method	Note
Soil-Wa	ator :	No informatio available	n No informati available	on No information available	No information available	-
Water-A	Λir ⊢	No information	n No informati available	on No information available	No information available	-
Soil-Air	•	No informatic available	n No informati available	on No information available	No information available	-
12.5.	Resu	lts of PBT and vPvB	assessment			
				nents considered to be ccumulative (vPvB) at I		
12.6.	Endo	crine disrupting pr	operties			
	accor	rding to REACH Art		mponents considered sion Delegated regula or higher.		
12.7.	Othe	r adverse effects				
	No ir	nformation available	e			
SECTIO	N 13.	Disposal consider	ations			
13.1.	Wa	ste processing met	:hods			
13.1.1.	Pro	oduct/Packaging di	sposal:			
		omit for disposal to otection.	the legal person au	thorized by the Minis	try of Environmental	and Nature
13.1.2.	Wa	aste codes/waste de	esignations accordin	a to Low:		



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Trade name:	HYDROQUINONE - SODIUM SULPHITE				
Product code:	HNS-15-X**	Date of compilation:	21 Dec 2022	Version:	3

13.1.3.	Waste tretment – relevant	information			
	No information available				
13.1.4.	Sewage disposal – relevant	: information:			
	Waste must not be dispose	ed of into the sewage system.			
13.1.5.	Other disposal recommendations:				
	authorized by the ministry	duct's remains into the sewage system. Submit the remains to the collectors in charge. Do not dispose of the packaging into the sewage system. Submit ctors authorized by the ministry in charge. Do not dispose of in places where			
13.1.6.	Relevant Community provi	sions:			
	-				
SECTION	I 14. Transport information				
	Transporting/shipment by ro	ad (ADR)			
UN numb	oer:	3077			
UN prop	er shipping name:	Environmentally hazardous substance, solid, n.o.s. (hydroquinone)			
Transpor	t hazard class(es):	9			
Packing o	group:	III			
Environm	nental hazards:	Yes			
Special p	recautions for user:	~			
	Transporting/shipment by ra	il (RID)			
UN numb	per:	3077			
UN prop	er shipping name:	Environmentally hazardous substance, solid, n.o.s. (hydroquinone)			
Transpor	t hazard class(es):	9			
Packing o	group:	III			
Environm	nental hazards:	Yes			
Special p	recautions for user:	-			
	Transporting/shipment by in	land waterways (ADN)			
UN numb	per:	3077			
UN prop	er shipping name:	Environmentally hazardous substance, solid, n.o.s. (hydroquinone)			
Transpor	t hazard class(es):	9			
Packing o	group:	III			
Environm	nental hazards:	Yes			
Special p	recautions for user:	-			



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Trade name:	HYDROQUINONE - SODIUM SULPHITE				
Product code:	HNS-15-X**	Date of compilation:	21 Dec 2022	Version:	3

UN number:	3077	
UN proper shipping name:	Environmentally hazardous substance, solid, n.o.s. (hydroquinone)	
Transport hazard class(es):	9	
Packing group:	III	
Environmental hazards:	Yes	
Special precautions for user:	-	
Transport in bulk condition in accordance with Annex II. of MARPOL 73/78 and IBC Codex:	-	
Transporting/shipment by air (IC	AO-TI/IATA-DGR)	
UN number:	3077	
UN proper shipping name:	Environmentally hazardous substance, solid, n.o.s. (hydroquinone)	
Transport hazard class(es):	9	
Packing group:	III	
Environmental hazards:	Yes	
Special precautions for user:	-	

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



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Trade name:	HYDROQUINONE - SODIUM SULPHITE				
Product code:	HNS-15-X**	Date of compilation:	21 Dec 2022	Version:	3

	Other EU regulations:	Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC; Directive 2004/42/CE of the European Parliament and of the Council of 21 April 2004 on the limitation of emissions of volatile organic compounds due to the use of organic solvents in certain paints and varnishes and vehicle refinishing products and amending Directive 1999/13/EC;		
		Council Directive 98/24/EC of 7 April 1998 on the protection of the health and safety of workers from the risks related to chemical agents at work; Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006; REACH Restrictions on the manufacturing, placing on the market and use of certain dangerous substances, mixtures and articles (Appen XVIII):		
	dangerous substances, mixtures and articles (Annex XVII); Information according 1999/13/EC about limitation of emissions of volatile organic compounds (VOC quideline)			
	National legislation:	Chemicals Act, Regulation on classification, packaging and labeling of dangerous substances, Ordinance on occupational exposure limit values and on biological limit values, Regulation on categories, types and classification of waste with a waste catalog and list of hazardous waste, Ordinance on writing Material safety data sheet, Transport of Hazardous Substances Act		
15.2.	Chemical safety assessment			
	None			

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



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Trade name:	HYDROQUINONE - SODIUM SULPHITE			ГЕ	
Product code:	HNS-15-X**	Date of compilation:	21 Dec 2022	Version:	3

16.4.	Classification and procedure used to derive the classification for mixture according to Regulation (EC) 1272/2008 (CLP)					
Classifi	Classification		Classification procedure			
_			-			
16.5.	Rele	evant H statements (num	ber and full text)			
		302	Harmful if swallowed.			
	317 H: 318		May cause an allergic skin reaction.			
			Causes serious eye damage.			
		341	Suspected of causing genetic defects. Suspected of causing cancer.			
		351				
		400	Harmful if swallowed.			
16.6.	Trai	ning advice:	-			
			** "X" in the product code marks different volumes (different packaging of the product)			
16.7. Further information:		ther information:	We are not responsible for consequences in case of failure to comply with instructions for use or improper use of the product described in this material safety data sheet.			

ANNEX: Exposure scenario resulting to Chemical safety assessment



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Trade name:	NUCLEAR FAST RED (KERNECHTROT) REAGENT			ī
Product code:	KR-OT-X**	Date of compilation:	14 November 2022	Version: 4

1.1.	Product identifier				
	Trade name:	NUCLEAR FA	ST RED (K	(ERNECHTROT) REAGENT	
	Chemical name:	-			
	Catalogue number:	jue number: KR-OT-X**			
1.2.	Relevant identified uses	of the substa	nce or mi	xture and uses advised against	
	Uses:		Counte	erstain in many special staining kits.	
	Uses advised against:	Uses advised against:		he 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 and there is no reason to use it for other purposes.		
1.3.	Details of the supplier of the safety data sheet				
	Supplier: BioG		Gnost Ltd	nost Ltd.	
	Address:	Address: Med		djugorska 59, Zagreb	
	Telephone number: +38!		35 1 2409	5 1 2409997	
	Telefax:	Telefax: +385		5 1 2404039	
	e-mail of competent person: msds		ls@biognost.hr		
	National contact:	National contact: -			
1.4.	Emergency telephone n	number			
	National Protection and Rescue Director		torate:	112	
		Medical information:			
	Medical information:			+385 1 2348 342	

SECTION 2. Hazards identification					
2.1.	Classification of the substance or mixture				
2.1.1.	Classification according to Regulation (EC) No 1272/2008 (CLP)				
	Hazard class and category code: Hazard statement*:				
	Not identified as hazardous substance.				
2.1.2.	Additional information				
	-				
* For fu	ll text of Hazard- and EU Hazard-sta	atements: see SE	CTION 16		
2.2.	Label elements				
	Product identification:	NUCLEAR FAST	RED (KERNECHTROT) REAGENT		
	Identification number:	-			
	Authorisation number:	-			
	Hazard pictograms:	-			



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Trade name:		NT		
Product code:	KR-OT-X**	Date of compilation:	14 November 2022	Version: 4

	Signal word:	-
	Hazard statement:	-
	Precautionary statements:	-
	Supplemetal hazard information (EU)	-
2.3.	Other hazards	
	Endocrine Disrupting Properties:	
	No known endocrine disrupting prope	erties.

