

RHODANINE KIT

The kit contains:

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



Page 1 of 18

Trading name:	4% NB FORMALDEHYDE				
Product code:	FNB4-X**	Revision date:	06 Nov 2023	Version:	7

1.1	Product identifier				
	Trading name:	4% NB FOR	MALDEHYDE		
	Chemical name:	-			
	Catalogue number:	FNB4-X**			
1.2	Relevant identified us	es of the subs	tance or mixt	ure and uses advised against	
	Uses:		Fixative for	use in histology.	
	Uses advised against:		Only the id	entified 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:	Supplier:		BioGnost Ltd.	
	Address:	Address:		Medjugorska 59, Zagreb	
	Telephone number:		+385 1 2409997		
	Fax no.:	Fax no.:		+385 1 2404039	
	e-mail of competent	person:	msds@biognost.hr		
	National contact:	National contact:		-	
1.4	Emergency telephone	Emergency telephone number			
	National Protection a	nd Rescue Dire	ectorate:	112	
	Medical information:			+385 1 2348 342	
	Other information:			-	

SECTIO	SECTION 2 HAZARDS INFORMATION				
2.1	Classification of the substance or mixture				
2.1.1	Classification according to (EC) Regulation N	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	*For full text of Hazard- and EU Hazard-statements: see Section 16				



SAFETY DATA SHEET

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

Page 2 of 18

Trading name:	4% NB FORMALDEHYDE				
Product code:	FNB4-X**	Revision date:	06 Nov 2023	Version:	7

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

SECTION 3 COI	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)		



Page 3 of 18

Trading name:	4% NB FORMALDEHYDE				
Product code:	FNB4-X**	Revision date:	06 Nov 2023	Version:	7

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

4.1	Description of first aid measures				
	General notes:	If the suggested first aid measures do not prove sufficient, seek medical attention.			
	Following inhalation:	Carry the afflicted person out of the contaminated area into a well-ventilated area or out for fresh air. In case of difficult breathing, provide the afflicted person with oxygen.			
	Following skin contact:	Remove contaminated clothing. Immediately wash with plenty of water for at least 20 minutes. Seek medical assistance if the symptoms of irritation remain.			
	Following eye contact:	Rinse out with plenty of water with the eyelid held wide open for at least 20 minutes. If the symptoms remain, immediately call in ophthalmologist.			
	Following ingestion:	Rinse the oral cavity, drink 1-2 glasses of water. Immediately consult a physician and show the container or label. In case of swallowing large quantities, transport the afflicted person to the hospital.			
	Self-protection of the first aider:	-			
4.2	Most important symptoms and ef	fects, both acute and delayed			
	Following inhalation:	Depending on concentration and exposure time, it may lead to mucosa irritation, cough, and dyspnea.			
	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			



Page 4 of 18

Trading name:	4% NB FORMALDEHYDE				
Product code:	FNB4-X**	Revision date:	06 Nov 2023	Version:	7

SECTI	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 su	ubstance 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 compressed air breathing apparatus and fireproof clothing.				
5.4	Additional information				
	Do not contaminate the environment	ent with extinguishing media.			

SECTIO	ON 6 ACCIDENTAL RELEASE MI	EASURES	
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 a (see Section 8).	case of inadequate ventilation use adequate airways protective equipment	
6.2	Environmental precautions:		
	Do not dispose of in sewage, or Protection and Rescue Directo	drainage system and waterways. In case of large spillage contact National rate (NPRD) on 112.	
6.3	Methods and material for con-	tainment and cleaning up	
6.3.1.	Bunding, covering of drains; capping procedures:	Sand or clay barriers.	
6.3.2.	Cleaning up:	Where possible, the substance can be absorbed by using absorbing material. Place the waste material in tightly closed impermeable containers. Store the substance in well ventilated storage rooms until disposal. Submit for disposal to the legal persons authorized by the Ministry of Environmental and Nature Protection. After disposal of the products, wash the area and and involved materials with water.	
6.3.3.	Other information:	Do not use incompatible materials (see Section 10).	



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

Page 5 of 18

Trading name:		4% NB FORMALDEHYDE			
Product code:	FNB4-X**	Revision date:	06 Nov 2023	Version:	7

6.4	Reference to other sections
	-

SECTIO	ON 7 HANDLING AN STORAGE					
7.1	Precautions for safe handling					
7.1.1.	Protection measures					
	Measures to prevent fire:		Use in well ventilated storage rooms.			
	Measures to prevent aerosol and dust generation	on:	Secure proper ventilation.			
	Measures to protect the environment:		Prevent spilling into the sewage system and waterways.			
	Other measures:		-			
7.1.2.	Advice on general occupational hygiene:					
	Do not eat, drink or smoke in the workspace. Th	oroughly was	sh hands after work and before eating.			
7.2	Conditions for safe storage, including any incon	npatibilities				
	Technical measures and storage conditions:	Keep in tightly closed and upright set containers well ventilated storage rooms at temperatures rafrom 15 to 25 °C.				
	Packaging materials:	Manufactu containers	ırer's original packaging. Avoid metal			
	Requirements for storage rooms and vessels:	Keep away	r from food and drink. Keep the containers sed.			
	Advices for storage equipment:	must be re	ge must be made of hard material; floors esistant to chemicals. There must be no drain ly leads into sewage system. Secure proper i.			
	Further information on storage conditions:	Do not place the unused materia and do not use empty containers chemicals. Do not store with inco (see Section 10).				
7.3	Specific end use(s)					
	Recommendations:	-				
	Industrial sector specific solutions:	-				

SECTION	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	_			



Page 6 of 18

								Page 6 01 16	
Trading name:				4%	NB FO	RMALDEHY)E		
Product code:	FNB4-X** Revision		date: 06 Nov 2023		Version:	7			
Formaldehyde	50-00-0 0.		0.3/	'n 6	0.37/0.74	_			
Methanol			'-56-1	200		260/-	_		
					,				
Substance name:	-								
EC No:	-	CAS No	o: -	-					
DNEL									
				Indus	strial				
Route of	Acu	ıte	A	cute		Chronic		Chronic	
exposure:	effect	local	effect	systemic		effect local		effect systemic	
Oral	-		-		-			-	
	0.75 mg/		120 ma	n/m ³	0.375	mg/m³		a ma/m³ (formaldahyda)	١
Inhalation	(formaldehyde) 130 m 130 mg/m ³ (meth		(metha		-	aldehyde)		9 mg/m³ (formaldehyde) 130 mg/m³ (methanol)	
	(methan	•			130 m	ıg/ m³ (methan	OI)		
Dermal	_		20 mg/	_	0.037 mg/cm ²		240 mg/kg (formaldehyde		
			(metha			aldehyde)		20 mg/kg (methanol)	
Critical physical pa	rameters: s	olubility,	flammak	oility, corros	sivity:	-			
				Consi	umer				
Route of	Acı			cute		Chronic		Chronic	
exposure:	effect			systemic		effect local		effect systemic	_
Oral	-		4 mg/kg (methan		-			4.1 mg/kg (formaldehyd 4 mg/kg (methanol)	e)
	0.5		-		0.1 m	ng/m³			
Inhalation	26 mg. (metha		26 mg/m (methan		(form	(formaldehyde)		3.2 mg/m³ (formaldehyde) 26 mg/m³ (methanol)	
	(metric					g/m³ (methanc	ıl)		
Dermal	-		4 mg/kg (methan			0.012 mg/cm ² (formaldehyde)		102 mg/kg (formaldehyd 4mg/kg (methanol)	ie)
PNEC			(1110-1110-11		(mg, kg (memanor)	
Environmental pro	tection tar	net			PNEC	<u> </u>			
·						ng/l (formalde	hvde)		
Fresh water						ng/l (methanol	•		
Freehunten!!	nto.					g/kg (formalde)	
Freshwater sedime	ents				77 mg	g/kg (methano	l)		
Marine water			0.44 r	ng/l (formalde	hyde)				
iviainie watel					2.08 r	ng/l (methanol)		
Marine sediments						g/kg (formalde	-		
					7.7 mg/kg (methanol)				
Food chain					No in	formation avai	lable		



