

RHODANINE KIT

The kit contains:

Formaldehyde NB 4%
Hematoxylin M
Rhodanine reagent
Sodium acetate, solution



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Trading name:	4% NB FORMALDEHYDE				
Product code:	FNB4-X**	Revision date:	21 Dec 2022	Version:	6

SECT	ION 1 IDENTIFICATION	OF THE SUBS	TANCE/MI	XTURE AND OF THE COMPANY/UNDERTAKING
1.1	Product identifier			
	Trading name:	4% NB FOR	RMALDEHYD	E
	Chemical name:	-		
	Catalogue number:	FNB4-X**		
1.2	Relevant identified us	es of the subs	tance or mix	cture and uses advised against
	Uses:		Fixative fo	r use in histology.
	Uses advised against:		Only the id	dentified uses are advised.
	Reason why uses advi	sed against:	medical de	ict is intended for use only as an <i>in vitro</i> diagnostic evice, registered at the Agency for Medicinal Products and evices 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 +385 1 2409997 +385 1 2404039 msds@biognost.hr	
	Telephone number:			
	Fax no.:			
	e-mail of competent p	person:		
	National contact:		-	
1.4	Emergency telephone	number		
	National Protection a	nd Rescue Dir	ectorate:	112
	Medical information:			+385 1 2348 342
	Other information:	Other information:		-

SECTIO	SECTION 2 HAZARDS INFORMATION			
2.1	Classification of the substance or mixture			
2.1.1	Classification according to (EC) Regulation No	o. elements		
	Hazard class and category code:	Hazard statements*:		
	Acute Tox. 4	H302		
	Acute Tox. 4	H312		
	Acute Tox. 4	H332		
	Skin Sens. 1	H317		
	Muta. 2	H341		
	Carc. 1B H350			
2.1.2.	Additional information			
	-			
*For fu	Il text of Hazard- and EU Hazard-statements: se	e Section 16		



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2.2	Label elements	
	Product identification:	4% NB FORMALDEHYDE (10% neutral buffered and stabilized formalin solution, pH 7.0)
	Identification number:	-
	Authorization no.:	
	Hazard pictograms:	
	Signal word:	Danger
	Hazard statements:	 H302 Harmful if swallowed. H312 Harmful in contact with skin. H317 May cause an allergic skin reaction. H332 Harmful if inhaled. H341 Suspected of causing genetic defects. H350 May cause cancer.
	Precautionary statements:	P280 Wear protective gloves/protective clothing/eye/protection/face protection. P301+P312 IF SWALLOWED: Call a POISON CENTER/ doctor if you feel unwell. P302 + P352 IF ON SKIN: Wash with plenty of water. P304 + P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing. P308 + P313 IF exposed or concerned: Get medical advice/ attention.
	Further information:	-
2.3	Other hazards	
		ins no components considered to be either persistent, bioaccumulative ar and very bioaccumulative (vPvB) at levels of 0.1% or higher.

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)		



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50-00-0/ 200-001-8/ 605-001-00-5	01-2119488953-20- XXXX	3 – 5 %	formaldehyde, 37 %	Acute Tox. 3; H301 Acute Tox. 3; H311 Acute Tox. 3; H331 Skin Corr. 1B; H314 Skin. Sens. 1; H317 Muta. 2; H341 Carc. 1B; H350
67-56-1/ 200-659-6/ 603-001-00-X	01-2119433307-44- XXXX	1 – 3 %	methanol	Flam. Liq. 2; H225 Acute Tox. 3; H301 Acute Tox. 3; H311 Acute Tox. 3; H331 STOT SE 1; H370

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



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SECTI	ECTION 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:	No information available			
5.2	Special hazards arising from the substance or mixture				
	Hazardous combustion products:	Not flammable. Surrounding fire may cause hazardous fumes to be released.			
5.3	Advice for firefighters				
	Use a self-contained open-circuit	Use a self-contained open-circuit compressed air breathing apparatus and fireproof clothing.			
5.4	Additional information				
	Do not contaminate the environm	ent with extinguishing media.			

SECTIO	ON 6 ACCIDENTAL RELEASE ME	ASURES		
6.1	Personal precautions, protective equipment and emergency procedures			
6.1.1.	For non-emergency personnel			
	Protective equipment:	Use personal protective equipment (see Section 8).		
	Accident prevention methods:	Evacuate members of all non-essential personnel and those members without protective equipment. Avoid breathing vapors and avoid contact with skin and eyes. Do not smoke.		
	Emergency procedures:	Mark the area using proper signs.		
6.1.2.	For emergency responders:			
	Use protective equipment; in c (see Section 8).	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, or Protection and Rescue Directo	ge, drainage system and waterways. In case of large spillage contact National ectorate (NPRD) on 112.		
6.3	Methods and material for cont	ainment and cleaning up		
6.3.1.	Bunding, covering of drains; capping procedures:	Sand or clay barriers.		
6.3.2.	Cleaning up:	Where possible, the substance can be absorbed by using absorbing material. Place the waste material in tightly closed impermeable containers. Store the substance in well ventilated storage rooms until disposal. Submit for disposal to the legal persons authorized by the Ministry of Environmental and Nature Protection. After disposal of the products, wash the area and and involved materials with water.		
6.3.3.	Other information:	Do not use incompatible materials (see Section 10).		



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6.4	Reference to other sections
	-

7.1	Precautions for safe handling						
7.1.1.	Protection measures						
	Measures to prevent fire:		Use in well ventilated storage rooms.				
	Measures to prevent aerosol and dust generation	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:	Keep in tightly closed and upright set containers in a well ventilated storage rooms at temperatures ranging from 15 to 25 °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 drain that directly leads into sewage system. Secure proper ventilation.					
	Further information on storage conditions:	Do not place the unused material in the storage room and do not use empty containers for storing other chemicals. Do not store with incompatible materials (see Section 10).					
7.3	Specific end use(s)						
	Recommendations:	-					
	Industrial sector specific solutions:	-					

SECTIO	SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION								
8.1	Control parameters								
Substance		CAS No	Occupational exposure limit values/short term values		Biological limit values				
			ppm	mg/m³	-				



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Formaldehyde	e 50-00-0		-00-0	0.3/0.6 0.37/		0.37/0.74	T _			
Methanol			-56-1	200		260/-	_			
Wethanoi		07	-30-1	200)/ -	200/-				
Substance name:	-									
EC No:	-	CAS No): -							
DNEL	·		<u> </u>							
				Indu	strial					
Route of	Acı	ıte	Acu	ıte		Chronic			Chronic	
exposure:	effect	local	effect sy	/stemic		effect local		e	ffect systemic	
Oral	-		-		-			-		
Inhalation			130 mg/r (methanc		0.375 mg/m³ (formaldehyde) 130 mg/ m³ (methanol)		ol)	9 mg/m³ (formaldehyde) 130 mg/m³ (methanol)		
Dermal - 20 mg/k			20 mg/kg (methand		0.037 mg/cm ² (formaldehyde)			240 mg/kg (formaldehyde) 20 mg/kg (methanol)		ıyde)
Critical physical pa	rameters: s	solubility,	flammabili	ity, corro	sivity:	-				
				Cons	umer	·				
Route of	Ac	ute	Acu	te		Chronic			Chronic	
exposure:	effect	local	effect sy	stemic		effect local		e	ffect systemic	
Oral	-		4 mg/kg (methanol))	-			4.1 mg/kg (formaldehyde) 4 mg/kg (methanol)		yde)
Inhalation	26 mg (metha		26 mg/m ³ (methanol))		ig/m³ ialdehyde) g/m³ (methanc	ol)	_	m³ (formaldehy m³ (methanol)	yde)
Dermal	-		4 mg/kg (methanol))	0.012 mg/cm ² (formaldehyde)			_	/kg (formaldeh (methanol)	ıyde)
PNEC										
Environmental pro	tection tar	get			PNEC					
Fresh water					0.44 mg/l (formaldehyde) 20.8 mg/l (methanol)					
Freshwater sediments				2.3 mg/kg (formaldehyde) 77 mg/kg (methanol)						
Marine water				0.44 mg/l (formaldehyde) 2.08 mg/l (methanol)						
Marine sediments					2.3 m	g/kg (formalde g/kg (methanc	ehyde)			
Food chain					No information available					
. Joa cham					1 . 40					



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Microorga	anisms in sewage treatment		0.19 mg/l (formaldehyde) 100 mg/l (methanol)			
C :1 / :	li D		0.2 mg/kg (formaldehyde)			
Soil (agric	cultural)		100 mg/kg (methanol)			
Air			No information available			
8.2	Exposure controls					
8.2.1.	Engineering measures					
	Substance/mixture related measure prevent exposure during identifie		Use the product in well ventilated rooms. Use personal protective equipment. Do not eat, drink or smoke in the workspace.			
	Structural measures to prevent e	xposure:	In accordance with Section 7.			
	Organisational measures to prevent exposure: Technical measures to prevent exposure:		Organization of work in order to reduce other worker's influence during work process.			
			Secure proper workspace ventilation in order to keep concentration levels in air below permitted levels. Secure stations for rinsing eyes and showering.			
8.2.2.	Personal protection equipment					
8.2.2.1.	Eye and face protection:	Safety glasses that stick to face (EN 166) or visor in case of lower levels of concentration in air; protective gas mask that covers the entire face in case of higher levels of concentration in air.				
8.2.2.2.	Skin protection	<u> </u>				
	•		e nitrile gloves, 0.11 mm thick (EN 374).			
	Other skin protection:	Wear ant	istatic clothing made of natural fibers (such as cotton) g sleeves (EN 340) and shoes that cover the entire foot.			
8.2.2.3.	Respiratory protection:	Suitable i	mask (EN 136) or half mask (EN 140) equipped with a d "A1 + Form" filter (EN 143) used when concentration ceed GVI.			
8.2.2.4.	Thermal hazards:	No inforr	mation available			
8.2.3.	Environmental exposure controls					
	Substance/mixture related measures to prevent exposure:	See Secti	on 6			
	Structural measures to prevent exposure:	Use mod	ern equipment.			
	Organisational measures to prevent exposure:	Adapt the	e work process to the required working conditions of the e.			
	Technical measures to prevent exposure:	See Section 6				