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)		
6409-77-4/ 229-088-0/ -	-	≤ 1%	Disodium 1-amino-2,4- dihydroxy-9,10-dihydro- 9,10-dioxoanthracene-3- sulphonate	Skin Irr. 2; H315 Eye Irr. 2; H319 STOT SE; H335		

SECTI	SECTION 4. First aid measures				
4.1.	Description of first aid measures				
	General notes:	-			
	Following inhalation:	Remove person to fresh air. If breathing stops, immediately apply artificial respiration. If breathing difficulties occur, use emergency breathing apparatus. If the symptoms persist, immediately consult a physician.			
	Following skin contact: Remove all contaminated clothes using sterile gauze. 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. Do not induce vomiting. Immediately consult a physician and show the container or label. In case of swallowing large quantities, transport the afflicted person to the hospital.			
	Self-protection of the first aider:	-			
4.2.	Most important symptoms a	and effects, both acute and delayed			
	Following inhalation:	No information available			
	Following skin contact:	No information available			
	Following eye contact:	No information available			
	Following ingestion:	No information available			



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Trade name:		7		
Product code:	KR-OT-X**	Date of compilation:	14 November 2022	Version: 4

4.3.	Indication of any immediate medical attention and special treatment needed		
	No information available		

SECTIO	SECTION 5. Firefighting measures			
5.1.	Extinguishing media			
	Suitable extinguishing media:		Water, CO ₂ , foam, dry powder	
	Unsuitable extinguishing medi	a:	No information available	
5.2.	Special hazards arising from th	ne substa	ance or mixture	
	Hazardous combustion products:	No information available.		
5.3.	Advice for firefighters			
	Firefighters must always use fireproof suit and self-sustaining breathing apparatus with open circle that contains pressurized air in case of fire in closed space.			
5.4.	Additional information			
	Prevent spills and water used for putting out fire from contaminating waterways by enclosing and covering drains.			

SECTIO	FION 6. Accidental release measures				
6.1.	Personal precautions, protective equipment and emergency procedures				
6.1.1.	For non-emergency personnel				
	Protective equipment:	Use protective equipment in accordance with Section 8. Do not get in eyes or on skin. Do not inhale vapor/aerosols. Remove the persons not directly involved in rescuing procedure from the scene of event.			
	Accident prevention methods:	Keep away from heat, flames and sparks. Secure proper ventilation. Prevent electrostatic charge buildup. Use only grounded devices and equipment. Do not release in drains - explosion hazard.			
	Emergency procedures:	In case of accident secure the location and evacuate the personnel not involved in recovery.			
6.1.2.	For emergency responders:				
	Use protective equipment; in case of inadequate ventilation use adequate airways protective equipment (see Section 8).				
6.2.	6.2. Environmental precautions: Do not dispose of in sewage, drainage system and waterways. In case of large spillage contact Nati Protection and Rescue Directorate (NPRD) on 112.				
6.3.	Methods and material for containm	nent and cleaning up			



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Trade name:	NUCLEAR FAST RED (KERNECHTROT) REAGENT					
Product code:	KR-OT-X**	Date of compilation:	14 November 2022	Version: 4		

6.3.1.	Bunding, covering of drains; capping procedures:	Sand bags.			
6.3.2.	Cleaning up:	Where possible, soak up the product using inert matter, such as sand, silica gel, saw dust). 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:	Recovery of contaminated area should only be conducted by qualified person that uses stipulated protective equipment. Prevent the waste water from entering waterways.			
6.4.	Reference to other sections				
	See Section 7 for information about secure handling.				
	See Section 8 for information about personal protective equipment.				
	See Section 13 for information about containment.				

SECTIO	SECTION 7. Handling and storage				
7.1.	Precautions for safe handling				
7.1.1.	Protective measures				
	Measures to prevent fire:	Keep away from heat, flames and sparks. Secure proper ventilation.			
	Measures to prevent aerosol and dust generation	Adequate ventilation of the rooms where the product is kept and handled. Containers must be firmly closed.			
	Measures to protect the environment:	Keep the containers firmly closed in vertical position when the product is not used. Prevent the product from entering waterways, sewerage and drainage systems by using barrage and semi-barrage made of sand, as well as covering the drainage by using plastic foil.			
	Other measures:	-			
7.1.2.	Advice on general occupational hygiene:				
	Do not eat, drink or smoke in the workspace. The	oroughly wash hands after work and before eating.			
7.2.	Conditions for safe storage, including any incor	patibilities			
	Technical measures and storage conditions:	In dry, cold and well-ventilated space. Containers must be firmly closed. Maintain adequate ventilation of the rooms where the product is kept and handled.			
	Packaging materials:	Manufacturer's original packaging.			



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Trade name:	NUCLEAR FAST RED (KERNECHTROT) REAGENT				
Product code:	KR-OT-X**	Date of compilation:	14 November 2022	Version:	4

	Requirements for storage rooms and vessels:	Keep away from food and drink. Keep the containers tightly closed.
	Advices for storage equipment:	Keep away from heat, flames, sparks and sunlight.
	Further information on storage conditions:	Do not place the unused material in the storage room and do not use empty containers for storing other chemicals. Do not store with incompatible materials (see Section 9).
7.3.	Specific end use(s)	
	Recommendations:	Secure stations for rinsing eyes and showering in the vicinity of work area.
	Industrial sector specific solutions:	-

K	Recommendations.				vicinity of work area.			
In	dustrial sec	ctor specific solutio	ons:	-				
SECTION 8	3. Exposure	e controls/person	al protec	tion				
8.1. Co	ontrol para	meters						
Substance			No		exposure limit t term values	Biological limit values		
				ppm	mg/m³			
-		-		-	-	-		
Substance name:								
EC No: - CAS N			-					
DNEL								
				Industrial				
Route of e	xposure:			cute effect systemic	Chronic e local			
Oral		- IOCai	-	systemic .	- IOCal	- systemic		
Inhalation		_	-		- -	- - - - - - - - - - -		
Dermal		-	-		-	-		
	rsical paran	ı neters: solubility, fla	<u> </u>	v, corrosivity:				
				Consumer				
Route of exposure: Acute effect		Acute effect local	Acute effect systemic		Chronic e			
Oral		-	-		-	-		
Inhalation		-	-		-	-		
Dermal		-	-		-	-		
PNEC								



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Trade name:		NUCLEAR FAST RED	(KERNECHTROT) REAGE	NT
Product code:	KR-OT-X**	Date of compilation:	14 November 2022	Version: 4

Environm	ental protection target		PNEC		
Fresh wat	er		No information available		
Freshwate	er sediments		No information available		
Marine water			No information available		
Marine sediments			No information available		
Food chain			No information available		
Microorganisms in sewage treatment			No information available		
Soil (agricultural)			No information available		
Air			No information available		
8.2.	Exposure controls				
8.2.1.	Appropriate engineering control	S			
	Substance/mixture related measures to prevent exposure during identified uses:		product in well ventilated rooms. Use personal protective ent. Do not eat, drink or smoke in the workspace.		
	Structural measures to prevent exposure:	In accor	accordance with Section 7.		
	Organisational measures to prevent exposure:	_	ganization of work in order to reduce other worker's influence ring work process.		
	Technical measures to prevent exposure:		proper workspace ventilation in order to keep tration levels in air below permitted levels.		
8.2.2.	Personal protection equipment				
8.2.2.1.	Eye and face protection:	levels o	plasses that stick to face (EN 166) or visor in case of lower f concentration in air; protective gas mask that covers the ace in case of higher levels of concentration in air.		
8.2.2.2.	Skin protection				
			ive gloves must be according to the EU Directive 25/EEC and standard EN 374.		
	Hand protection:		Glove material: nitrile rubber		
			Glove thickness: ≥0.50 mm		
			Break through time: >480 min		
	Other skin protection:		ntistatic clothing made of natural fibers (such as cotton) ng sleeves (EN 13034), and shoes that cover the entire foot (35).		
8.2.2.3.	Respiratory protection:	Suitable mask or half mask equipped with a combined "A-P" filter and used when concentration levels exceed GVI.			
8.2.2.4.	Thermal hazards:	No information available			
8.2.3.	Environmental exposure controls				