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

Page 7 of 18

Trading name:		4% NB FORMALDEHYDE				
Product code:	FNB4-X**	Revision date:	06 Nov 2023	Version:	7	

Microorga	anisms in sewage treatment		0.19 mg/l (formaldehyde) 100 mg/l (methanol)		
C = i1 /= ===i =	u de una 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 measurevent exposure during identified		Use the product in well ventilated rooms. Use personal protective equipment. Do not eat, drink or smoke in the workspace.		
	Structural measures to prevent ex	xposure:	In accordance with Section 7.		
	Organisational measures to prevee exposure:	ent	Organization of work in order to reduce other worker's influence during work process.		
	Technical measures to prevent ex	rposure:	Secure proper workspace ventilation in order to keep concentration levels in air below permitted levels. Secure stations for rinsing eyes and showering.		
8.2.2.	Personal protection equipment				
8.2.2.1.	Eye and face protection:	Safety glasses that stick to face (EN 166) or visor in case of lower levels of concentration in air; protective gas mask that covers the entire face in case of higher levels of concentration in air.			
8.2.2.2.	Skin protection				
	Hand protection:	Protectiv	e nitrile gloves, 0.11 mm thick (EN 374).		
	Other skin protection:	Wear ant	ristatic 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 combine	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		
	Technical measures to prevent exposure:	See Secti	See Section 6		



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

Page 8 of 18

Trading name:		4% NB FORMALDEHYDE				
Product code:	FNB4-X**	Revision date:	06 Nov 2023	Version:	7	

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					
	Lower 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					
9.2	Other information							

SECTIO	SECTION 10 STABILITY AND REACTIVITY				
10.1	Reactivity:	See subsections 10.3 through 10.5.			
10.2	Chemical stability:	The product is chemically stable under standard ambient conditions of storing and using (room temperature).			
10.3	Possibility of hazardous reactions:	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.			



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

Page 9 of 18

Trading name:	4% NB FORMALDEHYDE				
Product code:	FNB4-X**	Revision date:	06 Nov 2023	Version:	7

Hazardous decomposition products: No information available. 10.6

11.1 Information	n on toxicolog	ical effects						
Acute toxic	ity:							
Route of exposure:	Method	Species	Do	ose LD ₅₀ / ATE _{mi}		Exposure ti	me	Results
Oral:	-	rat		LD ₅₀		No information available		100 mg/kg (formaldehyde) 100.1 mg/kg (methanol)
Dermal:	-	rabbit		LD ₅₀		No information 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	<u> </u>	icity – single e	xposure (S	STOT SE):	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	hazard:		No infor	mation a	vailable.			
Irritation ar	nd corrosion							
	Ехро	sure time	Spec	ies	Evaluation	Method		Note
Skin corrosion/irritation:	_		rabbit		-	-		skin irritation.
Serious eye damage/irritation	· · · · · · · · · · · · · · · · · · ·		rabbit		-	-	No	eye irritation.
Sensitizatio	on							
Skin sensitization:	Ma	y cause allergi	c skin reac	tion.				
Respiratory sensitiza	ν±ίασι Λ.ΙΙ.	ergic persons n	ممر طاممامر	, irritatia	n			



Page 10 of 18

Trading name:		4% NB FORMALDEHYDE							
Product code:	FNB4-X**	Revision date:	06 Nov 2023	Version:	7				

Sympto	ms related to the p	hysical, chemic	al and toxicolog	ical characterist	ics				
Oral exposure:		severe burns of and the stomac		throat, as well a	as a danger of pe	erforation of the			
Dermal exposure		on concentration and exposure time, redness accompanied by sensation of pain may occur, as well as skin cracking and rash.							
Inhalation expos	ilro	on concentration and exposure time, it may lead to mucosal irritations, cough, breath, possible damages: damage of respiratory tract							
Eye exposure:	Depending of Risk of blind		n concentration and exposure time, it may lead to stinging, tearing, and pain. less.						
Repeate	ed dose toxicity (sub	pacute, 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	-			



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

Page 11 of 18

Trading name:		4% NB FORMALDEHYDE							
Product code:	FNB4-X**	Revision date:	06 Nov 2023	Version:	7				

	Specific target	organ toxicity – repeated exposure	e (STOT RE):	
		Specific effects	Target organ	Note
Subacu	te oral	No information available	No information available	-
Subacu	te dermal	No information available	No information available	-
Subacu	te inhalation	No information available	No information available	-
Subchro	chronic oral No information available		No information available	-
Subchro	ubchronic dermal No information available		No information available	-
Subchro	ubchronic 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	-
	Mutagenicity is Germ cell muta Reproductive to Summary of ex	agenicity:	Evidence of genetic defects. No information available No information available No information available	
11.2	Information or	other hazards:		
11.2.1.	Endocrine disr	upting properties:		
	components disrupting pro 57(f) or Comn 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.		
11.2.2.	Other informa	tion:		

SECTION	U 12 I	ברטו טפו	CAL INE	ORMATION:
SECTION	V 12 I	COLOGI	CALINI	ORIVIA HUN:

12.1 Toxicity



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

Page 12 of 18

Trading name:		4% NB FORMALDEHYDE							
Product code:	FNB4-X**	Revision date:	06 Nov 2023	Version:	7				

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	_	_	_	_	_	_

Persistence and degradability 12.2

Abiotic degradation

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



Page 13 of 18

Trading name:					
Product code:	FNB4-X**	Revision date:	06 Nov 2023	Version:	7

	Biodeg	radatio	on								
% Degrad			Time (da	nys)	N	Method		Evaluati	on		Note
No information available		No information available						No information available		No information available	
12.3	Bioaccı	umulat	ive potenti	al							
	Partitio	n coef	ficient: n-o	ctanol/wat	er (log K	ow):	1				
Valu	e Concentration pH °C Method				Eval	uation		Note			
0,021	formaldehyde			-		-					
-0.77	-			-	-	methanol		-		-	
	alue		tion factor Spec			Method ormation	NI-	Evalua			Note
No information No available available			normation	available			ilable		-		
	Chronic	c ecoto	oxicity								
	Value		Do	SP :	oosure time	Species	M	lethod	Evalu	ation	Note
Chronic	toxicity	on fish	n LC ₅₀		rmation lable	No information available		ormatio vailable	No informa availabl		-
Chronic toxicity on crustacea (<i>Daphnia</i>)		EC ₅₀	1	rmation lable	No information available		ormatio vailable	No informa availabl		-	
12.4	Mobilit	v in so	oil								
				ribution in	environn	nental compar	tmen	ts:			
			on available			I					
	Surface tension:		Concentration		Method			Note			



											Page 14 of 18	3
Trading	g nar	ne:			49	6 N	B FORM	ИALDE	HYDE			
Produc	t cod	de: I	FNB4-X**		Revisio	n da	ate:	06 N	lov 2023		Version:	7
		·									i	·
		rmation lable	No information available	No ir	nformation able	1	No info	ormatio le	n	-		
	Ads	orption /	desorption									
Transpo	nsport A/D coefficient Henry's constant		log	Kow	Εv	aporatio	on rate	Meth	iod	Note		
Soil-wa	vater No information available		No info	ormation le		o inform ailable	ation	No inform available	nation	-		
Water-a	air	No availabl	information e	No info	ormation le		inform ailable	ation	No inforn available	nation	-	
Soil-air		No availabl	No information Navailable av		ormation le		lo information vailable		No inform available	nation	-	
	0											
12.5.	Res	ults of PB	T and vPvB asses	sment								
			ce/mixture conta r very persistent		•				•			and
12.6.	End	ocrine dis	srupting properti	ies								
	acco	ording to	e/mixture does r REACH Article 5 ⁻ EU) 2018/605 at l	7(f) or C	ommissio	n De	elegated					
	:											
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.	Pr	oduct/Pa	ckaging disposa	l:								
		ıbmit for otection.	disposal to the l	egal per	son autho	rize	d by the	Ministr	y of Enviror	nmental	and Nature	
13.1.2.	W	aste code	es/waste designa	itions ac	cording to	Lav	w:					
	Pa	ckaging	that contains res	idual ha	zardous sı	ubst	ances o	r is cont	aminated w	vith haza	ardous substan	ces