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9.1	Information on basic physical and chemical properties							
		Value	Method					
	Physical state:	liquid	No information available					
	Colour:	colorless	No information available					
	Odour/odour threshold:	sharp/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:	cca 100 °C at 1,013 hPa	No information available					
	Flammability:	No information available	No information available					
	Lover and upper explosion limit:	No information available	No information available					
	Flash point:	Not applicable	No information available					
	Auto-ignition temperature:	No information available	No information available					
	Decomposition temperature:	No information available	No information available					
	pH:	6.8-7.2 (neutral buffered)	No information available					
	Kinematic viscosity:	No information available	No information available					
	Solubility:	completely soluble in water	No information available					
	Partition coefficient n-octanol/water (log value):	No information available	No information available					
	Vapour pressure:	No information available	No information available					
	Density and/or relative density	No information available	No information available					
	Relative vapour density:	No information available	No information available					
	Particle characteristics:	No information available	No information available					
.2	Other information							

SECTIO	SECTION 10 STABILITY AND REACTIVITY					
10.1	Reactivity:	See subsections 10.3 through 10.5.				
10.2	Chemical stability:	The product is chemically stable under standard ambient conditions of storing and using (room temperature).				
10.3	Possibility of hazardous reactions:	Acids, nitrogen oxides, hydrogen peroxide, oxidizing agents, polymerization initiators, alkaline metals.				
10.4	Conditions to avoid:	Heat sources, low temperatures.				
10.5	Incompatible materials:	Various metals, alloys, plastic, magnesium, zinc alloys.				



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Hazardous decomposition products: 10.6 No information available.

SECTION 11 TOXIC			1					
	n on toxicolog	gical effects						
Acute toxic	ity:	1	-					
Route of exposure:	Method	Species	Do	ose LD ₅₀ / ATE _{mi}		Exposure ti	me	Results
Oral:	-	rat		LD ₅₀		No informat available		100 mg/kg (formaldehyde) 100.1 mg/kg (methanol)
Dermal:	-	rabbit		LD ₅₀		No informat available		270 mg/kg (formaldehyde) 300.1 mg/kg (methanol)
Inhalation:	-	rat		LC ₅₀ 4 h			0.57 mg/l (formaldehyde) 3.1 mg/l (methanol)	
Specific tar	get organ to	cicity – single e	exposure (S	STOT SE):				
	Sı	pecific effects			Target org	an		Note
Oral:	No informat	ion available		No information available			-	
Dermal:	No informat	ion available		No information available			_	
Inhalation:	No informat	ion available	No information available				_	
Aspiration l	hazard:		No infor	mation a	vailable.			
Irritation ar	nd corrosion							
	Expc	sure time	Spec	ies	Evaluation	Method		Note
Skin corrosion/irritation:		rabbit		-	-	No	skin irritation.	
Serious eye - damage/irritation		rabbit -		-	-	No	No eye irritation.	
Sensitizatio	n							
Skin sensitization:	Ma	y cause allergi	gic skin reaction.					
Respiratory sensitiza		ergic persons r						



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Зутрю	ms related to the p	-				orforation of the			
Oral exposure:			evere burns of the mouth and throat, as well as a danger of perforation of the nd the stomach.						
Dermal exposure	· · · ·		•	e time, redness a n cracking and r		sensation of			
Inhalation expos	lir∆' : ·		•	e time, it may lea mage of respirat		itations, cough			
Eye exposure:	Depending Risk of blin		on and exposure	e time, it may lea	nd to stinging, te	aring, and pain			
Repeate	ed dose toxicity (su	bacute, subchro	onic, chronic)						
	Dose	Exposure time	Species	Method	Evaluation	Note			
Subacute oral	No information available	No information available	No information available	No information available	No information available	-			
Subacute dermal	No information available	No information available	No information available	No information available	No information available	-			
Subacute inhalation	No information available	No information available	No information available	No information available	No information available	-			
Subchronic oral	No information available	No information available	No information available	No information available	No information available	-			
Subchronic dermal	No information available	No information available	No information available	No information available	No information available	-			
Subchronic inhalation	No information available	No information available	No information available	No information available	No information available	-			
Chronic oral	No information available	No information available	No information available	No information available	No information available	-			
Chronic dermal	No information available	No information available	No information available	No information available	No information available	-			
Chronic inhalation	No information available	No information available	No information available	No information available	No information available	-			



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	Specific target	organ toxicity - repeated exposure	(STOT	RE):			
		Specific effects		Target organ	Note		
Subacu	te oral	No information available		No information available	-		
Subacu	Subacute dermal No information available			No information available	-		
Subacu	te inhalation	No information available		No information available	-		
Subchr	onic oral	No information available		No information available	-		
Subchr	onic dermal	No information available		No information available	-		
Subchr	onic 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 (c	arcinogenicity; mutagenicity; repro	ductive 1	toxicity)			
	Carcinogenicity:		Did r experir	not show carcinogenic ments.	effects in anima		
	Mutagenicity i	n vitro:	No info	ormation available			
	Genotoxicity:		No info	ormation available			
	Mutagenicity i	n vivo:	No information available				
	Germ cell muta	agenicity:	No information available				
	Reproductive t	oxicity:	No information available				
	Summary of ev	valuation of the CMR properties:	No info	ormation available			
11.2	Information or	n other hazards:					
11.2.1.	Endocrine disr	upting properties:					
	The substant components disrupting prop 57(f) or Comm 2017/2100 or	ce/mixture does not contain considered to have endocrine perties according to REACH Article hission Delegated regulation (EU) r Commission Regulation (EU) vels of 0.1% or higher.					

	INFORMATION	

12.1 Toxicity



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Acute (short-term) toxicity	Dose	Exposure time	Species	Method	Evaluation	Note
Fish	LC ₅₀	96 hours	fish (Morone saxatilis)	-	6.7 mg/l (formaldehyde) 15.400 mh/l (methanol)	-
Crustacea:	EC ₅₀	48 hours	water flea (Daphnia magna)	-	5.8 mg/l (formaldehyde) 18.260 mg/l (methanol)	-
Algae/aquatic plants	IC ₅₀	4 days	green algae	-	4.89 mg/l (formaldehyde) 22.000 mg/l (methanol)	-
Other organisms	-	-	-	-	-	_
Chronic (long-term) toxicity	Dose	Exposure time	Species	Method	Evaluation	Note
Fish	LC ₅₀	96 hours	No information available	No information available	No information available	-
Crustacea:	EC ₅₀	48 hours	No information available	No information available	No information available	-
Algae/aquatic plants	IC ₅₀	72 hours	No information available	No information available	No information available	-
Other organisms	-	-	-	-	-	-

12.2 Persistence and degradability Abiotic degradation Degradation half-lives Method Evaluation Note No information No information Marine water No information available available available No information No information No information available Fresh water available available No information No information No information available Air available available No information No information Soil No information available available available



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Biodeg	gradation									
% Degradation		Time (days)		N	Method		Evaluatio	on		Note
No		information available					No information available		No information available	
12.2										
	umulative on coefficie	ent: n-octan	ol/wate	r (log K	 ow):					
Value	Concentra		ρΗ	°C	Method		Evalı	uation		Note
0,021 -		-		-	formaldehyde	e	-		_	
-0.77 -		-		-	methanol		-		-	
	centration	factor (BCF)							
	Value S				Method		Evaluat			Note
No information available	No availa		nation	No inf	ormation ole		Io informat vailable	ion	-	
2										
Chroni	c ecotoxic	ity	1							
Value	2	Dose	•	osure ime	Species		Method	Evalu	ation	Note
Chronic toxicity	hronic toxicity on fish LC ₅₀		No information available		No information available	ı ir	lo nformatio available	No informa availabl		-
Chronic toxicity crustacea (<i>Dapl</i>		EC ₅₀	No infor availa	mation able	No information available	ı ir	lo nformatio available	No informa availabl		-
	ty in soil									
			ion in e	environn	nental compa	rtme	ents:			
	ormation a	available								
	e tension:							1		NI /
Val	iue	°C	C	oncentr	ation		Method			Note



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Produc	t coc	de:	FNB4-X**	Revisio	n date:	21 🗅	ec 2022		Version:	6
				1		i			1	
		rmation lable	No information available	No information available	n No ir availa	nformatio able	n	-		
					<u> </u>					
	Ads	orption /	desorption							
Transpo		A/D	coefficient ry's constant	log Kow	Evapora	tion rate	Meth	nod	Note	
Soil-wa	ter	No availabl	information e	No information available	No infor		No inforn available	nation	-	
Water-a	air	No availabl	information e	No information available	No infor		No inforn available	nation	-	
Soil-air		No availabl	information No information available		No infor		No inforn available	nation	-	
	:									
12.5.	Results of PBT and vPvB assessment									
				ins no component			•			and
	toxi	c (PBT), c	r very persistent	and very bioaccur	nulative (v	PVB) at le	veis of 0.19	6 or nigr	ner.	
12.6	FI	!I!								
12.6.			srupting properti							
	acco	ording to	REACH Article 5	not contain compo 7(f) or Commission evels of 0.1% or h	n Delegate					
12.6.	Oth	er advers	e effects							
	No	informati	on available							
SECTIO	N 13	DISPOS	AL CONSIDERAT	TIONS						
13.1	W	aste trea	tment methods							
13.1.1.	1.1. Product/Packaging disposal:									
	Submit for disposal to the legal person authorized by the Ministry of Environmental and Nature Protection.									
13.1.2.	W	aste cod	es/waste designa	tions according to	Law:					
	Pa	ckaging	that contains res	idual hazardous s	ubstances	or is cont	aminated v	vith haza	ardous substan	ces