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Trade name:		NUCLEAR FAST RED (KERNECHTROT) REAGENT				
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Substance/mixture related measures to prevent exposure:	See Section 6
Structural measures to prevent exposure:	Use modern equipment.
Organisational measures to prevent exposure:	Adapt the work process to the required working conditions of the workplace.
Technical measures to prevent exposure:	See Section 6

.1.	Information on basic physical ar	nd chemical properties	
		Value	Method
	Physical state:	liquid	No information available
	Colour:	red	No information available
	Odour/odour threshold:	No information available	No information available
	Melting point / freezing point:	No information available	No information available
	Boiling point or initial boiling point and boiling range:	No information available	No information available
	Flammability:	No information available	No information available
	Lover and upper explosion limit:	No information available	No information available
	Flash point:	No information available	No information available
	Auto-ignition temperature:	No information available	No information available
	Decomposition temperature:	No information available	No information available
	pH:	No information available	No information available
	Kinematic viscosity:	No information available	No information available
	Solubility:	No information available	No information available
	Partition coefficient noctanol/water (log value):	No information available	No information available
	Vapour pressure:	No information available	No information available
	Density and/or relative density	No information available	No information available
	Relative vapour density:	No information available	No information available
	Particle characteristics:	No information available	No information available
2.	Other information		

SECTION 10.: Stability and reactivity



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Trade name:		NUCLEAR FAST RED (KERNECHTROT) REAGENT				
Product code:	KR-OT-X**	Date of compilation:	14 November 2022	Version: 4		

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

SECTION 11 Toxico	ological information						
	n on toxicological effe	cts					
Acute toxic	ity:						
Route of exposure:	Method	Species	LD	ctive dose ₅₀ /LC ₅₀ or TE _{mixture}	Exposur	re time	Results
Oral:	Oral: No information available		No inf availat	ormation ole	No infor availa		_
Dermal:	No information available	_	No inf availat	ormation ole	No infor availa		_
Inhalation: No information available		-	No inf availat	ormation ole	No infor		-
Specific tar	get organ toxicity – si Specific		(STOT SE): Target organ			Note	
	•			No information available			Note
Oral:	No information avail			No information available -		-	
Dermal:	No information avail						
Inhalation:	No information avail	able	No information available -				
Aspiration	hazard:	-					
Irritation ar	nd corrosion						
	Exposure tin	ne Sp	ecies	Evaluation	ı Me	ethod	Note
Skin corrosion/irritation:	sion/irritation:			-	-		No information available
Serious eye damage/irritation	-	-		-	-		No information available



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Trade name:	NUCLEAR FAST RED (KERNECHTROT) REAGENT				
Product code:	KR-OT-X**	Date of compilation:	14 November 2022	Version: 4	

<u> </u>						
Sensitiza						
Dermal exposure	: No informatio	n available				
Inhalation exposure:	No informatio	n available				
Sympto	ms related to the p	hysical, chemic	al and toxicolog	ical characteristi	CS	
Oral exposure:	No informatio	n available				
Dermal exposure	: No informatio	n available				
Inhalation exposure:	No informatio	n available				
Eye exposure:	No informatio	n available				
Repeate	ed dose toxicity (su		onic, chronic)			
	Dose	Exposure time	Species	Method	Evaluation	Note
Subacute oral	No information available	No information available	No information available	No information available	No information available	-
Subacute dermal	No information available	No information available	No information available	No information available	No information available	-
Subacute inhalation	No information available	No information available	No information available	No information available	No information available	-
Subchronic oral	No information available	No information available	No information available	No information available	No information available	-
Subchronic dermal	No information available	No information available	No information available	No information available	No information available	-
Subchronic inhalation	No information available	No information available	No information available	No information available	No information available	-
Chronic oral	No information available	No information available	No information available	No information available	No information available	_
Chronic dermal	No information available	No information available	No information available	No information available	No information available	-



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Trade name:	e: NUCLEAR FAST RED (KERNECHTROT) REAGENT					_	
Product code:	KR-OT-X**	KR-OT-X** Date of compilation: 14 November 2022		2022	Version: 4		
Chronic inhalation	No information available	No information available	No information available	No information available	No informatio available	on -	
Specific	target organ toxic	city – repeated e	exposure (STOT	RE):			
		Specific effects		Target orga	n	Note	
Subacute oral	No info	rmation availabl	e No i	nformation availa	ble	-	
Subacute derma	l No info	rmation availabl	e No i	nformation availa	ble	-	
Subacute inhalat	ion No info	rmation availabl	e No i	nformation availa	ble	-	
Subchronic oral	No info	rmation availabl	e No i	nformation availa	ble	-	
Subchronic derm	nal No info	rmation availabl	e No i	nformation availa	ble	-	
Subchronic inhal	ation No info	rmation availabl	e No i	nformation availa	ble	-	
Chronic oral	No info	rmation available No ir		information available		-	
Chronic dermal	No info	rmation available No i		nformation available		-	
Chronic inhalation	on No info	rmation available No ii		nformation availa	ble	-	
:							
CMR ef	fects (carcinogenio	ity; mutagenicit	y; reproductive	toxicity)			
Carcino	genicity:		No informati	on available			
Mutage	enicity <i>in-vitro</i> :		No information available				
Genoto	xicity:		No informati	on available			
Mutage	enicity <i>in-vivo</i> :		No informati	on available			
Germ c	ell mutagenicity:		No information available				
Reprod	uctive toxicity:		No informati	on available			
Summa propert	ry of evaluation ies:	of the CMR	No informati	on available			
11.2. Informa	ation on other haza	ards:					
11.2.1. Endocri	ne disrupting prop	perties:					
	wn endocrine disru ect human health.	upting propertie	S				
11.2.2. Other is	nformations:		•				
-							

SEC	TION	12. G	eneral	notes:
2EC	HON	12. G	enerai	notes

12.1. Toxicity



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Trade name:		NUCLEAR FAST RED (K	(ERNECHTROT) REAGENT	7
Product code:	KR-OT-X**	Date of compilation:	14 November 2022	Version: 4

Acute (short-teritoxicity	m)	Dose	Exposure time	Species	Method	Eval	uation	N	ote
Fish		LC ₅₀	96 hours	No information available	-	No inforr available	mation	-	
Crustacea:		EC ₅₀	48 hours	No information available	-	No inforr available	nation	-	
Algae/aquatic pl	ants	IC ₅₀	72 hours	No information available	-	No inforr available	nation	_	
Other organisms	5	-	_	-	-	-		-	
Chronic (long-te toxicity	rm)	Dose	Exposure time	Species	Method	Eval	uation	N	ote
Fish		LC ₅₀	96 hours	No information available	-	No inforr available	nation	-	
Crustacea:		EC ₅₀	48 hours	No information available	-	No inforr available	nation	-	
Algae/aquatic pl	ants	IC ₅₀	72 hours	No information available	-	No inforr available	mation	-	
Other organisms	5	-	-	-	-	-		-	
12.2. Persiste Abiotic	degra								
	De	egradation h	alf-lives	Method		E۱	/aluation		Note
Marine water	No ir	nformation a	vailable	No information available		No information available		e	-
Fresh water	No ir	nformation a	vailable	No information available		No information available		e	-
Air	No ir	nformation a	vailable	No information av	No information available No		No information available		-
Soil	No ir	nformation a	vailable	No information av	railable	No informa	ation availabl	e	-
Biodegi	radatio	on							
% Degradation		Time (days	()	Method	Eva	luation	N	ote	
No information No			nation	information availab	le No ii	nformation le	No available	inforr	mation
12.3. Bioaccu	ımulat	ive potential							
Octano	l-wate	er partition co	pefficient (lo	g Kow)					
Value	Conce	entration	рН	°C Method	E	valuation	1	Note	