Transporting/shipment by sea (IMDG)

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

amended by Regulation (EU) No. 2020/878

Page 15 of 18

Trading name:			4% NB FORMALDEHYDE									
Product	code:	FNB4-X**	Revision date:	06 Nov 2023	Version:	7						
13.1.3.	Waste t	reatment – relevant	: information:									
	No info	mation available										
13.1.4.	Sewage	disposal – relevant	information:									
	Waste n	nust not be dispose	ed of into the sewage system.									
13.1.5.	Other d	isposal recommend	ions:									
	authoriz	ed by the ministry	luct's remains into the sewag in charge. Do not dispose of ctors authorized by the minist	the packaging into the s								
13.1.6.	Relevan	t Community provis	sions:									
	-											
SECTION	N 14 TRAN	ISPORT INFORMA	TION									
	Transport	ing/shipment by ro	ad (ADR)									
UN num	ber:		Not applicable									
UN prop	er shippin	g name:	-	-								
Transpor	rt hazard c	lass(es):	-	-								
Packing	group:		-	-								
Environn	nentally ha	zardous:	-									
Special p	precaution	s for user:	-									
	Transport	ing/shipment by ra	il (RID)									
UN num	ber:		Not applicable									
UN prop	er shippin	g name:	-									
······	rt hazard c	lass(es):	-									
Packing	group:		-									
Environn	nentally ha	zardous:	-									
Special p	recaution	s for user:	-									
	Inland wa	terway transport (A	DN)									
UN num	ber:		Not applicable	Not applicable								
UN prop	er shippin	g name:	-	-								
Transpor	rt hazard c	lass(es):	-	-								
Packing	group:		-									
Environn	nentally ha	zardous:	-									
Special r	recaution	s for user:	_									



SAFETY DATA SHEET

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

Page 16 of 18

Trading name:		4% NB FORMALDEHYDE				
Product code:	FNB4-X**	Revision date:	06 Nov 2023	Version:	7	

T		
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.		

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



Page 17 of 18

Trading name:	4% NB FORMALDEHYDE				
Product code:	FNB4-X**	Revision date:	06 Nov 2023	Version:	7

	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 199 guideline)	9/13/EC about limitation of emissions of volatile organic compounds (VOC-
	National legislation:	Chemicals Act, Regulation on classification, packaging and labeling of dangerous substances, Ordinance on occupational exposure limit values and on biological limit values, Regulation on categories, types and classification of waste with a waste catalog and list of hazardous waste, Ordinance on writing Material safety data sheet, Transport of Hazardous Substances Act
15.2	Chemical safety assessmen	t
	None	

SECTIO	SECTION 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:	-			



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

Page 18 of 18

Trading name:	4% NB FORMALDEHYDE				
Product code:	FNB4-X**	Revision date:	06 Nov 2023	Version:	7

16.4.	Classification and procedure used to derive the classification for mixture according to Regulation (EC) 1272/2008 (CLP)				
Classific	Classification according to CLP		Classification procedure		
_			-		
16.5.	Rele	evant H statements (num	ber and full text)		
	H:	225	Highly flammable liquid and vapor.		
		301	Toxic if swallowed.		
		302	Harmful if swallowed.		
		311	Toxic in contact with skin.		
	312 314		Harmful in contact with skin.		
			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.	Training advice:		-		
	16.7. 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.		

Α	N	IN	E	X:
		ш	_	,

EXPOSURE SCENARIO RESULTING TO CHEMICAL SAFETY ASSESSMENT



Page 1 of 17

Trading name:	HEMATOXYLIN M				
Product code:	HEMM-OT-X**	Revision date:	16.07.2024.	Version:	10

SECTIO	ON 1: Identification of	the substanc	e/mixture a	and of the company/undertaking	
1.1.	Product identifier				
	Trading name:	HEMATOX	YLIN M		
	Chemical name:	-			
	Catalogue number:	HEMM-OT	-X**		
1.2.	Relevant identified us	es of the sub:	stance or mix	xture and uses advised against	
	Uses:		Modified	hematoxylin acc. to Mayer for nuclear staining.	
	Uses advised against:		Only the i	dentified uses are advised.	
	Reason why uses advi	The product is intended for use only as an <i>in vitro</i> diagnomated against: medical device, registered at the Agency for Medical Devices and there is no reason to use it for other		evice, registered at the Agency for Medicinal Products and	
1.3.	Details of the supplie	of the safety	data sheet		
	Supplier:	В	ioGnost Ltd.	oGnost Ltd.	
	Address:	٨	Medjugorska 59, Zagreb +385 1 2409997 +385 1 2404039		
	Telephone number:	+			
	Fax no.:	+			
	e-mail of competent	oerson: <u>n</u>	msds@biognost.hr		
	National contact:	-			
1.4.	Emergency telephone	number			
	National Protection a	nd Rescue Dir	rectorate:	112	
	Medical information:	Medical information:		+385 1 2348 342	
	Other information:			-	

SECTIO	SECTION 2. Hazards identification				
2.1.	Classification of the substance or mixture				
2.1.1.	Classification according to Regi	ulation (EC) No 12	272/2008 (CLP)		
	Hazard class and catego	ory code:	Hazard statements*:		
	Acute Tox. 4		H302		
	Eye Dam. 1		H318		
2.1.2.	Additional information				
	-				
*For fu	ll text of Hazard- and EU Hazard-	statements: see S	ection 16		
2.2.	Label elements				
	Product identification: HEMATOXYLIN M				
	Identification number: -				
	Authorization number: -				



Page 2 of 17

Trading name:	HEMATOXYLIN M				
Product code:	HEMM-OT-X**	Revision date:	16.07.2024.	Version:	10

	Hazard pictograms:	GHS07 GHS05
	Signal word:	Danger
	Hazard statements:	H302 Harmful if swallowed. H318 Causes serious eye damage.
	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. P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
	Further information:	-
2.3.	Other hazards	
	Results of PBT and vPvB ass PBT or a vPvB.	

SECTION 3. Co	SECTION 3. Composition/information on ingredients							
CAS/ EC/ Index 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				
7784-31-8/ 616-524-3/ -	-	5 - 6 %	aluminium sulphate octadecahydrate	Eye Dam. 1 ; H318				

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



Page 3 of 17

Trading name:	HEMATOXYLIN M				
Product code:	HEMM-OT-X**	Revision date:	16.07.2024.	Version:	10

	Following skin contact: water and soap. Seek medical assistance if the symptome remain. Rinse out with plenty of water with the eyelid held with clean fingers. If the symptoms remain, immediately can provide the person with water (2 glasses at most). Immediately can consult a physician. In extreme case, if medical assistation available within 1 hour, induce vomiting (only if the person with water).		Remove contaminated clothing. Immediately wash with plenty of water and soap. Seek medical assistance if the symptoms of irritation remain.		
			Rinse out with plenty of water with the eyelid held wide open using clean fingers. If the symptoms remain, immediately call a physician.		
			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.		
			Treat symptomatically.		
4.2.	Most important symptom	s and eff	ects, both acute and delayed		
	Following inhalation:		cion of large amounts of vapors in inadequately ventilated perimeter ause 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:	Causes	s serious eye damage.		
	Following ingestion:	Swallowing may cause irritation of mucosa, tingling sensation in the mouth, burning sensation; higher levels of concentration may cause nausea, abdominal pain and vomiting. In case of vomiting, aspiration causes coughing, difficult breathing. Higher levels of concentration may cause suffocation.			
4.3.	Indication of any immedia	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 igniti Do not contaminate the environm				



Page 4 of 17

Trading name:	HEMATOXYLIN M				
Product code:	HEMM-OT-X**	Revision date:	16.07.2024.	Version:	10