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13.1.3.	Waste treatment – relevant information:						
	No information available	No information available					
13.1.4.	Sewage disposal – relevant ir	Sewage disposal – relevant information:					
	Waste must not be disposed	of into the sewage system.					
13.1.5.	Other disposal recommenda	tions:					
	Do not dispose of the product's remains into the sewage system. Submit the remains to the collectors authorized by the ministry in charge. Do not dispose of the packaging into the sewage system. Submit the packaging to the collectors authorized by the ministry in charge.						
13.1.6.	Relevant Community provision	ons:					
	-						
SECTION	14 TRANSPORT INFORMAT	ION					
7	Transporting/shipment by road	d (ADR)					
UN number:		Not applicable					
UN prope	er shipping name:	-					
Transport	hazard class(es):	-					
Packing g	ıroup:	-					
Environm	entally hazardous:	-					
Special p	recautions for user:	-					
7	Transporting/shipment by rail	(RID)					
UN numb	oer:	Not applicable					
UN prope	er shipping name:	-					
Transport	: hazard class(es):	-					
Packing g	roup:	-					
Environm	entally hazardous:	-					
Special p	recautions for user:	-					
I	nland waterway transport (AD	N)					
UN numb	er:	Not applicable					
UN prope	er shipping name:	-					
Transport	: hazard class(es):	-					
Packing g	roup:	-					
Environm	entally hazardous:	-					
Special p	recautions for user:	-					
	ransporting/shipment by sea (IMDG)						



SAFETY DATA SHEET

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

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Trading name:		ALDEHYDE			
Product code:	FNB4-X**	Revision date:	21 Dec 2022	Version:	6

UN number:	Not applicable	
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:	3334	
UN proper shipping name:	Aviation regulated liquid, n.o.s. (formaldehyde)	
Transport hazard class(es):	9	
Packing group:	III	
Environmentally hazardous:	None	
Special precautions for user:	no information	
Further information: Formaldehyde solutions, nonflammable, containing less than 25% of formaldehyde do not adhere to the ADR regulations.		

SECTI	SECTION 15 REGULATORY INFORMATION				
15.1	5.1 Safety, health and environmental regulations/legislation specific for the substance or mixture EU regulations				
	Authorization and/or	restrictions of use			
	Authorizations:	-			
	Restrictions:	-			



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Trading name:		ALDEHYDE			
Product code:	FNB4-X**	Revision date:	21 Dec 2022	Version:	6

	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 assessmen	t	
	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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Trading name:		4% NB FOR	MALDEHYDE		
Product code:	FNB4-X**	Revision date:	21 Dec 2022	Version:	6

16.4.	Classification and procedure used to derive the classification for mixture according to Regulation (EC) 1272/2008 (CLP)				
Classifi	Classification according to CLP		Classification procedure		
_			-		
16.5.	Relevant H statements (num		ber and full text)		
	H: 225 301		Highly flammable liquid and vapor.		
			Toxic if swallowed.		
		302	Harmful if swallowed.		
	311		Toxic in contact with skin.		
	312		Harmful in contact with skin.		
	314		Causes severe skin burns and eye damage		
	317		May cause allergic skin reaction.		
		331	Toxic if inhaled.		
		332	Harmful if inhaled.		
		341	Suspected of causing genetic defects.		
		350	May cause cancer.		
		370	Causes damage to organs.		
16.6.	Trai	ning advice:	-		
	7. Further information:		** "X" in the product code marks different volumes (different packagings of the product)		
16.7.			We are not responsible for consequences in case of failure to comply with instructions for use or improper use of the product described in this material safety data sheet.		

_			_	
Δ	NI	NI	-	X:
_	14	и	-	л.

EXPOSURE SCENARIO RESULTING TO CHEMICAL SAFETY ASSESSMENT



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Trading name:	HEMATOXYLIN M				
Product code:	HEMM-OT-X**	Revision date:	29.03.2023.	Version:	9

1.1.	Product identifier	Product identifier			
	Trading name:	НЕМАТО	XYLIN M		
	Chemical name:	-			
	Catalogue number:	НЕММ-О	HEMM-OT-X**		
1.2. Relevant identified uses of the substance or mixture and uses advised against		ture and uses advised against			
	Uses:		Modified h	nematoxylin acc. to Mayer for nuclear staining.	
	Uses advised against:		Only the ic	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 supplie	Details of the supplier of the safety data sheet			
	Supplier:		BioGnost Ltd.		
	Address:		Medjugorska 59, Zagreb +385 1 2409997		
	Telephone number:				
	Fax no.:	•		+385 1 2404039	
	e-mail of competent person:		msds@biognost.hr		
	e-mail of competent	person:	msds@biogno	ost.hr	
	e-mail of competent National contact:	person:	msds@biogno -	<u>ost.hr</u>	
1.4.	-			<u>ost.hr</u>	
1.4.	National contact:	number	-	112	
1.4.	National contact: Emergency telephone	number	-		

SECTION 2. Hazards identification						
2.1.	Classification of the substance	Classification of the substance or mixture				
2.1.1.	Classification according to Re	gulation (EC) No 12	272/2008 (CLP)			
	Hazard class and cate	Hazard class and category code: Hazard statements*:				
	Acute Tox. 4		H302			
2.1.2.	Additional information					
	-					
*For fu	ll text of Hazard- and EU Hazard	d-statements: see S	ection 16			
2.2.	Label elements					
	Product identification:	HEMATOXYLI	NM			
	Identification number:	-				
	Authorization number:	-				



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Trading name:	HEMATOXYLIN M					
Product code:	HEMM-OT-X**	Revision date:	29.03.2023.	Version:	9	

	Hazard pictograms:	GHS07				
	Signal word:	Warning				
	Hazard statements:	H302 Harmful if swallowed.				
	Precautionary statements:	P280 Wear protective gloves/protective clothing/eye/protection/face protection. P301 + P312 IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.				
	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)				
302-17-0/ 206-117-5/ 605-014-00-6	-	5 – 6%	chloral hydrate	Acute Tox. 3; H301 Skin Irrit. 2; H315 Eye Irrit. 2; H319				

SECTI	SECTION 4. First aid measures						
4.1.	Description of first aid measures						
	General notes:	-					
	Following inhalation:	Carry the afflicted person out of the contaminated area into a well-ventilated area or out for fresh air. If breathing becomes erratic or it stops, immediately apply artificial respiration (other than mouth-to-mouth) and contact a physician.					
	Following skin contact:	Remove contaminated clothing. Immediately wash with plenty of water and soap. Seek medical assistance if the symptoms of irritation remain.					
	Following eye contact:	Rinse out with plenty of water with the eyelid held wide open using clean fingers. If the symptoms remain, immediately call a physician.					



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Trading name:	HEMATOXYLIN M					
Product code:	HEMM-OT-X**	Revision date:	29.03.2023.	Version:	9	

	Following ingestion:		Provide the person with water (2 glasses at most). Immediately consult a physician. In extreme case, if medical assistance is not available within 1 hour, induce vomiting (only if the person is fully awake and conscious), apply activated charcoal (20-40 g in a 10% solution) and consult a physician as soon as possible.		
	Self-protection of the firs	t aider:	Treat symptomatically.		
4.2.	Most important symptom	ns and eff	fects, both acute and delayed		
	Following inhalation:	Inhalation of large amounts of vapors in inadequately ventilated perimeter may cause coughing, sneezing, headache and nausea.			
	Following skin contact:		irritation. After short exposure, resorption effects are not likely. Long- xposure may cause drying, cracking and tingling sensation of skin.		
	Following eye contact:	Direct eye contact may cause slight to moderate irritation, lacrima burning sensation.			
	Following ingestion:	burnin abdom cough	Swallowing may cause irritation of mucosa, tingling sensation in the moburning sensation; higher levels of concentration may cause nausea, abdominal pain and vomiting. In case of vomiting, aspiration causes coughing, difficult breathing. Higher levels of concentration may cause suffocation.		
4.3.	Indication of any immedi	ate medi	cal 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: No information available					
5.2.	Special hazards arising from the substance or mixture					
	Hazardous combustion products: Hydrochloride and phosgene may be released in case of fire.					
5.3.	Advice for firefighters					
	Use a self-contained open-circuit compressed air breathing apparatus and fireproof clothing. Cool closed containers exposed to fire with water spray or vapor.					
5.4.	Additional information					
	Remove sources of heat and ignition. Do not contaminate the environment with extinguishing media.					