Trade name:

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

NUCLEAR FAST RED (KERNECHTROT) REAGENT

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Produc	t code	•	KR-OT	-X** [Date of	f compila	tion:	14	Noven	nber 202	22	Version	ո: 4
No informa available		No availa	inform able	ation ₋		- N	o in vailab	formation le	No availa	informa ble	ation	No ii available	nformation
		ncentr	ration f	actor (BCF)								
No info available			No info	Species ormation le		M No infor available		on N	Evaluation No information available			Note No information available	
	Chron	ic eco	otoxicity	<i></i>									
	Valu			Dose		posure time	3	Species	Me	ethod	E	valuation	Note
Chronic	toxicity	y on fi	ish	LC ₅₀		No information available		rmation ilable	No inforr availa	nation ble		rmation lable	-
Chronic crustace	-			EC ₅₀	No infor availa	mation able		rmation ilable	No inforn availa	nation ble	1	rmation lable	
12.4.	Mobil	ity in s	soil										
		······································			ion in e	environme	ntal c	compartme	ents:				
			tion av	ailable									
	Surfac		sion:	0.0					ا العماد			ъ.,	
	No Va	lue	No	°C		oncentrati			Method			Note	
			ormation		No information available		on No information available			-			
	<u> </u>										<u> </u>		
	Adsor	ption	/ deso	rption									
Transpo		Α/	'D coef	•	lo	og Kow	Εν	/aporation	rate	Meth	nod	ſ	Note



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Trade name:		NUCLEAR FAST RED (KERNECHTROT) REAGE	NT
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	1						1
Soil-wat	ter No	lable	information	No information available	No information available	No information available	-
Water-a	air No avai	lable	information	No information available	No information available	No information available	-
Soil-air	No avai	lable	information	No information available	No information available	No information available	-
12.5.	Results o	f PBT a	and vPvB asses	sment			
	No inforr	mation	available				
12.6.	Endocrin	e disru	ıpting properti	es			
	No know	n end	ocrine disrupti	ng properties that	affect the environm	nent.	
12.7.	Other ad	verse (effects				
	No inforr	mation	available				
SECTIO	N 13. Dis	oosal	consideration	S			
13.1.	Waste	treatm	ent methods				
13.1.1.			aging disposal				
	Submit Protect		sposal to the l	egal person autho	rized by the Ministry	y of Environmental a	and Nature
	FIOLECT	1011.					
13.1.2.	Waste	codes	/waste designa	tions according to	Low:		
	15 01 1 substar		ckaging that c	ontains residual h	azardous substances	s or is contaminated	l with hazardous
13.1.3.	Waste	treatm	ent – relevant	information:			
	No info	rmatio	on available				
13.1.4.	Sewage	e dispo	osal – relevant	information:			
	Waste	must r	not be dispose	d of into the sewa	ge system.		
13.1.5.	Other o	disposi	al recommend	ations:			



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	authorized by the ministr	oduct's remains into the sewage system. Submit the remains to the collectors y in charge. Do not dispose of the packaging into the sewage system. Submit ectors authorized by the ministry in charge. Do not dispose of in places where				
13.1.6.	Relevant Community provisions:					
		gement Act, Ordinance on Waste Management, Regulation on categories, f waste with waste catalog and list of hazardous waste				
SECTION	N 14. Transport information	on				
	Transporting/shipment by r					
UN num		Not subject to transport regulations				
UN prop	er shipping name:	-				
	rt hazard class(es):	-				
Packing		-				
-	nental hazards:	-				
Special p	precautions for user:	-				
	Transporting/shipment by r	rail (RID)				
UN num		Not subject to transport regulations				
UN prop	er shipping name:	-				
	rt hazard class(es):	-				
Packing	group:	-				
Environn	nental hazards:	-				
Special p	precautions for user:	-				
	Transporting/shipment by i	nland waterways (ADN)				
UN num	ber:	Not subject to transport regulations				
UN prop	er shipping name:	-				
Transpor	t hazard class(es):	-				
Packing	group:	-				
Environn	nental hazards:	-				
Special p	precautions for user:	-				
	Transporting/shipment by s	sea (IMDG)				
UN num	ber:	Not subject to transport regulations				
UN prop	er shipping name:	-				
Transpor	t hazard class(es):	-				
Packing	group:	-				
Environn	nental hazards:	Not subject to transport regulations				



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Product code:	KR-OT-X**	Date of compilation:	14 November 2022	Version:	4

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

15.1.	Safety, health and environmental regulations/legislation specific for the substance or mixture				
	EU regulations				
	Authorisations and/or res	trictions of use			
	Authorisations:	-			
	Restrictions:	-			
	Other EU regulations:	Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/9: and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC; Directive 2004/42/CE of the European Parliament and of the Council of 21 April 2004 on the limitation of emissions of volatile organic compounds due to the use of organic solvents in certain paints and varnishes and vehicle refinishing products and amending Directive 1999/13/EC; Council Directive 98/24/EC of 7 April 1998 on the protection of the health and safety of workers from the risks related to chemical agents at work; Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 10 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006; REACH Restrictions on the manufacturing, placing on the market and use of certain dangerous substances, mixtures and articles (Annex XVIII);			



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Trade name:	NUCLEAR FAST RED (KERNECHTROT) REAGENT			IT
Product code:	KR-OT-X** Date of compilation:		14 November 2022	Version: 4

	National regulation:	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, Transport of Hazardous Substances Act
15.2.	Chemical safety assessment	
	None	

SECTIO	ON 16	6. Other information		
16.1.	Ind	ication of changes:	-	
16.2.	Abbreviations and acronyms:		ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road) IMDG: International Maritime Code for Dangerous Goods IATA: International Air Transport Association GHS: Globally Harmonised System of Classification and Labelling of Chemicals EINECS: European Inventory of Existing Commercial Chemical Substances CAS: Chemical Abstracts Service (division of the American Chemical Society) DNEL: Derived No-Effect Level (UK REACH) LC50: Lethal concentration, 50 percent LD50: Lethal dose, 50 percent PBT: Persistent, Bioaccumulative and Toxic vPvB: very Persistent and very Bioaccumulative	
16.3.	Key literature references and source of data:		-	
16.4.	Classification and procedure 1272/2008 (CLP)		used to derive the classification for mixture according to Regulation (EC)	
Classif	icatior	1	Classification procedure	
-				
16.5.	Rele	evant H statements (numl	per and full text)	
		H315	Causes skin irritation.	
	H:	H319	Causes serious eye irritation.	
		H335	May cause respiratory irritation.	
16.6.	Trai	ining advice:	-	
			** "X" in the product code marks different volumes (different packagings of the product)	
16.7. Further information:		ther 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



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

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

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Trading name:	SILVER NITRATE, 1% SOLUTION				
Product code:	SN1-OT-X**	Date of compilation:	21 Dec 2022	Version:	3

SECTION 1.1	ON 1: Identification of Product identifier	the substance	e/mixture	and of the company/undertaking		
1.1		CILVED MIT	DATE 10/	ATE 10/ COLUTION		
	Trading name:	SILVER IVIII	(AIE, 1%)	TE, 1% SOLUTION		
	Chemical name:	-	-			
	Catalogue number:	SN1-OT-X*	SN1-OT-X**			
1.2	Relevant identified us	es of the substance or mixture and uses advised against				
	Uses:		For use	with Grimelius kit.		
	Uses advised against:		Only the	e identified uses are advised.		
	Reason why uses advi	es advised against: medical device, registered at the Agency fo		duct is intended for use only as an <i>in vitro</i> diagnostic device, registered at the Agency for Medicinal Products and Devices and there is no reason to use it for other purposes.		
1.3	Details of the supplier	of the safety	data shee	t		
	Supplier:		BioGnost Ltd.			
	Address:		Medjugorska 59, Zagreb			
	Telephone number:		+385 1 2409997 +385 1 2404039 msds@biognost.hr			
	Telefax.:					
	e-mail of competent p	person:				
	National contact:		-			
1.4	Emergency telephone	number				
	National Protection ar	nd Rescue Dire	ectorate:	112		
	Medical information:			+385 1 2348 342		
	Other information:			-		