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	n 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	ıres:	Mark the area using proper signs.		
6.1.2.	For emergency resp	onders:			
	Wear protective equ	uipment (see	Section 8).		
6.2.	Environmental prec	autions:			
	•	dispose of in sewage, drainage system and waterways. In case of large spillage contact National on and Rescue Directorate (NPRD) on 112.			
6.3.	Methods and mater	rial for containment and cleaning up			
6.3.1.	Bunding, covering of drains; capping procedures:	Cap the dr	Cap the drains. Collect, bundle 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 in	formation ab	out 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.				
	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:	-				



Page 5 of 17

Trading name:	HEMATOXYLIN M				
Product code:	HEMM-OT-X**	Revision date:	16.07.2024.	Version:	10

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

	maus	striai set	ctor spe	cific solutior	15.	-				
SECTION	ON 8. E	xposur	e contro	ols/persona	l protec	tion				
8.1.	Cont	rol para	parameters							
Substance CAS No				Occupational values/shor	•		iological limit values			
					ppm	mg/m ³	3			
								-		
		7								
Substaname:		Alumii	nium su	lphate octac	decahydı	rate				
EC No	:	233-13	35-0	CAS No:	778	34-31-8				
DNEL										
						Industrial				
Route expos	_			Acute ect local	effe	Acute ect systemic		hronic ect local	Chronic effect systemic	
Oral			-		-		-		-	
Inhala	tion		-		-		-		13.4 mg/m³ (aluminium sulphate octadecahydrate)	



Page 6 of 17

Trading r	name:			HEMA	TOXYLIN M		
Product	code:	HEMM-OT-X**	Revisio	on date:	16.07.2024.	Version:	10
Dermal		-	-		-	(alun	ng/kg bw/day ninium sulphate decahydrate)
Critical ph	nysical pa	rameters: solubility, flar	<u> </u>				
				nsumer	1	1	
Route of exposure		Acute effect local	Acut effect sys		Chronic effect local		Chronic effect systemic
Oral		-	-		-	-	
Inhalation	1	-	-		-	-	
Dermal		-	-		-	-	
PNEC							
Environm	ental pro	tection target		PNEC			
Fresh wat	er			No infor	mation available		
Freshwate	er sedime	nts		No infor	mation available		
Marine wa	ater			No information available			
Marine se	ediments			No infor	mation available		
Food chai	in			No infor	mation available		
		sewage treatment			mation available		
Soil (agric	cultural)				mation available		
Air				No infor	mation available		
8.2.	Expos	ure controls					
8.2.1.	Appro	priate engineering con	trols				
	measu	ance/mixture related ures to prevent exposur g identified uses:	Δ :	•	n well ventilated root eat, drink or smo	•	•
	Struct expos	ural measures to preve ure:	nt No info	nformation available			
		isational measures to nt exposure:	_	anization of work in order to reduce other worker's influence ng work process.			
	Techn expos	ical measures to prever ure:			orkspace ventilation els in air below pe		•
8.2.2.	Persor	nal protection equipme	nt				
8.2.2.1.	Eye ar	nd face protection:	Safety	glasses tha	t stick to face (pre	venting splas	hing) or visor.
8.2.2.2.	Skin p	rotection					



Page 7 of 17

Trading name:		HEMATOXYLIN M						
Product code:	HEMM-OT-X**	Revision date:	16.07.2024.	Version:	10			

	Hand protection:	2016/425/EE Glove Glove	oves must be according to the EU Directive EU C and standard EN 374. e material: nitrile rubber e thickness: ≥0.40 mm neation period: > 480 min		
	Other skin protection:	Wear antistatic clothing made of natural fibers (such as cott with long sleeves, and shoes that cover the entire foot.			
8.2.2.3.	Respiratory protection:		During long-term exposure wear a protective mask or a half mas equipped with filter A.		
8.2.2.4.	Thermal hazards:	No informati	on available		
8.2.3.	Environmental exposure con	trols			
	Substance/mixture related m prevent exposure:	easures to	See Section 6		
	Structural measures to preve	nt exposure:	Use modern equipment.		
	Organisational measures to p	prevent exposure:	Adapt the work process to the required working conditions of the workplace.		
	Technical measures to preven	nt exposure:	See Section 6		

1.	Information on basic physical and cher	mical 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
	Lower 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



Page 8 of 17

Trading name:		HEMATOXYLIN M						
Product code:	HEMM-OT-X**	Revision date:	16.07.2024.	Version:	10			

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

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

		ological information		ulation (FC) No. 1272	/2000	
11.1.	Information	n on hazard classes as	defined in Reg	julation (EC) NO 1272	/2008	
	Acute toxic	ity:				
Route of exposure		Method	Species	Effective dose LD ₅₀ /LC ₅₀ or ATE _{mixture}	Exposure time	Results
Oral:		No information available	rat	LD ₅₀	-	479 mg/kg (chloral hydrate) >2.000-<5.000 mg/kg (aluminium sulphate octadecahydrate)
Dermal:		No information available	rat	LD ₅₀	-	3.030 mg/kg (chloral hydrate) >5.000mg/kg (aluminium sulphate octadecahydrate)
Inhalatio	n:	No information available	_	LC ₅₀	_	-



Page 9 of 17

Trading name:		HEMATOXYLIN M						
Product code:	HEMM-OT-X**	Revision date:	16.07.2024.	Version:	10			

Specific	c target	organ toxicit	y – single expo	osure (STOT S	SE):			
		S	pecific effects		Target o	rgan		Note
Oral: No inform		No informati	on available		No information	n available	-	
Dermal:		No informati	on available		No information	n available	-	
Inhalation:		No informati	on available		No information	n available	-	
Aspirat	ion haza	ard:	N	o informatio	n available			
Irritatio	on and c	orrosion						
;		Exposure	time S _l	pecies	Evaluation	Method		Note
Skin corrosion/irritat	ion:	-	-	-		-	-	
Serious eye damage/irritatio	on	24 h	rabb	it -		-	Causes damage	serious eye e
Sensiti	zation							
Skin sensitizatio		No informati	on available					
Respiratory		No information available						
Jenora Zaron.								
Sympto	oms rela	ited to the ph	nysical, chemic	al and toxico	logical characte	ristics		
Oral exposure:		1	ition available					
Dermal exposur	e:	No informa	ntion available					
Inhalation expo	sure:	No informa	ition available					
Eye exposure:		No informa	tion available					
Repeat	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 informati on available	No inform available	ation	-
Subacute dermal	No availa	information able	No information available	No information available	No informati on available	No inform available	ation	-



Page 10 of 17

Trading name:		HEMATOXYLIN M						
Product code:	HEMM-OT-X**	Revision date:	16.07.2024.	Version:	10			

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

Specific target organ	toxicity -	reneated	exposure	(STOT RF)
Specific target organ	LOXICITY	repeated	CAPOSUIC	(JIOI NE).

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



Page 11 of 17

Trading name:	HEMATOXYLIN M							
Product code:	HEMM-OT-X**	Revision date:	16.07.2024.	Version:	10			

	CMR effects (carcinogenic	ty, mutagenicity, reproductive toxicity)					
	Carcinogenicity:	Current studies on test animals did not indicate carcinogenic effects.					
	Mutagenicity in vitro:	Current in vitro tests did not indicate mutagenic effects.					
	Genotoxicity:	No information available					
	Mutagenicity in vivo:	Current in vivo tests did not indicate mutagenic effects.					
	Germ cell mutagenicity:	No information available					
	Reproductive toxicity:	No toxicity on reproductive organs was determined in reproductive organs.					
	Summary of evaluation of	the CMR properties: -					
11.2.	Information on other haza	rds:					
11.2.1.	Endocrine disrupting prop	erties:					
	No known endocrine dis that affect human health.	srupting properties					
11.2.2	Other information:						
	-						