SECTIO	SECTION 6. Accidental release measures				
6.1.	Personal precautions, protective equipment and emergency procedures				
6.1.1.	For non-emergency personnel				



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Trading name:	HEMATOXYLIN M					
Product code:	HEMM-OT-X**	Revision date:	29.03.2023.	Version:	9	

	Protective equipme	nt:	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 procedu	res:	Mark the area using proper signs.		
6.1.2.	For emergency resp	onders:			
	Wear protective equ	uipment (see	Section 8).		
6.2.	Environmental preca	autions:			
	Do not dispose of in sewage, drainage system and waterways. In case of large spillage contact National Protection and Rescue Directorate (NPRD) on 112.				
6.3.	Methods and material for containment and cleaning up				
6.3.1.	Bunding, covering of drains; capping procedures:	Cap the dra	Cap the drains. Collect, nudle and pump out everything that got spilled.		
6.3.2.	Cleaning up:	Where possible, the substance can be absorbed by using inflammable material (sand, diatomaceous earth, vermiculite). Place the waste material in tightly closed impermeable containers. Store the substance in well ventilated storage rooms until disposal. Submit for disposal to the legal persons authorized by the Ministry of Environmental and Nature Protection. After disposal of the products, wash the area and involved materials with water.			
6.3.3.	Other information:	-			
6.4.	Reference to other 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.	Protection measures						
	Measures to prevent fire: Keep away from sources of heat and ignition. Do not smoke.						
	easures to prevent aerosol and dust generation: 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						



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

SECTION 8. Exp	SECTION 8. Exposure controls/personal protection								
8.1. Control	parameters	arameters							
Substan	nce	CAS	No	Occupational exposure limit values/short term values		Bio	ological limit values		
				ppm	mg/m³				
-		-		-	-	-			
Substance name:									
EC No: -		CAS No:	-						
DNEL									
				Industrial					
Route of		Acute		Acute	Chror	nic	Chronic		
exposure:	ef	ect local	effe	ect systemic	effect l	ocal	effect systemic		
Oral	-		-		-		-		
Inhalation	-		-		-		-		
Dermal	-		-		-		-		
Critical physical p	Critical physical parameters: solubility, flammability, corrosivity:								
	Consumer								



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Trading name:	HEMATOXYLIN M					
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Route of		Acute	Acut	_	Chronic	Chronic	
exposure	•	effect local	effect sys	temic	effect local	effect systemic	
Oral		-	-		-	-	
Inhalation		-	-		-	-	
Dermal		-	-		-	-	
PNEC				ı			
Environme	ental protec	tion target		PNEC			
Fresh wate	er			No inform	nation available		
Freshwate	r sediments	5		No infor	mation available		
Marine wa	ater			No infor	mation available		
Marine se	diments			No infor	mation available		
Food chai	n			No infor	mation available		
Microorga	nisms in se	wage treatment		No infor	mation available		
Soil (agric	ultural)			No infor	mation available		
Air				No inform	mation available		
8.2.	Exposure	e controls					
8.2.1.	Appropriate engineering controls						
	measures to prevent exposure			ne product in well ventilated rooms. Use personal protective ment. Do not eat, drink or smoke in the workspace.			
	Structura exposure	al measures to preve	nt No info	information available			
		ntional measures to exposure:		anization of work in order to reduce other worker's influence ng work process.			
	Technica exposure	I measures to preve		e proper workspace ventilation in order to keep entration levels in air below permitted levels.			
8.2.2.	Personal	protection equipme	ent				
8.2.2.1.	Eye and	face protection:	Safety g	glasses tha	t stick to face (preventi	ng splashing) or visor.	
8.2.2.2.	Skin pro	tection	<u>-</u>				
				ctive gloves must be according to the EU Directive EU /425/EEC and standard EN 374. Glove material: nitrile rubber Glove thickness: ≥0.40 mm			
	Other sk	in protection:		Permeation period: > 480 min antistatic clothing made of natural fibers (such as cotton) ang sleeves, and shoes that cover the entire foot.			



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Trading name:	HEMATOXYLIN M					
Product code:	HEMM-OT-X**	Revision date:	29.03.2023.	Version:	9	

8.2.2.3.	Respiratory protection:	During long-term exposure wear a protective mask or a half nequipped with filter A.			
8.2.2.4.	Thermal hazards:	No information available			
8.2.3.	Environmental exposure control	ls			
	Substance/mixture related measures to prevent exposure:		See Section 6		
	Structural measures to prevent exposure: Organisational measures to prevent exposure:		Use modern equipment.		
			Adapt the work process to the required working conditions of the workplace.		
	Technical measures to prevent exposure:		See Section 6		

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



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Trading name:	HEMATOXYLIN M					
Product code:	HEMM-OT-X**	Revision date:	29.03.2023.	Version:	9	

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

SECTION 11. Toxic	ological information	ı					
11.1. Informatio	n on hazard classes as	defined in Regu	lation (EC) No 127	2/2008			
Acute toxic	city:						
Route of exposure:	Method	Species	Effective dose LD ₅₀ /LC ₅₀ or ATE _{mixture}	Exposure t	ime Results		
Oral:	No information available	rat	LD ₅₀	-	479 mg/kg (chloral hydrate)		
Dermal:	No information available	rat	LD ₅₀	-	3.030 mg/kg (chloral hydrate)		
Inhalation:	No information available	_	LC ₅₀	-	-		
Specific ta	rget organ toxicity – si	nale exposure (S	STOT SE):				
- -	5 5	ic effects		t organ	Note		
Oral:	No information as	/ailable	No informa	No information available -			
Dermal:	No information av	vailable	No informa	No information available -			
Inhalation:	No information av	vailable	No informa	No information available -			
Aspiration	hazard:	No infor	mation available				
Irritation a	nd corrosion						
	Exposure time	Species	Evaluation	Method	Note		
Skin corrosion/irritation:	-	-	-				
Serious eye damage/irritation	-	-	-				



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Trading name:	HEMATOXYLIN M					
Product code:	Product code: HEMM-OT-X**		29.03.2023.	Version:	9	

Sensitiz	ation						
Skin sensitization: No information available							
Respiratory sensitization:		No informati	on available				
Cumpto	me role	stad to the ph	veical chamic	al and toyicalog	ical characteristi	ico	
Oral exposure:	IIIS IEIG		ition available	ar and toxicolog	icai characteristi	10.5	
Dermal exposure	.		ition available				
Inhalation expos			ition available				
Eye exposure:	u. c.		ition available				
7 - 7							
Repeate	ed dose	toxicity (sub	acute, subchro	onic, chronic)			
,		Dose	Exposure time	Species	Method	Evaluation	Note
Subacute oral	No availa	information able	No information available	No information available	No information available	No information available	-
Subacute dermal	No availa	information able	No information available	No information available	No information available	No information available	-
Subacute inhalation	No availa	information able	No information available	No information available	No information available	No information available	-
Subchronic oral No information available			No information available	No information available	No information available	No information available	-
Subchronic dermal	No availa	information able	No information available	No information available	No information available	No information available	-
Subchronic No inhalation avai		information able	No information available	No information available	No information available	No information available	-
Chronic oral	No availa	information able	No information available	No information available	No information available	No information available	-
Chronic dermal	No availa	information able	No information available	No information available	No information available	No information available	-



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Trading name:	ding name: HEMATOXYLIN M							
Product code:	HEMM-C)T-X**	Re	vision date:	29.03.2023.	Version:		9
Chronic No inform available		ation	No information available	No information available	No information available	No informati available	on	-
Specific	target organ	toxicit	y – repeated e	xposure (STOT	RE):			
			Specific e	ffects	Target o	organ		Note
Subacute oral	ubacute oral No i		nformation ava	ailable	No information	n available	-	
Subacute derma		No ir	nformation ava	ailable	No informatio	n available	-	
Subacute inhalat	ubacute inhalation No i			ailable	No informatio	n available	-	
Subchronic oral	nic oral No infor			ailable	No informatio	n available	-	
Subchronic derm	nal	l No information av			No informatio	n available	-	
Subchronic inhal	ation	on No information av			No informatio	n available	-	
Chronic oral	oral No informati			ailable	No informatio	n available	-	
Chronic dermal No i			nformation ava	ailable	No information	n available	-	
Chronic inhalation No		No ir	nformation ava	ailable	No information	n available	-	
	fects (carcinog	enicity		y, reproductive ies on test anir	toxicity) mals did not indi	cate carcino	genic (effects.
	enicity in vitro:		Current <i>in vitro tests</i> did not indicate mutagenic effects.					
Genoto	xicity:		No information available					
Mutage	nicity <i>in vivo</i> :		Current in vivo tests did not indicate mutagenic effects.					
Germ co	ell mutagenici	ty:	No informat	ion available				
Reprod	uctive toxicity:		No toxicity on reproductive organs was determined in reproductive organs					uctive organs
Summa	ry of evaluatic	n of th	ne CMR prope	rties: -				
11.2. Informa	tion on other	hazaro	ds:					
11.2.1. Endocri	ne disrupting	prope	rties:					
	own endocrine ect human hea		upting prope	rties				
11.2.2 Other in	nformations:							
_								

S	EC	T	10	N	12.	Eco	logi	ical	inf	fori	mat	ion
---	----	---	----	---	-----	-----	------	------	-----	------	-----	-----

12.1. Toxicity



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Trading name:		HEMATOXYLIN M					
Product code:	HEMM-OT-X**	Revision date:	29.03.2023.	Version:	9		

Acute (short-term) toxicity	Dose	Exposure time	Species	Method	Evaluation	Note
Fish	LC ₅₀	96 hours	Leuciscus idus	No information available	1,720 mg/l (chloral hydrate)	-
Crustacea:	EC ₅₀	48 hours	water flea	No information available	510 mg/l (chloral hydrate)	-
Algae/aquatic plants	IC ₅₀	8 days	green algae	No information available	2.8 mg/l (chloral hydrate)	-
Other organisms	LC ₅₀	72 hours	-	-	-	-
Chronic (long-term) toxicity	Dose	Exposure time	Species	Method	Evaluation	Note
Fish	LC ₅₀	96 hours	No information available	No information available	No information available	-
Crustacea:	EC ₅₀	48 hours	No information available	No information available	No information available	-
Algae/aquatic plants	IC ₅₀	72 hours	No information available	No information available	No information available	-
Other organisms	-	-	-	_	-	-