SECTIO	CTION 2. Hazards identification				
2.1	Classification of the substance or mixture				
2.1.1	Classification according to Regulation (EC) No 1272/2008 (CLP)				
	Hazard class and ca	tegory code:	Hazard statements*:		
	Aquatic Chronic 3		H412		
2.1.2.	Additional information				
	-	-			
*For fu	ıll text of Hazard- and EU Haza	ard-statements: see S	SECTION 16		
2.2	Label elements				
	Product identification:	SILVER NITRATI	E, 1% SOLUTION		
	Identification number:	nber: -			
	Authorization number:	-			
	Hazard pictograms:	-			



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Trading name:	SILVER NITRATE, 1% SOLUTION				
Product code:	SN1-OT-X**	Date of compilation:	21 Dec 2022	Version:	3

	Signal word:		
	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		
	Endocrine Disrupting Prope	erties:	
	No known endocrine disrupti	ing properties	
	Results of PBT and vPvB assessment : According to the results of its assessment, this substance is PBT or a vPvB.		

SECTION 3. Cor	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	-	< 1 %	silver nitrate	Ox. Sol. 2; H272 Skin Corr. 1B; H314 Aquatic Acute 1; H400 Aquatic Chronic 1; H410		

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



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

SECTIO	SECTION 5. Firefighting measures				
5.1	Extinguishing media				
	Suitable extinguishing media: Water spray, 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	ECTION 6. Accidental release measures				
6.1	Personal precautions, protective	e equipment and emergency procedures			
6.1.1.	For non-emergency personnel				
	Protective equipment: Use personal protective equipment (see Section 8).				
	Accident prevention methods: Evacuate members of all non-essential personnel and those member 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 conta	inment and cleaning up			



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6.3.1.	Bunding, covering of drains; capping procedures:	Sand or clay barriers.	
6.3.2.	Cleaning up:	Where possible, the substance can be absorbed by using absorbing material. Place the waste material in tightly closed impermeable containers. Store the substance in well ventilated storage rooms until disposal. Submit for disposal to the legal persons authorized by the Ministry of Environmental and Nature Protection. After disposal of the products, wash the area and and involved materials with water.	
6.3.3.	Other information:	Do not use incompatible materials (see Section 10).	
6.4	Reference to other sections		
	See Section 7 for information on safe handling. See Section 8 for information on personal protection equipment. See Section 13 for disposal 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	n:	Secure proper ventilation.			
	Measures to protect the environment:		Prevent spilling into the sewage system and waterways.			
	Other measures:		-			
7.1.2.	Advice on general occupational hygiene:					
	Do not eat, drink or smoke in the workspace. Thoroughly wash hands after work and before eating.					
7.2	Conditions for safe storage, including any incompatibilities					
	Technical measures and storage conditions:	Keep in tightly closed and upright set containers at temperatures ranging from +2 to +8 °C.				
	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 did that directly leads into sewage system. Secure proportilation.				
	Further information on storage conditions:	Do not place the unused material in the storage roo and do not use empty containers for storing other chemicals. Do not store with incompatible materials (see Section 10).				



Marine sediments

Soil (agricultural)

Microorganisms in sewage treatment

Food chain

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

Industrial	Industrial sector specific solutions: -								
SECTION 8. Expos	ure contr	ols/perso	nal pro	otection	1				
8.1 Control pa	arameters								
				Occ			exposure limit		
Substance	9	CA	S No	V	/alue	es/short	term values		Biological limit values
					pp	m	mg/m³		
-			-			-	-		-
Substance name:	-								
EC No:	-	CAS No	:	-					
DNEL									
Industrial									
Route of	Route of Acute			Acute		Chronic			Chronic
exposure:	effect	local	effec	t system	nic	effect local			effect systemic
Oral	-		-			-			-
Inhalation	-		-			-			-
Dermal	-		-			-			-
Critical physical pa	rameters: s	solubility,	flamma	ability, co	orro	sivity:	-		
				С	ons	umer			
Route of	Acı	ute		Acute		Chronic			Chronic
exposure:	effect	local	effec	ct system	nic	effect local			effect systemic
Oral	-		-			-			-
Inhalation	-		-			-			-
Dermal	-		-			-			-
PNEC									
Environmental pro-	tection tar	get			PNEC				
Fresh water					n	no information available			
Freshwater sedime	nts				n	no information available			
Marine water				n	no information available				

no information available

no information available

no information available

no information available



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Air			no information available
8.2	Exposure controls		
8.2.1.	Appropriate engineering controls		
	Substance/mixture related measure prevent exposure during identified		Use the product in well ventilated rooms. Use personal protective equipment. Do not eat, drink or smoke in the workspace.
	Structural measures to prevent exposure:		In accordance with Section 7.
	Organisational measures to preven exposure:	it	Organization of work in order to reduce other worker's influence during work process.
	Technical measures to prevent exp	osure:	Secure proper workspace ventilation in order to keep concentration levels in air below permitted levels. Secure stations for rinsing eyes and showering.
8.2.2.	Personal protection equipment		
8.2.2.1.	Eye and face protection:	levels o	glasses that stick to face (EN 166) or visor in case of lower of concentration in air; protective gas mask that covers the face in case of higher levels of concentration in air.
8.2.2.2.	Skin protection		
	Hand protection:	Protect	tive nitrile gloves, >0.11 mm thick (EN 374).
	I ITNOT CVIN NYOTOCTION:		nntistatic 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.
	_	Adapt workpl	the work process to the required working conditions of the ace.
	Technical measures to prevent exposure:	See Se	ction 6

SECTION 9. Physical and chemical properties

9.1 Information on basic physical and chemical properties



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Trading name:	SILVER NITRATE, 1% SOLUTION					
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		Value	Method
	Physical state:	liquid	No information available
	Colour:	colourless	No information available
	Odour/odour threshold:	no information available	No information available
	Melting point / freezing point:	No information available	No information available
	Boiling point or initial boiling point and boiling range:	No information available	No information available
	Flammability:	No information available	No information available
	Lover and upper explosion limit:	No information available	No information available
	Flash point:	No information available	No information available
	Auto-ignition temperature:	No information available	No information available
	Decomposition temperature:	No information available	No information available
	pH:	No information available	No information available
	Kinematic viscosity:	No information available	No information available
	Solubility:	No information available	No information available
	Partition coefficient n- octanol/water (log value):	No information available	No information available
	Vapour pressure:	No information available	No information available
	Density and/or relative density:	No information available	No information available
	Relative vapour density:	No information available	No information available
	Particle characteristics:	No information available	No information available
)	Other information		

SECTION	SECTION 10. Stability and reactivity				
10.1	Reactivity:	See subsections 10.3 through 10.5.			
10.2	Chemical stability:	The product is chemically stable under standard ambient conditions of storing and using.			
10.3	Possibility of hazardous reactions:	No 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			

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



Eye exposure:

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Trading name:	SILVER NITRATE, 1% SOLUTION							
Product code:	SN1-OT-X	* *	Date of	ate of compilation: 21 I		Dec 2022	Versio	n: 3
Route of exposure:	Method Specie		D	Dose LD ₅₀ /LC ₅₀ or ATE _{mix}		Exposure time	ne Results	
Oral:	_	No information	on	_		information ilable		_
Dermal:	-	No information	on	-		information ilable		-
Inhalation:	-	No information	on	-		information ilable		-
Specific tar		xicity – single e	xposure (_			
		Specific effects			et orgai		No	ite
Oral:		tion available		No information available				
Dermal:		tion available		No information available			-	
Inhalation:	No informa	tion available		No informati	on avail	able -		
Aspiration	hazard:		No info	mation availab	le.			
; · · · ·								
Irritation a	nd corrosion							
:	Ехро	osure time	Spe	cies Evalu	uation	Method	N	lote
Skin corrosion/irritation:	-		-	-		-	-	
Serious eye damage/irritation	-		-	-		-	-	
Sensitizatio	on							
Skin sensitization:	-							
Respiratory sensitiza	ation: -							
Cymptoms	rolated to th	o physical char	mical and	tovical agical sk	aaractor	ictics		
		e physical, cher mation available		toxicological ci	iaracter	Stics		
Oral exposure:		mation available						
Dermal exposure:								
Inhalation exposure	: No intori	mation available	е.					