SECTION 12. Ecolo	ogical information
-------------------	--------------------

12 1	Tovicity
1/1	LOVICITY

r=rrr remerty						
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	-



Page 12 of 17

Trading name	e:				НЕМАТ	OXYL	.IN M				17
Product code		HEMM-OT-	R	Revision date: 16.07.2024.			Versic	n:	10		
Crustacea:		EC ₅₀	48 hour	c	No information vailable	No information available		No informat available		-	
Algae/aquatic	Algae/aquatic plants IC ₅₀ 73		72 hour	c	No information available		mation able	No information available		_	
Other organisi	ns	-	-	-		-		-		-	
12.2 Di-			_::::								
		and degradal adation	Ollity								
, ADIOC		gradation ha	f-lives		Method			Evalua	tion		Note
Marine water		formation av		No ir	nformation avail	able	No info	ormation			
Fresh water	No in	formation av	ailable	No ir	nformation avail	able	No info	ormation	available		-
Air	No in	formation av	ailable	No ir	No information available No information a				n available -		
Soil	No in	formation av	ailable	No ir	nformation avail	able	ble No information av				-
:											
Biode	gradat	ion				1		ı			
% Degradatio		Time (day			Method		Evaluat			Note	
No informatio available		infor ailable							No informavailable		
		tive potentia		er (loc	ı Kow).						
Value		entration	рН	°C	Method		Eval	uation		Note	<u> </u>
			•								
_	No i availab	nformation le			No information available		No infor available		-		
_			-						-		
Bioco	availab	e ation factor (available		available		-		
	ncentra	e ation factor (tion	No info	Note	



Page 13 of 17

Trading name:	HEMATOXYLIN M						
Product code:	HEMM-OT-X**	Revision date:	16.07.2024.	Version:	10		

(Chronic ecoto	kicity							
	Value	Dose	Exposure time	Spo	ecies	Method	Eva	luation	Note
Chronic to	oxicity on fish	LC ₅₀	No informati on available	No inform availal		No information available	No information - available		-
	oxicity on (Daphnia)	EC ₅₀	No informati on available	No inform availal		No information available	on No information - available		
12.4. I	Mobility in soi								
:	•	licted distributi	on in enviror	nmental	compart	tments:			
	No informatio								
9	Surface tensio	n:							
	Value	°C	Concen	tration		Method		-	Vote
i	No nformation available	No information available	No inforr available	mation	No inf	o information available		-	
	Adsorption / d	esorption							
Transport	. A/D (coefficient 's constant	log Kov	۷	Evapora	ntion rate	Metho	d	Note
Soil-wate	ter No information No informati available available			No information available		No informatio available	on -		
Water-air	No available	information	No informa available	information No information available		nation	No informatio available	on -	
Soil-air	oil-air		lo inform vailable	nation	No informatio available	on -			



Page 14 of 17

Trading name:	HEMATOXYLIN M								
Product code:	HEMM-OT-X**	Version:	10						

12.6.	Endocrine disrupting properties					
	No known endocrine disrupting properties that affect the environment.					
12.7.	Other adverse effects	Other adverse effects				
	No adverse effects are expected.					
SECTIO	TON 13. Disposal considerations					
13.1.	Waste treatment methods					
13.1.1.	1. Product/Packaging disposal:					
	Submit for disposal to the legal persor Protection.	authorized by the Ministry of Environmental and Nature				
13.1.2.	. 3	ding to Law:				
	No information available	No information available				
13.1.3.		Waste treatment – relevant information:				
	No information available					
13.1.4.	Sewage disposal – relevant information:					
	Waste must not be disposed of into the sewage system.					
13.1.5.	•					
	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.	6. Relevant Community provisions:	Relevant Community provisions:				
SECTION 14. Transport information						
Transporting/shipment by road (ADR)						
UN nur	number: Not su	bject to transport regulations.				
UN pro	proper shipping name: -					
Transport hazard class(es): -						



SAFETY DATA SHEET

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

Page 15 of 17

Trading name: HEMATOXYLIN M							
Product code:	HEMM-OT-X**		Revision date:	16.07.2024.	Version:	10	
Packing group:		_					
Environmentally h	nazardous:	-					
Special precaution		-					
	ting/shipment by rail	(RID)					
UN number:		No	Not subject to transport regulations.				
UN proper shippir	ng name:	-					
Transport hazard		-					
Packing group:		-					
Environmentally h	azardous:	-					
Special precaution	ns for user:	-					
Inland wa	aterway transport (AD	N)					
UN number:		No	t subject to transpo	ort regulations.			
UN proper shippir	ng name:	-					
Transport hazard	class(es):	-					
Packing group:		-					
Environmentally h	azardous:	-					
Special precaution	ns for user:	-					
Transpor	ting/shipment by sea	(IMDG)					
UN number:		No	t subject to transpo	ort regulations.			
UN proper shippir	ng name:	-					
Transport hazard class(es):		-					
Packing group:		-					
Environmentally hazardous:		-					
Special precautions for user:		-					
Transpor	ting/shipment by air (ICAO-1	I/IATA-DGR)				
UN number:		No	t subject to transpo	ort regulations.			

Further information:	The product is not subject to classification.
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SECTION 15. Regulatory information

UN proper shipping name: Transport hazard class(es):

Environmentally hazardous: Special precautions for user:

Packing group:



Page 16 of 17

Trading name:	HEMATOXYLIN M				
Product code:	HEMM-OT-X**	Revision date:	16.07.2024.	Version:	10

15.1.	Safety, health and environmental regulations/legislation specific for the substance or mixture			
	EU regulations			
	Authorization and/or restrictions of use			
	Authorizations:	-		
	Restrictions:	-		
	Other EU regulations:	Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC; Directive 2004/42/CE of the European Parliament and of the Council of 21 April 2004 on the limitation of emissions of volatile organic compounds due to the use of organic solvents in certain paints and varnishes and vehicle refinishing products and amending Directive 1999/13/EC; Council Directive 98/24/EC of 7 April 1998 on the protection of the health and safety of workers from the risks related to chemical agents at work; Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006; REACH Restrictions on the manufacturing, placing on the market and use of certain dangerous substances, mixtures and articles (Annex XVII);		
	Information according 199 guideline)	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 assessmen	nt		
	None			

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



SAFETY DATA SHEET

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

Page 17 of 17

Trading name:	HEMATOXYLIN M				
Product code:	HEMM-OT-X**	Revision date:	16.07.2024.	Version:	10

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 used to derive the classification for mixture according to Regulation (EC) 1272/2008 (CLP)			
Classifi	cation	Class	ification procedure	
-		-		
16.5.	Relevant H statements (nun	ber an	d full text)	
	301	Toxic	if swallowed.	
	302	Harm	nful if swallowed.	
	H: 315	Caus	es skin irritation.	
	318	Causes serious eye damage.		
	319	Causes serious eye irritation.		
16.6.	Training advice:	-		
		** "X" in the product code marks different volumes (different packagings of the product)		
16.7.	Further information:	We are not responsible for consequences in case of failure to comply with instructions for use or improper use of the product described in this material safety data sheet.		

ANNEX:

EXPOSURE SCENARIO RESULTING TO CHEMICAL SAFETY ASSESSMENT



Page 1 of 17

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

SECT	ION 1: Identification	of the substa	ance/mixt	ure and of	the company/undertaking	
1.1.	Product identifier	•				
	Trade name:	RHODANINE	E REAGENT	Γ		
	Chemical name:	-				
	Catalogue number:	RR-OT-X**				
1.2.	Relevant identified	uses of the sul	bstance or	mixture an	d uses advised against	
	Uses:			For use wi	th Rhodanine kit.	
	Uses advised agains	st:		Only the id	dentified uses are advised.	
	Reason why uses ac	dvised against:	ct is intended for use only as an <i>in vitro</i> diagnostic evice, registered at the Agency for Medicinal and Medical Devices and there is no reason to use r purposes.			
1.3.	Details of the suppl	etails of the supplier of the safety data sheet				
	Supplier:		BioGr	BioGnost Ltd.		
	Address:		Medjı	edjugorska 59, Zagreb		
	Telephone number:		+385	35 1 2409997		
	Telefax:		+385	85 1 2404039		
	E-mail of competer	t person:	<u>msds</u>	ds@biognost.hr		
	National contact:		-			
1.4.	Emergency telephone numbers					
	National Protection	and Rescue D	irectorate:		112	
	Medical information	า:			+385 1 2348 342	
	Other information:				-	

SECTI	ECTION 2. Hazards identification					
2.1.	Classification of the substa	Classification of the substance or mixture				
2.1.1.	Classification according to	Regulation (EC)	No. 1272/2008 (C	LP)		
	Hazard class and ca	Hazard class and category code: Hazard statement*:				
	Flam. Liq. 2		H225			
2.1.2.	Additional information					
	-	-				
*For fu	ull text of Hazard- and EU Haz	zard-statements:	see Section 16.			
2.2.	Label elements					
	Product identification:	RHODANIN	NE REAGENT			
	Identification number:	_				



Page 2 of 17

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

	Authorisation number:	
	Hazard pictograms:	GHS02
	Signal word:	Danger
	Warning statement:	H225 Highly flammable liquid and vapor.
	Precautionary statement:	 P210 Keep away from heat/sparks/open flames/hot surfaces Do not smoke. 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 Prope No known endocrine disruption Results of PBT and vPvB ass PBT or a vPvB.	