12.2. Persistence and degradability

Abiotic degradation

	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	_

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



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Trading name:		HEMATOXYLIN M					
Product code:	HEMM-OT-X**	Revision date:	29.03.2023.	Version:	9		

12.3.	Bioaccu	mulative	potential								
	Partition	coeffici	ent: n-octa	nol/wate	er (log	Kow):					
Valu	ie (Concentra	ation	рН	°C	М	ethod	Evalu	ation	١	Note
-	No ava	informailable	mation -		-	No info	ormation lle	No inform available	nation	-	
	Bioconc	entratior	n factor (BC	CF)							
\	/alue		Species	,		Method	d	Evaluati	on	N	ote
·		info	rmation	No ir	nformation		No informati available	on	No informa	ation	
	Chronic	ecotoxic	ity	i			1		1	1	
	Value		Dose		osure me	Spe	ecies	Method	Eva	luation	Note
Chroni	c toxicity o	on fish	LC ₅₀	on	ormati No informa availab		ation i	No nformation available	No info	ormation le	-
	c toxicity o		EC ₅₀	No infor on avail		No inform availab	ation i	No nformation available	No info	ormation le	-
12.4.	Mobility	in soil									
	1		ted distrib	ution in e	enviror	mental	compartme	ents:			
		mation a					I				
	Surface										
	Valu		°C	С	oncent	ration		Method		Not	te
	No informa available	tion ir	lo nformation vailable		inforn ailable	nation	No infor		_		



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	Adsorption / desorption				
Transpo	rt A/D coefficient Henry's constant	log Kow	Evaporation rate	Method	Note
Soil-wat	er No information available	No information available	No information available	No information available	-
Water-a	ir No information available	No information available	No information available	No information available	-
Soil-air	No information available	No information available	No information available	No information available	-
12.5.	Results of PBT and vPvB asses	csmont			
12.3.	No information available	Silient			
	140 IIIOIIIIatioii available				
12.6.	Endocrine disrupting propert	es es			
12.0.	No known endocrine disrupti		affect the environm	nent	
	TVO KHOWIT CHAOCHITE disrapti	ng properties that	ancer the environm	ierre.	
12.7.	Other adverse effects				
12.7.	No adverse effects are expect	ed.			
SECTIO	N 13. Disposal consideration	S			
13.1.	Waste treatment methods	-			
13.1.1.	Product/Packaging disposa	l:			
	Submit for disposal to the I Protection.		rized by the Ministr	y of Environmental	and Nature
			n l aw.		
13 1 2	Waste codes/waste designs	ations according to	LUVV.		
13.1.2.	Waste codes/waste designa	itions according to			
13.1.2.	Waste codes/waste designation available	itions according to			
	No information available				
	No information available Waste treatment – relevant				
13.1.2. 13.1.3.	No information available Waste treatment – relevant	information:			



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13.1.5. Other disposal recomm	mendations:						
authorized by the min	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 բ	provisions:						
-							
SECTION 14. Transport informa	ation						
Transporting/shipment I	py 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 l	oy 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 transpo	ort (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 I	by sea (IMDG)						
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 u	er: -				
Transporting/sh	nsporting/shipment by air (ICAO-TI/IATA-DGR)				
UN number:	Not subject to transport regulations.				
UN proper shipping nam	e:				
Transport hazard class(es	: -				
Packing group:	-				
Environmentally hazardo	ıs: -				
Special precautions for u	er: -				
Further information:	The product is not subject to classification.				

.1. Safety, health and envi	Safety, health and environmental regulations/legislation specific for the substance or mixture				
EU regulations	EU regulations				
Authorization and/or re	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);				



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	National legislation:	Chemicals Act, Regulation on classification, packaging and labeling of dangerous substances, Ordinance on occupational exposure limit values and on biological limit values, Regulation on categories, types and classification of waste with a waste catalog and list of hazardous waste, Ordinance on writing Material safety data sheet, Transport of Hazardous Substances Act			
15.2.	Chemical safety assessment				
	None				

SECTIO	ON 16	6. Other information					
16.1.	Ind	cation of changes:		-			
16.2.			:	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 used 1272/2008 (CLP)		used t	o derive the classification for mixture according to Regulation (EC)			
Classifi	catior	1	Class	ssification procedure			
		-					
16.5.	.5. Relevant H statements (number a		ber and	d full text)			
	H301 Toxic if swallowed. H: H302 Harmful if swallowed. H315 Causes skin irritation. H319 Causes serious eye irritation.		ıful if swallowed. es skin irritation.				
16.6.	Trai	Training advice: -					
16.7.	Further information: We a instru		the p We a instru	' in the product code marks different volumes (different packagings of roduct) re not responsible for consequences in case of failure to comply with actions for use or improper use of the product described in this rial safety data sheet.			



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

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Product code:	roduct code: HEMM-OT-X**		29.03.2023.	Version:	9	

ANNEX:

EXPOSURE SCENARIO RESULTING TO CHEMICAL SAFETY ASSESSMENT



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Trade name:		RHODANINE REAGENT				
Product code:	RR-OT-X**	Date of compilation:	14 Nov 2022	Version:	6	

1.1.	Product identifier				
	Trade name:	RHODANINE RE	EAGEN	Т	
	Chemical name:	-	-		
	Catalogue number:	RR-OT-X**			
1.2.	Relevant identified	l uses of the substa	ance or	r mixture ar	d uses advised against
	Uses:		For use w	th Rhodanine kit.	
	Uses advised against:			Only the i	dentified uses are advised.
	Reason why uses a	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 supp	olier of the safety d	ata she	eet	
	Supplier:		BioGnost Ltd.		
	Address:		Medjugorska 59, Zagreb		
	Telephone number:		+385 1 2409997		
	Telefax:		+385 1 2404039		
	E-mail of compete	nt person:	msds@biognost.hr		
	National contact:		-		
1.4.	Emergency telephone numbers				
	National Protectio	n and Rescue Direc	ctorate	:	112
	Medical information	on:			+385 1 2348 342
	Other information:				_

SECTIO	SECTION 2. Hazards identification					
2.1.	Classification of the substance	Classification of the substance or mixture				
2.1.1.	Classification according to Re	egulation (EC) No	o. 1272/2008 (CLP)			
	Hazard class and categ	Hazard class and category code: Haza				
	Flam. Liq. 2		H225			
2.1.2.	Additional information	Additional information				
	-					
*For fu	ll text of Hazard- and EU Hazard	d-statements: see	e Section 16.			
2.2.	Label elements					
	Product identification:	RHODANINE	REAGENT			
	Identification number:	-				



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Trade name:		RHODANINE REAGENT				
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	A			
	Authorisation number:			
	Hazard pictograms:	GHS02		
	Signal word:	Danger		
	Warning statement:	H225 Highly flammable liquid and vapor.		
		P210 Keep away from heat/sparks/open flames/hot surfaces Do not smoke.		
	Precautionary statement:	P233 Keep container tightly closed. P280 Wear protective gloves/protective clothing/eye/protection/face protection.		
	Supplemental hazard information (EU):	-		
2.3.	Other hazards			
	Endocrine Disrupting Properties:			
	No known endocrine disrupti	ng properties		
	Results of PBT and vPvB ass PBT or a vPvB.	sessment : According to the results of its assessment, this substance is not a		

SECTION 3. Co	SECTION 3. Composition/information on ingredients							
CAS/ EC/ Index number	REACH Registration No	Weight % content (or range)	Identification name	Classification according to Regulation (EC) No 1272/2008 (CLP)				
64-17-5/ 200-578-6/ 603-002-00-5	01-2119457610-43- 0147	80 - 100 %	ethanol	Flam. Liq. 2; H225				

SECT	SECTION 4. First aid measures			
4.1.	Description of first aid measures			
	General notes:	If the suggested first aid measures do not prove sufficient, seek medical attention.		
	Following inhalation:	Carry the afflicted person out of the contaminated area into a well-ventilated area or out for fresh air. In case of difficult breathing, provide the afflicted person with oxygen.		
	Following skin contact:	Remove all contaminated clothes/footwear. Thoroughly wash with water for at least 15 minutes.		



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	Following eye contact:	Rinse the eyes using mild jet of clean water for at least 20 minutes with the eyelids held wide open.			
	Following swallowing:	Rinse the mouth thoroughly with 1-2 glasses of water. Immediately consult a physician and show the container or label. In case of swallowing large quantities, transport the afflicted person to the hospital.			
	Self-protection of the first aider	-			
4.2.	Most important symptoms and effects, both acute and delayed				
	Following inhalation:	Depending on concentration and exposure time, it may lead to mucosa irritation, cough, and dyspnea.			
	Following skin contact:	Depending on concentration and exposure time, it may lead to irritation, rash, skin drying and skin cracking.			
	Following eye contact:	Depending on concentration and exposure time, it may lead to irritation, tearing, redness and pain.			
	Following swallowing:	Depending on concentration and exposure time, it may lead to stinging and digestive mucus damage, abdominal pain, nausea, vomiting.			
4.3.	Indication of any immediate med	ical attention and special treatment needed			
	No information available				

SECT	ION 5. Firefighting measures				
5.1.	Extinguishing media	Extinguishing media			
	Suitable extinguishing media:	Small fire - water spray, dry powder, alcohol-resistant foam, CO2 Large fire - water spray or alcohol-resistant foam			
	Unsuitable extinguishing media:	Water with full jet			
5.2.	Special hazards arising from th	e substance or mixture			
	Hazardous byproducts of fire:	Incomplete combustion of the product.			
5.3.	Advice for firefighters				
	, ,	elf-contained open-circuit compressed air breathing apparatus and a set eat dissipation (fireproof clothing).			
5.4.	Additional information				
	Cool endangered receptacles we not contaminate the environment	vith water spray. Collect contaminated fire fighting water separately. Do ent with extinguishing media.			