Repeated dose toxicity (sub	acute, subchr	onic, chronic)			
Dose	Exposure time	Species	Method	Evaluation	Note

No information available.



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Trading name:	SILVER NITRATE, 1% SOLUTION					
Product code:	SN1-OT-X**	Date of compilation:	21 Dec 2022	Version:	3	

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

	Specific 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	-



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Trading name:	SILVER NITRATE, 1% SOLUTION					
Product code:	SN1-OT-X**	Date of compilation:	21 Dec 2022	Version:	3	

	CMR effects (carcinogenicity; mutagenicity; reproductive toxicity)					
	Carcinogenicity:	No information available.				
	Mutagenicity in vitro:	No information available.				
	Genotoxicity:	No information available.				
	Mutagenicity in vivo:	No information available.				
	Germ cell mutagenicity:	No information available.				
	Reproductive toxicity:	No information available.				
		,				
	Summary of evaluation of the CMR properties:	No information available.				
11.2.	Information on other hazards:					
11.2.1.	Endocrine disrupting properties:					
	No known endocrine disrupting properties that affect human health.					
11.2.2.	Other informations:					
	-					

SECTION 12. 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	-	



No information

available

No

available

information No information

available

No information

available

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

Trading name:				SILVER NITRA	TE, 1%	SOLUT	ION		
Product code:	S	N1-OT-X*	*	Date of compila	ition:	21 De	c 2022	Version:	3
Crustacea:		EC ₅₀	48 hours	No information available	No inforn availa	nation ble	No information available	-	
Algae/aquatic pl	ants	IC ₅₀	72 hours	No information available	No inforn availa	nation ble	No information available	-	
Other organisms	5	-	-	-	-		-	-	
12.2 Persiste Abiotic	degra	nd degrada dation gradation		Method		Evaluatio	n	Note	
Marine water		nformation		No information available	No information available		า		
Fresh water	No ir	nformation	available	No information available	No information - available				
Air	No ir	nformation	available	No information available	No information available		-	-	
Soil	No ir	nformation	available	No information available	No information - available				
Biodegr	adatio	on					ï		
% Degradation	n	Time	(days)	Method	F	Evaluation	n	Note	
No information available		No i available	nformation	No information available	No information available			No information available	
		ive potent							
			coefficient (l						
	Conce	ntration	рН	°C Method		Evalua		Note	
- -				-	-		-		
Biocono Value	entra	tion factor Spec		Method		Evaluatio	on	Note	



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Trading name:		SILVER NITRATE, 1%	SOLUTION		
Product code:	SN1-OT-X**	Date of compilation:	21 Dec 2022	Version:	3

	Chr	onic ecoto	xicity						
		llue	Dose	Exposure time	Species	Meth	nod E	Evaluation	Note
Chron	ic toxi	city on fish	LC ₅₀	information	No informatior available	No inform availab		o formation ailable	-
		city on aphnia)	EC ₅₀	information	No informatior available	No inform availab		o formation ailable	-
12.4	Mo	bility in soi							
Known or predicted distribution in environmental compartments:									
		informatio			- r				
	Surface tension:								
		Value	°C	Concentrat	ion	n Method			Note
		rmation ilable	No information available	No informati available		No information available		-	
	Ads	orption / d	lesorption						
Transp	oort		coefficient 's constant	log Kow	Evapora	ation rate	Met	hod	Note
Soil-water		No available	information	No information available	n No infor available			mation	-
	ter-air No information No information available No information available		No infor available		-				
Water		No	information	No information No infor available available		rmation	No infor	mation	_

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.



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Trading name:		SILVER NITRATE, 1% SOLUTION			
Product code:	SN1-OT-X**	Date of compilation:	21 Dec 2022	Version:	3

12.6.	. Endocrine disrupting properties					
12.0.		es not contain components considered to have endocrine disrupting properties				
		e 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission				
	Regulation (EU) 2018/605 at levels of 0.1% or higher.					
12.7.	Other adverse effects					
	No information available					
SECTIO	N 13. Disposal considerati	ons				
13.1	Waste treatment method	ls				
13.1.1.	Product/Packaging dispo	osal:				
	-	e legal person authorized by the Ministry of Environmental and Nature				
	Protection.					
13.1.2.	-	gnations according to Law:				
	Packaging that contains residual hazardous substances or is contaminated with hazardous substances					
13.1.3.	Waste treatment – releva	nt information:				
	No information available					
	:					
13.1.4.	Sewage disposal – releva	nt information:				
	Waste must not be dispo	sed of into the sewage system.				
	1					
13.1.5.	Other disposal recomme	ndations:				
		oduct's remains into the sewage system. Submit the remains to the collectors				
	-	ry in charge. Do not dispose of the packaging into the sewage system. Submit ectors authorized by the ministry in charge.				
13.1.6.	Relevant Community pro	, , ,				
13.1.0.	-	VISIONS.				
SECTIO	N 14 TRANSPORT INFORM	MATION				
SECTIO	Transporting/shipment by					
UN nur		Not subject to transport regulations				
	pper shipping name:	-				
······	ort hazard class(es):					
······································	g group:					
racking	y group.					



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Trading name:		SILVER NITRATE, 1%	SOLUTION		Ψ	
Product code:	SN1-OT-X**	Date of compilation:	21 Dec 2022	Version:	3	

Environmentally hazardous:	-
Special precautions for user:	-
Transporting/shipment by rail (R	D)
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 (IC.	AO-TI/IATA-DGR)
UN number:	Not subject to transport regulations
UN proper shipping name:	-
Transport hazard class(es):	-
Packing group:	-
Environmentally hazardous:	-
Special precautions for user:	-
Further information: -	



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Trading name:	SILVER NITRATE, 1% SOLUTION				
Product code:	SN1-OT-X**	Date of compilation:	21 Dec 2022	Version:	3

15.1	Safety, health and enviror	nmental regulations/legislation specific for the substance or mixture			
	EU regulations				
	Authorization and/or restrictions of use				
	Authorizations:	-			
	Restrictions:	-			
	Other EU regulations:	Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC; Directive 2004/42/CE of the European Parliament and of the Council of 21 April 2004 on the limitation of emissions of volatile organic compounds due to the use of organic solvents in certain paints and varnishes and vehicle refinishing products and amending Directive 1999/13/EC; Council Directive 98/24/EC of 7 April 1998 on the protection of the health and safety of workers from the risks related to chemical agents at work; Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006; REACH Restrictions on the manufacturing, placing on the market and use of certain dangerous substances, mixtures and articles (Annex XVII);			
	Information according 1999/13/EC about limitation of emissions of volatile organic compounds (VOC-guideline)				
	National legislation:	Chemicals Act, Regulation on classification, packaging and labeling of dangerous substances, Ordinance on occupational exposure limit values and on biological limit values, Regulation on categories, types and classification of waste with a waste catalog and list of hazardous waste, Ordinance on writing Material safety data sheet, Transport of Hazardous Substances Act			
15.2	Chemical safety assessme	ent			
	None				

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



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Trading name:	SILVER NITRATE, 1% SOLUTION				
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16.2	2 Abbreviations and acronyms:		ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road) IMDG: International Maritime Code for Dangerous Goods IATA: International Air Transport Association GHS: Globally Harmonised System of Classification and Labelling of Chemicals EINECS: European Inventory of Existing Commercial Chemical Substances CAS: Chemical Abstracts Service (division of the American Chemical Society) DNEL: Derived No-Effect Level (UK REACH) LC50: Lethal concentration, 50 percent LD50: Lethal dose, 50 percent PBT: Persistent, Bioaccumulative and Toxic vPvB: very Persistent and very Bioaccumulative		
16.3.	Key literature references and source of data:		-		
16.4.		ssification and procedure 2/2008 (CLP)	used to derive the classification for mixture according to Regulation (EC)		
Classifi	catio	า	Classification procedure		
_			-		
16.5.	Rel	evant H statements (numl	per and full text)		
		272	May intensify fire; oxidiser.		
		314	Causes severe skin burns and eye damage.		
	H:	400	Very toxic to aquatic life.		
		410	Very toxic to aquatic life with long lasting effects.		
		412	Harmful to aquatic life with long lasting effects		
16.6.	Tra	ining advice:	-		
16.7.	16.7. Further information:		** "X" in the product code marks different volumes (different packagings of the product) We are not responsible for consequences in case of failure to comply with		
			instructions for use or improper use of the product described in this material safety data sheet.		