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



Page 3 of 17

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

	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 e	ffects, 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	lical attention and special treatment needed
	No information available	

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

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



Page 4 of 17

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

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

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



Page 5 of 17

Trade name:	RHODANINE REAGENT				
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	CAS No		Occupational exposure limit values/short term values		•	Biological limit values
			ppn	า	mg/m³	
Ethanol	64-17-	5	1000	/-	1900/-	No information available
Substance: -						
EC No:	-		CAS	No:	-	
DNEL						
		Ir	ndustria	al		
Route of exposure:	Acute	Acute			Chronic	Chronic
Route of exposure.	effect local	effect syste	emic	e	ffect local	effect systemic
Oral	-	-		-		-
Inhalation	1900 mg/m ³ (ethanol)	-		-		380 mg/m³ (ethanol)
Dermal	-	-		-		343 mg/kg (ethanol)
Critical physical param	Critical physical parameters: solubility, flammability, corrosivity:					
Consumer						
Route of exposure:	Acute	Acute			Chronic	Chronic
Route of exposure:	effect local	effect syste	emic	e ⁻	ffect local	effect systemic
Oral	-	-		-		87 mg/kg bw/day (ethanol)



Page 6 of 17

Trade n	ame:	RHODANINE REAGENT							
Product	code:	RR-OT-X**		Date of o	compilation:	14	Nov 2022	Version:	6
	•			1	T	•	1	:	:
Inhalatio	n	950 mg/m³ (ethanol)	-	-		114 mg/m³ (ethanol)			
Dermal		-	-		-		206 mg/kg	(ethanol)	
PNEC									
Environn	nental prote	ction target		PNEC					
Fresh wa	Fresh water			0.96 mg/l (ethanol)				
Freshwat	Freshwater sediments			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	g/kg (ethanol)				
Microorg	Microorganisms in sewage treatment			580 mg/l (e	ethanol)				
Soil (agri	Soil (agricultural)			0.63 mg/kg	(ethanol)				
Air			no information available						
8.2.	Exposure	controls							
8.2.1.	Appropria	te engineering cont	rols						
	measures	e/mixture related to prevent exposure entified uses:	9	Do not eat, drink or smoke in the workspace. Use personal protective equipment.					
	Structural exposure:	measures to preven	nt	No information available					
	Organisati prevent ex	ional measures to kposure:		Organization of work in order to reduce other worker's influence during work process.				nce	
	Technical exposure:	measures to preven	t	See Section 7.2					
8.2.2.	Personal p	protection equipmer	nt						
8.2.2.1.	Eye and fa	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 prote	Skin protection							
	Hand prot	tection:		tective gloves must be according to the EU Directive 2016/425/EEC I standard EN 374. Glove material: nitrile rubber Glove thickness: ≥0.50 mm Break through time: >480 min			ÆEC		



Page 7 of 17

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

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

.1.	Information on basic physical an	d 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		
	Lower 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		
	pH:	no information available	no information available		
	Kinematic viscosity:	no information available	no information available		
	Solubility:	no information available	no information available		
	Partition coefficient n- octanol/water (log value):	no information available	no information available		



Page 8 of 17

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

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

SECTIO	SECTION 10.: Stability and reactivity			
10.1.	Reactivity:	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.		

SECTION 11.	Toxicological info	rmation					
11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008							
Acute	e toxicity:						
Route of exposure:	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$		Results				
Oral:	-	rat	LD ₅₀ -		7.060 mg/kg (ethanol)		
Dermal:	mal: - rabbit		LD ₅₀	-	>20.000 mg/kg (ethanol)		
Inhalation:	-	rat	LC ₅₀	4 h (ethanol)	>8.000 mg/l (ethanol)		
Specific targ	get organ toxicity -	single exposure (STOT-SE):				
		Specific effects		Target organ		Note	
Oral:	No informat	ion available	N	lo information ava	ilable	-	
Dermal:	No informat	ion available	N	lo information ava	ilable	-	
Inhalation:	No informat	ion available	No information ava		ilable	-	
Aspiration	hazard:		No information	n available			



Page 9 of 17

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

Product code:		RR-OT-X**	Date	e of con	pilation:	14 Nov 2022	Version: 6		
Irritation an	nd co	rrosion							
<u> </u>		Exposure time	Species	S	Evaluati	on Meth	od Not		
Skin corrosion/irritat	ion	No information available	No infor available	mation	No informatio available	n No informati available			
Serious eye damage/irritatio	on	No information available	No infor available	mation	No informatio available	n No informati available			
Sensitization									
Skin sensitizatio	n:	No information	n available						
Respiratory sensitization:		No information	n available						
Jensinzarion.									
Symptoms re	lated	I to the physical, o	chemical and tox	icologica	al characteristic	S			
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 vor In case of vomiting, aspiration causes coughing, difficult breathing. Higher levels of concentration may cause suffocation.						and vomiting.			
Dermal exposur	e:	_	on. After short exposure, resorption effects are not likely. Long-term exposure rying, cracking and tingling sensation of skin.						
Inhalation exposure:				mounts of vapors in inadequately ventilated perimeter may cause headache and nausea.					
Eye exposure:		Direct eye conta sensation.	ct may cause slig	cause slight to moderate irritation, lacrimation and burning					
		<u> </u>							
Repeated do:	se to	xicity (subacute, s	ubchronic, chror	nic)					
		Dose Ex	kposure time	Speci	es Method	Evaluation	Note		
Subacute oral		ormation No avail	information able	No inform on availab	ıntormatı		-		
Subacute dermal		ormation No avail	information able	No inform on availab	ıntormatı available		-		
Subacute inhalation	intormation		information able	No inform on	ati No informati		-		

available



Page 10 of 17

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

Subchronic oral	No information available	No information available	No informati on available	No information available	No information available	-
Subchronic dermal	No information available	No information informati available on available		No information available	No information available	-
Subchronic inhalation	No information available	No information available	information informati inform		No information available	-
Chronic oral	No information available	No information available No available		No information available	No information available	-
Chronic dermal	No information available	No information available	No informati on available	No information available	No information available	-
Chronic inhalation	No information available	No information available	No information informati		No information available	-
Specific targ	get organ toxicity	/ - repeated exposure (S		Tanasta		Nata
Culpa suta anal		Specific effect		Target o		Note
Subacute oral Subacute derm	a a l	No information available No information available		No information a		-
Subacute inhal		No information available			-	
Subchronic ora		No information available		No information available No information available		_
Subchronic de		No information available		No information a		
Subchronic inh		No information available		No information a		
Chronic oral	ididioii	No information available		No information a	-	
Chronic derma	al	No information available		No information a		
Chronic inhalation No information				No information a		
		The state of the s	- - [
CMR effects	(carcinogenicity	, mutagenicity, reprodu	ctive toxicit	ty)		
Carcinogeni	icity:		No info	rmation available		
Mutagenicit	ty in-vitro		No info	rmation available		



Page 11 of 17

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

Geno	toxicity:	No information available			
Muta	genicity <i>in-vivo</i> :	No information available			
Germ	cell mutagenicity:	No information available			
Repro	oductive toxicity:	No information available			
Sumr	nary 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 information:				
	-				