SECTIO	SECTION 6. Accidental release measures		
6.1.	Personal precautions, protective equipment and emergency procedures		
6.1.1.	For non-emergency personnel		
	Protective equipment:	Use personal protective equipment (see Section 8).	



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	Accident prevention methods:	Evacuate members of all non-essential personnel and those members without protective equipment. Avoid breathing vapors and avoid contact with skin and eyes. Do not smoke. Keep away from ignition sources.	
	Emergency procedures:	Mark the area using proper signs.	
6.1.2.	For emergency responders:		
	Self-contained open-circuit con heat dissipation (fireproof cloth	npressed air breathing apparatus, a set for protecting the body from ing).	
6.2.	Environmental precautions:		
	Use sand protective barrier to prevent further spillage of chemicals. Prevent environmental pollution by not allowing the chemicals to enter the sewage system, surface water or groundwater.		
6.3.	Methods and materials for cont	tainment and cleaning up	
6.3.1.	Bunding, covering of drains; capping procedures:	Sand protective barrier or barriers made of similar materials	
6.3.2.	Cleaning up:	Sawdust, sand, mineral adsorbents	
6.3.3.	Other information:	Secure proper ventilation. Contact the responsible person; in case of larger spills and possible environmental pollution contact National Protection and Rescue (112). Do not use incompatible materials (see Section 10).	
6.4.	Reference to other sections		
	See Section 7 for information on safe handling.		
	See Section 8 for information o	n personal protection equipment.	
	See Section 13 for disposal info	rmation.	

SECTIO	SECTION 7. Handling and storage				
7.1.	Precautions for safe handling				
7.1.1.	Protection measures				
	Measures to prevent fire:	Use in well ventilated storage rooms. Keep away from sources of ignition and heat. Do not use tools that cause sparks. Do not smoke.			
	Measures to prevent aerosol and dust generation:	Secure proper ventilation.			
	Measures to protect the environment:	Prevent spilling into the sewage system and waterways.			
	Other measures: Protect against electrostatic charges.				
7.1.2.	Advice on general occupational hygiene:				
	Do not eat, drink or smoke in the workspace. Thoroughly wash hands after work and before eating.				
7.2.	Conditions for safe storage, including any inc	ompatibilities			



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Trade name:		RHODANINE REAG	ENT		
Product code:	RR-OT-X**	Date of compilation:	14 Nov 2022	Version:	6

	Technical measures and storage conditions:	Keep in tightly closed and upright set containers in a well ventilated storage rooms at temperatures ranging from 15 to 25 °C. Protect from heat and direct sunlight.
	Packaging materials:	Manufacturer's original packaging.
	Requirements for storage rooms and vessels:	Keep away from food and drink. Keep the containers tightly closed.
	Advices for storage equipment:	The storage must be made of hard material; floors must be resistant to chemicals. There must be no drain that directly leads into sewage system. Secure proper ventilation.
	Further information on storage conditions:	Do not place the unused material in the storage room and do not use empty containers for storing other chemicals. Do not store with incompatible materials (see Section 10).
7.3.	Specific end use(s)	
	Recommendations:	-
	Industrial sector specific solutions:	-

SECTION 8. Exposure	SECTION 8. Exposure controls/personal protection					
8.1. Control para	meters					
Substance	CASI	CAS No		Occupational exposure limit values/short term values		Biological limit values
			pp	m	mg/m³	
Ethanol	64-17	'- 5	100	00/-	1900/-	No information available
Substance:	-					
EC No:	-		CA	S No:	-	
DNEL						
			Industr	ial		
Route of exposure:	Acute	ute Acut		Chronic		Chronic
Route of exposure.	effect local	effect sys	stemic	e	ffect local	effect systemic
Oral	-	-		-		-
Inhalation	1900 mg/m³ (ethanol)	-		-		380 mg/m³ (ethanol)
Dermal	-	-		-		343 mg/kg (ethanol)
Critical physical param	Critical physical parameters: solubility, flammability, corrosivity:					
	Consumer					
Route of exposure:	Acute	Acu	te	Chronic		Chronic
Route of exposure:	effect local	effect sys	stemic	е	ffect local	effect systemic
Oral	-	-		-		87 mg/kg bw/day (ethanol)



Hand protection:

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Trade n	ame:			RHO	DANINE REAG	ENT	
Product	code:	RR-OT-X**		Date of	compilation:	14 Nov 2022	Version:
Inhalatio	n	950 mg/m³ (ethanol)	-		-	114 mg/m	³ (ethanol)
Dermal		-	-		-	206 mg/kg	(ethanol)
PNEC							
Environmental protection target			PNEC				
Fresh wa	iter			0.96 mg/l	(ethanol)		
Freshwat	ter sedime	nts		3.6 mg/kg	(ethanol)		
Marine v	vater			0.79 mg/l	(ethanol)		
Marine s	ediments			2.9 mg/kg	(ethanol)		
Food cha	ain			380-720 m	ng/kg (ethanol)		
Microorg	ganisms in	sewage treatment		580 mg/l (580 mg/l (ethanol)		
Soil (agricultural)			0.63 mg/kg (ethanol)				
Air				no information available			
8.2.	Exposur	e controls					
8.2.1.	Appropr	iate engineering co	ontrols				
	measure	ce/mixture related es to prevent expos dentified uses:	ure	Do not eat, protective e		the workspace. Use	e personal
	Structur exposur	al measures to preve:	/ent	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:		See Section 7.2				
8.2.2.	Persona	protection equipn	nent				
8.2.2.1.	Eye and	face protection:	of c	oncentration		N 166) or visor in ca gas mask that cover ration in air.	
8.2.2.2.	Skin pro	tection	<u>i</u>				
				tective gloves standard EN		ng to the EU Directi	ve 2016/425/EE

Glove material: nitrile rubber Glove thickness: ≥0.50 mm Break through time: >480 min



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Trade name:	RHODANINE REAGENT			_	
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	Other skin protection:	footwear, such as ru entire foot. In case impermeable mate	ork use cotton clothing (EN 340) and suitable ubber boots (EN 20345) or shoes that cover the of spilling hazard, use clothing made of rial suitable for protection from liquid chemicals and footwear made from the same material.	
8.2.2.3.	Respiratory protection:	a filter for organic v	mask (EN 136) or half mask (EN 140) equipped with apors, type "A" (boiling point >65°C) acording to en concentration levels exceed GVI.	
8.2.2.4.	Thermal hazards:	No information ava	ailable	
8.2.3.	Environmental exposure cor	ntrols		
	Substance/mixture related rexposure:	measures to prevent	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 preven	ent exposure:	See Section 6	

1.	Information on basic physical and	l chemical properties	chemical properties		
		Value	Method		
	Physical state:	liquid	no information available		
	Colour:	orange	no information available		
	Odour/odour threshold:	ethanol like/no information available	no information available		
	Melting point / freezing point:	no information available	no information available		
	Boiling point or initial boiling point and boiling range:	no information available	no information available		
	Flammability:	no information available	no information available		
	Lover and upper explosion limit:	no information available	no information available		
	Flash point:	13 °C	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		



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

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

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008								
Acut	e toxicity:							
Route of exposure:	Method	Species	Effective Dose LD ₅₀ /LC ₅₀ or ATE _{mixture}	Exposure time	Results			
Oral:	-	rat	LD ₅₀	-	7.060 mg/kg (ethanol)			
Dermal:	-	rabbit	LD ₅₀	-	>20.000 mg/kg (ethanol)			
Inhalation:	-	rat	LC ₅₀	4 h (ethanol)	>8.000 mg/l (ethanol)			

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

Aspiration hazard:	No information available



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Trade name:		RHODANINE REAGEN	IT		
Product code:	RR-OT-X**	Date of compilation:	14 Nov 2022	Version:	6

Product code.		RR-O1-X		Date	or con	ірпац	lion.	14 NOV	/ 2022	version	1.
Irritation ar	nd co										
		Exposur	e time	Species	5		Evaluatio	n	Method		Not
Skin corrosion/irritat	tion	No informat available		on No information available		No information available			No information available		-
Serious eye damage/irritation No inform availab				availahla availahla		No informa available		n -			
Sensitization											
Skin sensitizatio	n:	No infor	mation a	available							
Respiratory sensitization:		No infor									
Symptoms re	elated	I to the phy	sical, che	emical and toxi	icologica	al cha	racteristics				
Oral exposure:	Swallowing may cause irritation of mucosa, tingling sensation in the mouth, burning sensation; higher levels of concentration may cause nausea, abdominal pain and vom In case of vomiting, aspiration causes coughing, difficult breathing. Higher levels of concentration may cause suffocation.										
Dermal exposur	re:	-		ter short expos cracking and t		-			ely. Long-	term exp	osure
Inhalation exposure:			_	amounts of va g, headache ar	•		equately ven	tilated p	erimeter r	may caus	ie:
Eye exposure:		Direct eye sensation.		may cause slig	ght to m	odera	ate irritation	, lacrima	tion and b	ourning	
B		• • • •			• \						
Repeated do	se to			chronic, chron		:	Mathad	г.	valvation	Na	
Subacute oral	No information available		No availab	osure time information lle	No inform on availab	ati	No informatio available	n ir	valuation lo nformatior vailable	No 1 -	<u>le</u>
Subacute dermal	Information		No availab	information le	No inform on availab		No informatio available	n ir	lo nformatior vailable	٦ -	
Subacute inhalation No information available		mation No information		No inform on availab		No informatio available	n ir	lo nformatior vailable	۱ -		