ANNEX: Exposure scenario resulting to chemical safety assessment	
-	



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

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

SECTIO	SECTION 2. Hazards identification			
2.1.	Classification of the substance or mixture			
2.1.1.	Classification according to Regula	tion (EC) No 12	.72/2008 (CLP)	
	Hazard class and category	code:	Hazard statements*:	
	Not identified as hazardous subst	ance.	-	
2.1.2.	Additional information			
	-			
*For fu	ll text of Hazard- and EU Hazard-sta	tements: see S	ection 16	
2.2.	Label elements			
	Product identification:	SODIUM THI	DSULFATE, 5% SOLUTION	
	Identification number:	-		
	Authorization no.:	-		
	Hazard pictograms:	-		



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

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

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

SECTIO	SECTION 4. First aid measures			
4.1.	Description of first aid measures			
	General notes:	-		
	Following inhalation:	Carry the afflicted person out of the contaminated area into a well-ventilated area or out for fresh air. If breathing becomes erratic or it stops, immediately apply artificial respiration (other than mouth-to-mouth) and contact a physician.		
	Following skin contact:	Remove contaminated clothing. Immediately wash with plenty of water and soap. Seek medical assistance if the symptoms of irritation remain.		
	Following eye contact:	Rinse out with plenty of water with the eyelid held wide open using clean fingers. If the symptoms remain, immediately call a physician.		
	Following ingestion:	Do not induce vomiting. Make the afflicted person drink a glass of water. If spontaneous vomiting occurs, wash the mouth with water, then make the person drink 100-200 ml of water and seek medical attention.		
	Self-protection of the first aide	r: Treat symptomatically.		
4.2.	Most important symptoms and effects, both acute and delayed			
		According to our findings, chemical, physical and toxicological properties of he substance have not been entirely tested.		
	FUIIOWING SKIN CONTACT.	According to our findings, chemical, physical and toxicological properties of he substance have not been entirely tested.		



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

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

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

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



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

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

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



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

SECTION 8. Exposure controls/personal protection								
8.1. Control par		013, per30110	ii protee					
Substance					ccupational exposure limit values/short term values		Biological limit values	
				р	pm	mg/m³		
-		-			-	-	No information available	
Substance name:								
EC No: -	C No: - CAS No: -							
DNEL								
				Ind	ustrial			
Route of	A	Acute		Acute		Chronic	Chronic	
exposure: effe		ect local	effe	ct syst	emic	effect local	effect systemic	
Oral	-		-			-	-	
Inhalation				-	-			
Dermal	-		-			-	-	
Critical physical para	meters: s	solubility, fla	mmabilit	ty, corr	osivity:	-		
	1		ı	Con	sumer			
Route of exposure:		Acute ect local	effe	Acute ct syste		Chronic effect local	Chronic effect systemic	
Oral	-		-			-	-	
Inhalation	-		-			-	-	
Dermal	-		-			-	-	
PNEC								
Environmental prote	ction tar	get			PNEC			
Fresh water					No information available			
Freshwater sediment	:S				No information available			
Marine water					No information available			
Marine sediments					No information available			
Food chain					No infor	mation available		
Microorganisms in s	ewage tr	eatment			No information available			
Soil (agricultural)					No infor	mation available		
Air					No information available			



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

8.2.	Exposure controls					
8.2.1.	Engineering measures					
	Substance/mixture related measures to prevent exposure during identified uses:		Use the product in well ventilated rooms. Use personal protective equipment. Do not eat, drink or smoke in the workspace.			
	Structural measures to prexposure:	event	No information available			
	Organisational measures to prevent exposure: Technical measures to prevent exposure:		Organization of work in order to reduce other worker's influence during work process.			
			Secure proper workspace ventilation in order to keep concentration levels in air below permitted levels.			
8.2.2.	Personal protection equip	oment				
8.2.2.1.	Eye and face protection:	Safety glasses that stick to face (preventing splashing) (EN 166) or visor.				
8.2.2.2. Skin protection						
	Hand protection:	1	otective gloves must be according to the EU Directive 2016/425/EEC and andard EN 374. Glove material: nitrile rubber Glove thickness: ≥0.50 mm Break through time: >480 min			
	Other skin protection:		antistatic clothing made of natural fibers (such as cotton) with long s (EN 13034), and shoes that cover the entire foot (EN 10335).			
8.2.2.3.	Respiratory protection:	filter f	ctive full face mask (EN 136) or half mask (EN 140) equipped with a or organic vapors, type "A" (boiling point >65°C) acording to EN) used when concentration levels exceed GVI.			
8.2.2.4.	Thermal hazards:	No inf	ormation available			
8.2.3.	Environmental exposure	controls				
	Substance/mixture related measures to prevent expo		See Section 6			
	Structural measures to pr exposure:	event	Use modern equipment.			
	Organisational measures prevent exposure:	to	Adapt the work process to the required working conditions of the workplace.			
	Technical measures to pro	event	See Section 6			

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



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

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

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

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



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

Route of exposure:	Method	Species	Effective dose LD ₅₀ /LC ₅₀ or ATE _{mixture}	Exposure time	Results
Oral exposure:	No information available	-	LD ₅₀	-	-
Dermal exposure:	No information available	-	LD ₅₀	-	-
Inhalation No information exposure: available		-	LC ₅₀	-	_
Specific tar	get organ toxicity – s	inale exposure	(STOT SF):		
эрсете саг	Specific		Target organ		Note
Oral exposure:	No information		No information available	-	
Dermal exposure: No information		available	No information available	-	
Inhalation exposure:	No information	available	No information _ available		
Respiratory	irritation:	No inf	ormation available		
Irritation ar	nd corrosion				
milation ar	Exposure time	Species	Evaluation	Meth od	Note
Skin irritation:	-	-	-		
Eye irritation:	-	-	-		
Sensitizatio	n				
Dermal exposure:	No information avai	lable			
Inhalation	No information avai	lable			
exposure:					
exposure:	related to the physic	al, chemical an	d toxicological characterist	ics	
exposure: Symptoms	related to the physic		d toxicological characterist	ics	
Symptoms Oral exposure:	1	vailable	d toxicological characterist	ics	
exposure:	No information a	vailable vailable	d toxicological characterist	ics	



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	Dose	Exposure time	Species	Method	Evaluation	Note
Subacute oral	No information available	No information available	No information available	No information available	No information available	-
Subacute dermal	No information available	No information available	No information available	No information available	No information available	-
Subacute inhalation	No information available	No information available	No information available	No information available	No information available	-
Subchronic oral	No information available	No information available	No information available	No information available	No information available	-
Subchronic dermal	No information available	No information available	No information available	No information available	No information available	-
Subchronic inhalation	No information available	No information available	No information available	No information available	No information available	-
Chronic oral	No information available	No information available	No information available	No information available	No information available	-
Chronic dermal	No information available	No information available	No information available	No information available	No information available	-
Chronic inhalation	No information available	No information available	No information available	No information available	No information available	-