SECTION 12. Ecological information									
12.1. Toxicity									
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/aquati c 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/aquati c plants	IC ₅₀	72 hours	No information available	No information available	No information available	_			



Page 12 of 17

Trade nam	ne:		RHODANINE REAGENT								
Product co	ode:	RR-OT	-X**		Date	of compilation	on:	14	Nov 2022	Version:	6
Other											
organisms	-		_		_	-		-		-	
12.2. Pe	rsister	nce and de	gradabi	lity							
Ab	oiotic (degradatio	n						1		
		Degradation	gradation half-lives		N	1ethod	E۱	/aluatio	n	Note	
Marine water	No	informatio	rmation available		No infor		No inf availal	ormation ole	on -		
Fresh water	No	informatio	rmation available		No infor		No inf availal	ormatio	on -		
Air	No	informatio	rmation available		No infor		No inf availal	ormatio	on -		
Soil	No	informatio	nformation available		No information N			No information available			
					·		i				
Biodegra	datior	1									
% Degrada	ition	Time	e (days)		Me	thod	E۱	/aluatio	n	Note	
-	-			-		-			-		
12.3.	Bioad	cumulative	e potent	tial							
	Octa	nol-water բ	partition	coeffici	ent (log Ko	w)			:		
Value	(Concentrat	ion	рН	°C	Method		Evalu	uation	Note	
-	-			-	-	-		-	-	-	
Віосо	ncent	ration Fact	or (BCF)		1					1	
Value		S	pecies			Method		Eval	uation	Note	<u>)</u>
No information available			No information available			No information available		-			
Chronic e	ecotox	ricity									
Value		Dose		Exposu	re time	Species Me		hod	Evaluatio	n No	te



Page 13 of 17

Trade r	name:				RF	ODANINE I	REAGE	ΝT			
Produc	t code:	RR-OT	-X**	С	Date of compilation: 14 N			Nov 2022	Version:	6	
Chronic on fish	toxicity	LC ₅₀	No informavailable			No No information available available			No information available	-	
Chronic on crust (Daphni	acea	EC ₅₀	EC ₅₀ No info			No information available	No informa availab	1	No information available	-	
12.4.	Mobilit	y in soil									
	No info	or predicted ormation ava e tension:		on in enviro	nmen	tal compartm	ents:				
		/alue		°C	Со	ncentration	Met	hod		Note	
	No ii availab	nformation le	No i available	nformation		nformation lable	No information - available				
Transpo	rt	A/D coeffi Henry's cor	nstant	_	log Kow Evaporation					Note	!
Soil-Wa	No ter		ormation	No informa			tion	No information available		-	
Water-A	ir No		ormation	No informa	ation	No information No			formation	-	
Soil-Air	No ava	inf ailable	ormation	No informa available	ation	No informat available	tion	No in availa	formation ble	-	
12.5.	Doculto	of PBT and	vDvP acco	comont							
14.3.					s not o	contain any Pl	BT or vP	vB sub	stances.		
12.6.		ine disruptir	<u> </u>		onda	orino dispusta	ors				
	based (on avallable	uata, 00es	s not contain	enac	ocrine disrupto	JIS.				
	Other a	adverse effe	cts								
12.7.											
12.7.		erse effects	are expec	ted.							



Page 14 of 17

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

13.1.	Waste treatment methods					
13.1.1.	Product/Packaging disposa	l:				
	Submit for disposal to the legal person authorized by the Ministry of Environmental and Nature Protection.					
13.1.2.	Waste codes/waste designa	· · · · · ·				
	Packaging that contains res	idual hazardous substances or is contaminated with hazardous substances				
13.1.3.	Waste treatment – relevant	information:				
	No information available					
13.1.4.	Sewage disposal – relevant	information:				
	Waste must not be disposed of into the sewage system.					
	:					
13.1.5.	Other disposal recommendations:					
	Do not dispose of the product's remains into the sewage system. Submit the remains to the colle authorized by the ministry in charge. Do not dispose of the packaging into the sewage system. So the packaging to the collectors authorized by the ministry in charge.					
13.1.6.	Relevant Community provis	sions:				
	Disposal must be made acc	ording to official regulations.				
SECTIO	N 14. Transport information					
	nsporting/shipment by road (A					
UN num		1170				
	per shipping name:	Ethanol solution				
	ort hazard class(es):	3				
Packing		II .				
·····	mental hazards:	No information available				
Special	precautions for user:	-				
Tra	nsporting/shipment by rail (RI	D)				
UN num	nber:	1170				
UN prop	per shipping name:	Ethanol solution				
Transpo	ort hazard class(es):	3				
Packing	group:	II .				
Environi	mental hazards:	No information available				



Page 15 of 17

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

Special precautions for user:	-			
Transporting/shipment by inland waterways (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				
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 - information:				

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: -					



Page 16 of 17

Trade name:	RHODANINE REAGENT				
Product code:	RR-OT-X**	Date of compilation:	14 Nov 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 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	None		

SECTIO	SECTION 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			



Page 17 of 17

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

16.3.	Key literature reference	s and source of data: -			
16.4.	Classification and procedure used to derive the classification for mixture according to Regulation (EC) 1272/2008 (CLP)				
Classific	lassification Classification procedure				
_		-			
16.5.	Relevant H statements (number and full text)				
	H: 225	Highly flammable liquid and vapor.			
16.6.	Training advice:	-			
16.7.	Further information:	** "X" in the product code marks different volumes (different packaging of the product) We are not responsible for consequences in case of failure to comply with			
10.7.	Further information: We are not responsible for consequences in case of failure to comply wit instructions for use or improper use of the product described in this mate safety data sheet.				

ANNEX: Exposure scenario resulting to Chemical safety assessment	



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

Page 1 of 16

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

SECTION	ON 1. Identification of t	he substa	ance/mixture a	nd of the company/undertaking		
1.1.	Product identifier					
	Trading name:	SODIUN	1 Acetate, soli	UTION		
	Chemical name:	-				
	Catalogue number:	NA-OT-	X**			
1.2.	Relevant identified use	es of the s	s of the substance or mixture and uses advised against			
	Uses:		For use with R	thodanine kit.		
	Uses advised against:		Only the ident	tified uses are advised.		
	Reason why uses advis	sed	The product is intended for use only as an <i>in vitro</i> diagnostic med device, registered at the Agency for Medicinal Products and Med Devices and there is no reason to use it for other purposes			
1.3.	Details of the supplier	of the saf	ety data sheet			
	Supplier:		BioGnost Ltd.	BioGnost Ltd.		
	Address:		Medjugorska 5	edjugorska 59, Zagreb		
	Telephone number:		+385 1 240999	+385 1 2409997		
	Fax no.:		+385 1 2404039			
	e-mail of competent p	erson:	msds@biogno	<u>oiognost.hr</u>		
	National contact:		-			
1.4.	Emergency telephone	number				
	National Protection and Rescue Direct		Directorate:	112		
	Medical information:	Medical information:		+385 1 2348 342		
	Other information:			-		

SECTIO	SECTION 2. Hazards identification						
2.1.	Classification of the substance or mixture						
2.1.1.	Classification according to Regulation (EC) No 1272/2008 (CLP)						
	Hazard class and category	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-st	atements: see S	Section 16				
2.2.	Label elements						
	Product identification:	SODIUM ACE	TATE, SOLUTION				
	Identification number: -						
	Authorization no.:						
	Hazard pictograms: -						



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

Page 2 of 16

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 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)	
-	-	-	Contains no hazardous substances	-	

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



Page 3 of 16

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

SECTION	SECTION 5. Firefighting measures				
5.1.	Extinguishing media				
	Suitable extinguishing media:	Small fire - water spray, dry powder, CO 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 Cool closed containers exposed to	compressed air breathing apparatus and fireproof clothing. o fire with water spray or vapor.			
5.4.	Additional information				
	Remove sources of heat and ignition. Do not contaminate the environment with extinguishing media.				

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 t members without protective equipment. Remove all source 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.			