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Trade name:		RHODANINE REAGEN	Т		
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Subchronic oral	No information available	No information available	No informati on available	No information available	No information available	n -
Subchronic dermal	No information available	No information available	No informati on available	No information available	No information available	n -
Subchronic inhalation	No information available	No information available No information on available No information available No information available available		n -		
Chronic oral	No information available	available on		No information available	n -	
Chronic dermal	No information available	No information available	No informati on available		No information available	n -
Chronic inhalation	No information available	No information available	No informati on available	No information available	No information available	n -
Specific targ	et organ toxicity	/ - repeated exposure (S				
		Specific effect		Target or		Note
Subacute oral		No information availab		No information a	-	
Subacute derm		No information availab		No information available		-
Subacute inhala		No information availab		No information a	_	
Subchronic ora		No information availab		No information a	_	
Subchronic der		No information availab		No information a		-
Subchronic inha	alation	No information availab		No information a		_
Chronic oral		No information availab		No information a		_
Chronic dermal		No information availab		No information a		_
Chronic inhalat	ion	No information availab	ole	No information a	vailable	-
CNAD (C ·	/ · · · ·					
CMR effects Carcinogenic		, mutagenicity, reproduc		rmation available		



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Trade name:		RHODANINE REAGEN	Т		
Product code:	RR-OT-X**	Date of compilation:	14 Nov 2022	Version:	6

Geno	otoxicity:	No information available			
Muta	genicity <i>in-vivo</i> :	No information available			
Germ	n cell mutagenicity:	No information available			
Repro	oductive toxicity:	No information available			
Sumr	mary 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. E							
12.1. Toxici	ty						
Acute (short- term) toxicity	Dose	Exposure time	Species	Method	Evaluation	Note	
Fish	LC ₅₀	96 hours	Fish	No information available	8.140 mg/l (ethanol)	-	
Crustacea:	EC ₅₀	48 hours	Daphnia magna	No information available	7.800 mg/l (ethanol)	-	
Algae/aquatic plants:	IC ₅₀	72 hours	algae	No information available	5.000 mg/l (ethanol)	-	
Other organisms	-	-	-	-	-	-	
Chronic (long-term) toxicity	Doza	Exposure time	Species	Method	Evaluation	Note	
Fish	LC 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	-	



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Trade name	e:			F	RHODANINE	REAGEN	Т		
Product cod	de:	RR-OT-X**		Date	of compilation	on:	14 Nov 2022	Version:	6
Other organisms	-	-		-	-		-	-	
12.2. Per	sistend	e and degrad	ability						
		gradation							
:	С	egradation ha	alf-lives	N	1ethod	Evalu	uation	Note	
Marine water	No ir	nformation ava	ailable	No infor available		No inforr available	mation -		
Fresh water	No ir	nformation ava	ailable	No infor available		No inforr available	mation -		
Air	No ir	nformation ava	ailable	No infor available		No inforr available	mation -		
Soil	No ir	nformation ava	ailable	No infor available		No inforr available	nation -		
Biodegrac									
% Degradat	ion	Time (da	ys)	Me	ethod	Evalı	uation	Note	
-	-			-		-	-		
		umulative pot							
		ol-water partit					F 1	N	
Value		oncentration	p⊦		Method		Evaluation	Note	
-	_		-	-	-				
Dia a a a		tion Factor (P	CE)						
Value	icentra	tion Factor (B			Method		Evaluation	Note	
No		Specie	:5		Method		Evaluation	INOLE	
information available	N	o information	available	No infor	mation availab	ΙΔ :	nformation lable	-	
Chronic e	cotoxio	itv							
Value		Dose	Ехроз	sure time	Species	Metho	d Evaluatio	on Note	
Chronic toxic	city	LC ₅₀	No info		No	No	No	-	
L	· · · · · · · · · · · · · · · · · · ·					.i	<u>i</u>		



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Trade r	name:				Rŀ	HODANINE	REAGE	NT		
Produc	t code:	RR-OT	-X**		Date	of compilation	on:	14	Nov 2022	Version: 6
on fish			avai	able		information available	informa availab	1	information available	1
Chronic on crust (Daphni	acea	EC ₅₀	1	nformation able		No information available	No informa availab		No information available	1 -
12.4.	Mobility	in soil								
	Known			ion in enviro	nmer	ntal compartm	ents:			
		tension:	allable							
	Va	°C	Cc	ncentration	Met	thod		Note		
	No information No available available			information		information ilable	No inform availa			
·	-	esorption A/D coeffi	cient							
Transpo	rt	Henry's cor	nstant	log Kov	N .	Evaporation rate		Method		Note
Soil-Wa	ter No avai	inf lable	ormation	No informa available	ation	No information available		No information available		-
Water-A	Air No avai	inf lable	ormation	No informa available	ation	No informa available	No information available		formation able	-
Soil-Air	No avai	inf lable	ormation	No informa available	ation	No informa	tion	No ir availa	formation able	-
12.5.		of PBT and n available			s not	contain any P	BT or vP	vB sub	stances.	
12.6.	Endocrii	ne disruptir	ng propert	ies						
	Based o	n available	data, does	not contain	endo	ocrine disrupt	ors.			
12.7.	Other a	dverse effe	cts							
	No adve	erse effects	are expec	ted.						
SECTIO	N 13. Dis	posal cons	sideration	s						
13.1.	Waste t	reatment m	nethods							



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Trade name:	RHODANINE REAGENT				
Product code:	RR-OT-X**	Date of compilation:	14 Nov 2022	Version:	6

13.1.1.	Product/Packaging disposal:		
15.1.1.		l person authorized by the Ministry of Environmental and Nature	
13.1.2.	Waste codes/waste designation	ns according to Low:	
	Packaging that contains residu	al hazardous substances or is contaminated with hazardous substances	
13.1.3.	Waste treatment – relevant info	ormation:	
	No information available		
13.1.4.	Sewage disposal – relevant info		
	Waste must not be disposed o	f into the sewage system.	
13.1.5.	13.15 Other diamental recommendations.		
13.1.3.	Other disposal recommendation	's remains into the sewage system. Submit the remains to the collectors	
	•	harge. Do not dispose of the packaging into the sewage system. Submit	
	the packaging to the collectors	s authorized by the ministry in charge.	
13.1.6.	Relevant Community provision	s:	
	Disposal must be made accord	ling to official regulations.	
	N 14. Transport information		
······	nsporting/shipment by road (ADF		
UN num		1170	
	per shipping name:	Ethanol solution	
	rt hazard class(es):	3	
Packing	group. mental hazards:	No information available	
	precautions for user:	-	
'	nsporting/shipment by rail (RID)		
UN num		1170	
,	per shipping name:	Ethanol solution	
	rt hazard class(es):	3	
Packing		II	
·····	nental hazards:	No information available	
Special p	precautions for user:	-	



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Trade name:	RHODANINE REAGENT				
Product code:	RR-OT-X**	Date of compilation:	14 Nov 2022	Version:	6

Transporting/shipment by inland wat	terways (ADN)
UN number:	1170
UN proper shipping name:	Ethanol solution
Transport hazard class(es):	3
Packing group:	II
Environmental hazards:	No information available
Special precautions for user:	-
Transporting/shipment by sea (IMDG	5)
UN number:	1170
UN proper shipping name:	Ethanol solution
Transport hazard class(es):	3
Packing group:	II
Environmental hazards:	No information available
Special precautions for user:	-
Transport in bulk according to Annex II of MARPOL73/78 and the IBC code:	-
Transporting/shipment by air (ICAO-	TI/IATA-DGR)
UN number:	1170
UN proper shipping name:	Ethanol solution
Transport hazard class(es):	3
Packing group:	II
Environmental hazards:	No information available
Special precautions for user:	-
Further -	

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

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



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		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		
16.2	Alalama, ilatiama amala			
16.2.	Abbreviations and a	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 refere	nces and source of data: -		
16.4.	Classification and p 1272/2008 (CLP)	ocedure used to derive the classification for mixture according to Regulation (EC)		
Classific	cation	Classification procedure		
_		-		
16.5.	Relevant H stateme	nts (number and full text)		
	H: 225	Highly flammable liquid and vapor.		
16.6.	Training advice:	-		
10.0.	Training davice.			
		** "X" in the product code marks different volumes (different packaging of the		
		product)		
16.7.	Further information	We are not responsible for consequences in case of failure to comply with		
		instructions for use or improper use of the product described in this material		
		safety data sheet.		