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



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Chronic	inhalation	No informa	tion available	No information available	-	
	CMR effects (c	carcinogenicity	, mutagenicity, r	eproductive toxicity)		
	Carcinogenicit	:y:	Based on av	ailable data, the classification criteria	a are not met.	
	Mutagenicity	in-vitro:	Based on av	ailable data, the classification criteria	a are not met.	
	Genotoxicity:		Based on av	ailable data, the classification criteria	a are not met.	
	Mutagenicity (in-vivo:	Based on av	ailable data, the classification criteria	a are not met.	
	Germ cell mut	agenicity:	Based on av	ailable data, the classification criteria	a are not met.	
	Reproductive toxicity: Based on available data, the classification criteria are not me					
11.2	Information o	n other hazaro	s:			
11.2	Information o	n other hazard	s:			
11.2.1.	Endocrine disr					
	The substar contain com have endocri according to Commission E 2017/2100 or (EU) 2018/60 higher.	ponents con ne disrupting REACH Artic Delegated reg Commission	properties le 57(f) or ulation (EU) Regulation			
	Other informa	tions	·			
11.2.2.	Other informa	tions.				

SECTION 12. Ecological information

Toxicity 12.1.

Acute toxicity	Dose	Exposure time	Species	Method	Evaluation	Note
Fish	LC ₅₀	96 hours	No information available	No information available	-	-
Crustacea:	EC ₅₀	48 hours	No information available	No information available	-	-
Algae/aquatic plants	IC ₅₀	8 days	No information available	No information available	-	-
Microorganisms	LC ₅₀	72 hours	-	_	_	-



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

12.2. Persistence and degradability

Abiotic degradation

	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	-

2100	laara	dation
DIU.	ecnac	iaucii

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

12.3. Bioaccumulative potential

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

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

Bioconcentration factor (BCF)



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	Value		Species	Me	ethod	Evaluation		Note	
No information available				n No information available		No information available	No information available		ailable
	Chronic	ecotoxic	rity						
	Value		Dose	Exposure time	Species	Method	Eva	luation	Note
Chronic toxicity on fish LC ₅₀		No information available	No information available	No information available	No info	ormation lle	-		
	ic toxicity o cea (<i>Daphn</i>		EC ₅₀	No information available	No information available	No information available	No info	ormation lle	-
10.1									
12.4.	Mobility	in coil							
12.4.	Mobility		tad dictributi	ion in onvironm	ontal compart	tmonts:			
12.4.	Known c	or predic		on in environm	ental compart	tments:			
12.4.	Known o	or predic		on in environm	ental compart	tments:			
12.4.	Known of No infor	or predic mation a tension:						N	ote
12.4.	Known o	r prediction at tension: e kion ir	available	Concentra No informatavailable	tion	Method formation avail	able	N	ote
12.4.	Known of No informat available	r prediction attension: e kion ir a	°C Io Iformation vailable	Concentra No informa	tion	Method	able		ote
Transp	No informat available	tension a tension ir a a a a a a a a a a a a a a a a a a	°C Io Iformation vailable	Concentra No informa	tion No inf	Method			ote
	No informat available Adsorption No	ion / des	°C Io Information vailable sorption efficient	Concentra No informa available	tion No inf	Method formation avail ration rate		- Method ormation	
Transp	No informat available ort No available No av	ion / des	°C Io Information Vailable sorption efficient constant	Concentra No information available log Kow	tion No inf Evapo No inform available	Method formation avail ration rate	No info	Method ormation ole ormation	Note



Trading name:

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

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12.5.	Results of	PBT and vPvB assessm	ent						
	The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.								
12.6.	Endocrine	e disrupting properties							
	The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.								
12.7.	Other adv	verse effects							
12.7.		verse effects							
12.7.									

13.1.	Waste treatment methods

13.1.1. Product/Packaging disposal: Submit for disposal to the legal person authorized by the Ministry of Environmental and Nature Protection.

13.1.2. Waste codes/waste designations according to Law:

No information available

13.1.3. Waste treatment – relevant information:

No information available

13.1.4. Sewage disposal – relevant information:

Waste must not be disposed of into the sewage system.

13.1.5. Other disposal recommendations:

Do not dispose of the product's remains into the sewage system. Submit the remains to the collectors authorized by the ministry in charge. Do not dispose of the packaging into the sewage system. Submit the packaging to the collectors authorized by the ministry in charge. Do not dispose of in places where ignition may occur.

13.1.6. Relevant Community provisions:



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SECTION 14. Transport information	
Transporting/shipment by road ((ADR)
UN number:	Not subject to transport regulations.
UN proper shipping name:	-
Transport hazard class(es):	-
Packing group:	-
Environmentally hazardous:	-
Special precautions for user:	-
Transporting/shipment by rail (R	ID)
UN number:	Not subject to transport regulations.
UN proper shipping name:	-
Transport hazard class(es):	-
Packing group:	-
Environmentally hazardous:	-
Special precautions for user:	-
Inland waterway transport (ADN)
UN number:	Not subject to transport regulations.
UN proper shipping name:	-
Transport hazard class(es):	-
Packing group:	-
Environmentally hazardous:	-
Special precautions for user:	-
Transporting/shipment by sea (II	MDG)
UN number:	Not subject to transport regulations.
UN proper shipping name:	-
Transport hazard class(es):	-
Packing group:	-
Environmentally hazardous:	-
Special precautions for user:	-
Transporting/shipment by air (IC	AO-TI/IATA-DGR)
UN number:	Not subject to transport regulations.
UN proper shipping name:	-
Transport hazard class(es):	-
Packing group:	-
Environmentally hazardous:	-



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Special precautions for us	er:	-
Further information:	-	

15.1.	Safety, health and enviror	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:	Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC; Directive 2004/42/CE of the European Parliament and of the Council of 21 April 2004 on the limitation of emissions of volatile organic compounds due to the use of organic solvents in certain paints and varnishes and vehicle refinishing products and amending Directive 1999/13/EC; Council Directive 98/24/EC of 7 April 1998 on the protection of the health and safety of workers from the risks related to chemical agents at work; Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006; REACH Restrictions on the manufacturing, placing on the market and use of certain dangerous substances, mixtures and articles (Annex XVII);					
	Information according 19 guideline)	99/13/EC about limitation of emissions of volatile organic compounds (VOC-					
	National legislation:	Chemicals Act, Regulation on classification, packaging and labeling of dangerous substances, Ordinance on occupational exposure limit values and on biological limit values, Regulation on categories, types and classification of waste with a waste catalog and list of hazardous waste, Ordinance on writing Material safety data sheet, Transport of Hazardous Substances Act					
15.2.	Chemical safety assessme	ent					
	None						

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



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16.2.	Abbreviations and acronyms:	ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road) IMDG: International Maritime Code for Dangerous Goods IATA: International Air Transport Association GHS: Globally Harmonised System of Classification and Labelling of Chemicals EINECS: European Inventory of Existing Commercial Chemical Substances CAS: Chemical Abstracts Service (division of the American Chemical Society) DNEL: Derived No-Effect Level (UK REACH) LC50: Lethal concentration, 50 percent LD50: Lethal dose, 50 percent PBT: Persistent, Bioaccumulative and Toxic vPvB: very Persistent and very Bioaccumulative
16.3.	Key literature references and source of data:	-
16.4.	Classification and procedure u 1272/2008 (CLP)	sed to derive the classification for mixture according to Regulation (EC)
Classifi	cation	Classification procedure
-	-	
16.5.	Relevant H statements (number	r and full text)
	H:	
16.6.	Training advice:	
16.7.	** "X" in the product code marks different volumes (different packagings the product) We are not responsible for consequences in case of failure to comply wit instructions for use or improper use of the product described in this material safety data sheet.	

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Exposure scenario resulting to Chemical safety assessment

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