ANNEX: Exposure scenario resulting to Chemical safety assessment	
-	



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Trading name:	SODIUM ACETATE, SOLUTION				
Product code:	NA-OT-X**	Date of compilation:	21 Dec 2022	Version:	5

SECTI	ON 1. Identification of	the substa	nce/mixture a	and of the company/undertaking	
1.1.	Product identifier				
	Trading name:	SODIUM	ACETATE, SO	LUTION	
	Chemical name:	-	-		
	Catalogue number:	NA-OT-X	NA-OT-X**		
1.2.	Relevant identified us	es of the su	bstance or mi	xture and uses advised against	
	Uses:		For use with	Rhodanine kit.	
	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 person:		msds@biognost.hr		
	National contact:		-		
1.4.	Emergency telephone	number			
_	National Protection a	nd Rescue D	Directorate:	112	
	Medical information:			+385 1 2348 342	
	Other information:			_	

SECTIO	ECTION 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	Hazard class and category code: Hazard statements*:			
	Not identified as hazardous substance				
2.1.2.	Additional information				
	-				
*For fu	ll text of Hazard- and EU Hazard-sta	tements: see S	Section 16		
2.2.	Label elements				
	Product identification:	SODIUM ACE	ETATE, SOLUTION		
	Identification number:	-			
	Authorization no.:	-			
	Hazard pictograms:	-			



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Trading name:		SODIUM ACETATE, SOLUTION		
Product code:	NA-OT-X**	Date of compilation:	21 Dec 2022	Version: 5

	Signal word:	-	
	Hazard statements:	-	
	Precautionary statements:	-	
	Further information:	-	
2.3.	Other hazards		
	Endocrine Disrupting Propertie	es:	
	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)
_	-	-	Contains no hazardous substances	-

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



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Trading name:	SODIUM ACETATE, SOLUTION			
Product code:	NA-OT-X**	Date of compilation:	21 Dec 2022	Version: 5

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



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Trading name:	SODIUM ACETATE, SOLUTION				
Product code:	NA-OT-X**	Date of compilation:	21 Dec 2022	Version:	5

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

SECTIO	ON 7. Handling and storage	
7.1.	Precautions for safe handling	
7.1.1.	Protection measures	
	Measures to prevent fire:	Keep away from sources of heat and ignition. Do not smoke.
	Measures to prevent aerosol and dust generation:	Secure proper ventilation.
	Measures to protect the environment: Other measures:	Prevent spilling into the sewage system and waterways.
7.1.2.	Advice on general occupational hygiene:	
	Do not eat, drink or smoke in the workspace. T	horoughly wash hands after work and before eating.
7.2.	Conditions for safe storage, including any inco	mpatibilities
	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 ACETATE,	SOLUTION	
Product code:	NA-OT-X**	Date of compilation:	21 Dec 2022	Version: 5

SECTION 8. Exposur	e contr	ols/persona	al protec	tion			
8.1. Control para	meters	T					
Substance		CAS I	No		•	exposure limit t term values	Biological limit values
					ppm	mg/m³	
-		-			-	-	No information available
Substance - name:							
EC No: -		CAS No:	-				
DNEL							
				Inc	lustrial		
Route of	,	Acute		Acut	e	Chronic	Chronic
exposure:	effe	ect local	effe	ct sys	temic	effect local	effect systemic
Oral	-		-			-	-
Inhalation	-		-			-	-
Dermal	-		-				-
Critical physical parar	meters:	solubility, fla	ammabilit	y, cor	rosivity:	-	
	T			Co	nsumer		
Route of		Acute		Acut		Chronic	Chronic
exposure:	effe	ect local	effe	ct sys	temic	effect local	effect systemic
Oral	-		-			-	-
Inhalation	-		-			-	-
Dermal	-		-			-	-
PNEC					T		
Environmental protec	ction tar	get			PNEC		
Fresh water						mation available	
Freshwater sediments	S				No infor	mation available	
Marine water					No infor	mation available	
Marine sediments					No infor	mation available	
Food chain					No infor	mation available	
Microorganisms in se	wage tr	eatment			No infor	mation available	
Soil (agricultural)					No infor	mation available	
Air					No infor	mation available	



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Trading name:		SODIUM ACETATE,	SOLUTION	
Product code:	NA-OT-X**	Date of compilation:	21 Dec 2022	Version: 5

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

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



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Trading name:		SODIUM ACETATE,	SOLUTION	_
Product code:	NA-OT-X**	Date of compilation:	21 Dec 2022	Version: 5

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

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

SECTION	ON 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 ACETATE,	SOLUTION	
Product code:	NA-OT-X**	Date of compilation:	21 Dec 2022	Version: 5

Route of exposure:	Method	Species	Effective dose LD ₅₀ /LC ₅₀ or ATE _{mixture}	Exposure time	Results
Oral exposure:	No information available	_	LD ₅₀	_	_
Dermal exposure:	No information available	-	LD ₅₀	-	-
Inhalation exposure:	No information available	-	LC ₅₀	-	-
Specific ta	rget organ toxicity – s	ingle exposure	(STOT SE):		
	Specific	effects	Target organ		Note
Oral exposure:	No information	available	No information available	-	
Dermal exposure:	No information	available	No information available	-	
			No information		
Inhalation exposure Respirator	e: No information y irritation:		available ormation available	-	
Respirator	y irritation: and corrosion	No inf	available	Meth	Note
Respirator Irritation a	y irritation: and corrosion Exposure time	No info	available ormation available Evaluation	Meth od	Note
Respirator Irritation a Skin irritation:	y irritation: and corrosion	No inf	available ormation available	Meth	Note
Respirator Irritation a	y irritation: and corrosion Exposure time	No info	available ormation available Evaluation	Meth od	Note
Respirator Irritation a Skin irritation:	y irritation: Ind corrosion Exposure time	No info	available ormation available Evaluation	Meth od	Note
Respirator Irritation a Skin irritation: Eye irritation:	y irritation: Ind corrosion Exposure time	Species -	available ormation available Evaluation	Meth od	Note
Respirator Irritation a Skin irritation: Eye irritation:	y irritation: Ind corrosion Exposure time	Species	available ormation available Evaluation	Meth od	Note
Respirator Irritation a Skin irritation: Eye irritation: Sensitization Dermal exposure: Inhalation exposure:	y irritation: Ind corrosion Exposure time On No information avai	Species ilable	available ormation available Evaluation	Meth od	Note
Respirator Irritation a Skin irritation: Eye irritation: Sensitization Dermal exposure: Inhalation exposure:	y irritation: Ind corrosion Exposure time On No information avai	Species ilable lable al, chemical an	available ormation available Evaluation	Meth od	Note
Respirator Irritation a Skin irritation: Eye irritation: Sensitization Dermal exposure: Inhalation exposure: Symptoms	y irritation: Ind corrosion Exposure time No information available related to the physic	Species lable lable al, chemical and vailable	available ormation available Evaluation	Meth od	Note
Respirator Irritation a Skin irritation: Eye irritation: Sensitization Dermal exposure: Inhalation exposure: Symptoms Oral exposure:	y irritation: Ind corrosion Exposure time on No information avail related to the physic No information a No information a	Species llable llable al, chemical anvailable vailable	available ormation available Evaluation	Meth od	Note



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

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



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Chronic inhalation No information			n available	No information available	-
	CMR effects (c	arcinogenicity, r	nutagenicity,	reproductive toxicity)	
	Carcinogenicit	y:	Based on a	vailable data, the classification criteria	are not met.
	Mutagenicity i	n-vitro:	Based on a	vailable data, the classification criteria	are not met.
	Genotoxicity:		Based on a	vailable data, the classification criteria	are not met.
	Mutagenicity i	n-vivo:	Based on a	vailable data, the classification criteria	are not met.
	Germ cell mut	agenicity:	Based on a	vailable data, the classification criteria	are not met.
	Reproductive t	toxicity:	Based on a	vailable data, the classification criteria	are not met.
11.2		valuation of the			
11.2.1.		upting propertie	es:		
	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 informa	tions:			
	-				

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	-	_	-	-



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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	-

Biodegradation

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

12.3. Bioaccumulative potential

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

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

Bioconcentration factor (BCF)



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	Value		Species	Me	ethod	Evaluation		Note	
No information available		No information available		on No inform available			No information available		ailable
	Chronic	ecotoxic	ity						
	Value		Dose	Exposure time	Species	Method	Eva	luation	Note
Chroni	c toxicity o	n 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	-
12.4.	N.A I- 1114								
1/4	Mobility in soil Known or predicted distribution in environmental compartments:								
12.7.			tod distributi	on in environm	ental compart	ments:			
12.7.	Known c	r predic		on in environm	ental compart	ments:			
12.7.	Known o	or predic		on in environm	ental compart	ments:			
	Known c	or predic mation a tension:		on in environm Concentra		ments:		N	ote
12.7.	Known of No infor	mation attension: e Nation ir	available		tion		able	- N	ote
	Known of No informat available	e Nicon ir	°C Io Iformation vailable	Concentra No informat	tion	Method	able		ote
Transp	Known of No informat available	mation attension: e ion / des A/D coe	°C lo nformation vailable sorption	Concentra No informat	tion lion No inf	Method			
	No informat available Adsorption No	mation attension: e Note ion in attension A/D coed Henry's of	°C Io Information vailable sorption efficient	Concentra No informat available	tion lion No inf	Method Formation availa		- Method ormation	ote Note
Transp	Known of No informat available Adsorptiont No available N	ilable	°C lo nformation vailable sorption efficient constant	Concentra No informat available log Kow	tion No inf	Method Formation availation ration rate	No info	- Method ormation	Note



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12 F	Describe of DDT and vDvD assessment
12.5.	Results of PBT and vPvB assessment
	The substance/mixture does not contain components considered to have endocrine disrupting properties
	according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.
	Regulation (EO) 2010/003 at levels of 0.1% of higher.
12 C	
12.6.	Endocrine disrupting properties
	The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.
12.7.	Other adverse effects
	No information available
SECTIO	N 13. Disposal considerations
13.1.	Waste treatment methods
13.1.1.	Product/Packaging disposal:
	Submit for disposal to the legal person authorized by the Ministry of Environmental and Nature Protection.
13.1.2.	Waste codes/waste designations according to Law:
	No information available
13.1.3.	Waste treatment – relevant information:
15.1.5.	
	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:
	_



SAFETY DATA SHEET

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

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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 environmental regulations/legislation specific for the substance or mixture				
	EU regulations				
	Authorization and/or rest	trictions of use			
	Authorizations:	-			
	Restrictions:	-			
		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;			
	Other EU regulations:	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				

SECTIO	N 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 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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Δ	N	N	_	x	-

Exposure scenario resulting to Chemical safety assessment