Page 4 of 16

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	
	-	

SECTION	ON 7. Handling and storage				
7.1.	Precautions for safe handling				
7.1.1.	Protection measures				
	Measures to prevent fire:	Keep away from sources of heat and ignition. Do not smoke.			
	Measures to prevent aerosol and dust generation:	Secure proper ventilation.			
	Measures to protect the environment: Other measures:	Prevent spilling into the sewage system and waterways.			
7.1.2.	Advice on general occupational hygiene:				
	Do not eat, drink or smoke in the workspace. Thoroughly wash hands after work and before eating.				
7.2.	Conditions for safe storage, including any incompatibilities				
	Technical measures and storage conditions:	Keep in tightly closed and upright set containers in a w ventilated storage rooms, and away from sources of he 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:	-			



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

Page 5 of 16

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

-		ols/person	ai protec	uon				
8.1. Control para	meters							
Substance		CAS No			Occupational exposure limit values/short term values		Biological limit values	
				ppm	1	mg/m³		
-		-		-		-	No information available	
·								
Substance - name:								
EC No: -		CAS No:	-					
DNEL			·		•			
				Indust	rial			
Route of	A	Acute		Acute		Chronic	Chronic	
exposure:	effe	ect local	effe	ct system	ic	effect local	effect systemic	
Oral	-		-			-	-	
Inhalation	-		-			-	-	
Dermal	-		-	-		-	-	
Critical physical para	meters: s	solubility, fla	ammabili	ty, corrosi	vity:	-		
				Consu	mer			
Route of	A	Acute		Acute		Chronic	Chronic	
exposure:	effe	ect local	effe	ct system	ic	effect local	effect systemic	
Oral	-		-			-	-	
Inhalation	-		-			-	-	
Dermal	-		-			-	-	
PNEC								
Environmental protection	ction tar	get		PN	PNEC			
Fresh water				No	No information available			
Freshwater sediment	S			No	No information available			
Marine water			No	No information available				
Marine sediments			No	No information available				
Food chain			No	No information available				
Microorganisms in se	ewage tr	eatment		No	inform	ation available		
Soil (agricultural)				No	inform	ation available		
Air					٠,	ation available		



Page 6 of 16

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 prexposure:	event	No information available		
	Organisational measures prevent exposure:	to	Organization of work in order to reduce other worker's influence during work process.		
	Technical measures to pre exposure:	event	Secure proper workspace ventilation in order to keep concentration levels in air below permitted levels.		
8.2.2. Personal protection equipment					
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:		ear antistatic clothing made of natural fibers (such as cotton) with long eeves (EN 13034), and shoes that cover the entire foot (EN 10335).		
8.2.2.3.	Respiratory protection:	filter fo	tive full face mask (EN 136) or half mask (EN 140) equipped with a or organic vapors, type "A" (boiling point >65°C) acording to EN) used when concentration levels exceed GVI.		
8.2.2.4.	Thermal hazards:	No inf	ormation available		
8.2.3.	Environmental exposure 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 chen	nical properties	
		Value	Method



Page 7 of 16

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	
Lower and upper explosion limit:	No information available	No information available	
Flash point:	No information available	No information available	
Auto-ignition temperature:	No information available	No information available	
Decomposition temperature:	No information available	No information available	
рН:	No information available	No information available	
Kinematic viscosity:	No information available	No information available	
Solubility:	No information available	No information available	
Partition coefficient n-octanol/water (log value):	No information available	No information available	
Vapour pressure:	No information available	No information available	
Density and/or relative density:	No information available	No information available	
Relative vapour density:	No information available	No information available	
Particle characteristics:	No information available	No information available	
Other information			

SECTIO	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

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



Page 8 of 16

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			-	-	
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	-		
1 1 1	No information available		No information	-		
Inhalation exposure Respirator	y irritation:		available ormation available			
Respirator			1			
Respirator	y irritation:		1	Meth od	Note	
Respirator	y irritation: nd corrosion	No info	ormation available	Meth	Note	
Respirator Irritation a	y irritation: nd corrosion Exposure time	No info	ormation available Evaluation	Meth od	Note	
Respirator Irritation a Skin irritation:	y irritation: nd corrosion Exposure time	No info	Evaluation	Meth od	Note	
Respirator Irritation a Skin irritation: Eye irritation:	y irritation: nd corrosion Exposure time	Species	Evaluation	Meth od	Note	
Respirator Irritation a Skin irritation: Eye irritation:	y irritation: nd corrosion Exposure time	Species	Evaluation	Meth od	Note	
Respirator Irritation a Skin irritation: Eye irritation: Sensitization Dermal exposure: Inhalation exposure:	y irritation: nd corrosion Exposure time On No information avai	Species ilable	Evaluation	Meth od	Note	
Respirator Irritation a Skin irritation: Eye irritation: Sensitization Dermal exposure: Inhalation exposure: Symptoms	y irritation: nd corrosion Exposure time On No information avai	Species ilable ilable al, chemical and	Evaluation	Meth od	Note	
Respirator Irritation a Skin irritation: Eye irritation: Sensitization Dermal exposure: Inhalation exposure:	y irritation: nd corrosion Exposure time No information avaitable related to the physic	Species ilable ilable al, chemical and vailable	Evaluation	Meth od	Note	
Respirator Irritation a Skin irritation: Eye irritation: Sensitization Dermal exposure: Inhalation exposure: Symptoms Oral exposure:	y irritation: nd corrosion Exposure time on No information avaitable related to the physic No information a No information a No information a	Species ilable ilable al, chemical and vailable vailable	Evaluation	Meth od	Note	



Page 9 of 16

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

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

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



Page 10 of 16

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

Chronic	c inhalation	No informa	tion available	No information available	-
	CMR effects ((carcinogenicity	y, mutagenicity, re	eproductive toxicity)	
	Carcinogenic	ity:	Based on av	ailable data, the classification criteria	a are not met.
	Mutagenicity	in-vitro:	Based on av	ailable data, the classification criteria	a are not met.
	Genotoxicity:		Based on av	ailable data, the classification criteria	a are not met.
	Mutagenicity	in-vivo:	Based on av	ailable data, the classification criteria	a are not met.
	Germ cell mu	tagenicity:	Based on av	ailable data, the classification criteria	a are not met.
	Reproductive	toxicity:	Based on av	ailable data, the classification criteria	a are not met.
	Summary of o	evaluation of th	ne CMR propertie	s: -	
				S: -	
	Information o	on other hazard	ds:	S: -	
	Information of Endocrine dis	on other hazard	ds: rties:	s: -	
11.2	Information of Endocrine dis The substance components endocrine according to Commission 2017/2100 of Endocrine dis Endocrine according to Commission 2017/2100 of Endocrine dis Endocrine dis Endocrine according to Commission 2017/2100 of Endocrine dis Endocrine dis Endocrine dis Endocrine according to Commission 2017/2100 of Endocrine dis E	on other hazard	ds: rties: s not contain to have properties cle 57(f) or ulation (EU) Regulation	s: -	
	Information of Endocrine dis The substance components endocrine according to Commission 2017/2100 of (EU) 2018/66	on other hazard srupting proper e/mixture does considered disrupting or REACH Artion Delegated reg or Commission 05 at levels	ds: rties: s not contain to have properties cle 57(f) or ulation (EU) Regulation	S: -	

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	-	-	_	-				



Page 11 of 16

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

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. Pers	istence and degradability			
Abio	tic 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	adation			
% Degradation	Time (days)	Method	Evaluation	Note
No information available				

12.3. Bi	oaccumulative potentia	al				
Pa	artition coefficient: n-o	ctanol/wa	iter (log	Kow):		
Value	Concentration	рН	°C	Method	Evaluation	Note
-	No information available	-	-	No information available	No information available	-

Bioconcentration factor (BCF)



Page 12 of 16

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

v	'alue		Species	M	ethod	Evaluation		Note	9
No info	rmation e	No avail	information No information available		nation	No information available	No info	ormation av	vailable
	Chronic	ecotoxio	city						
	Value		Dose	Exposure time	Species	Method	Eva	luation	Note
Chronic	toxicity o	n fish	LC ₅₀	No information available	No information available	No information available	No info	ormation ble	-
	toxicity o ea (<i>Daphn</i>		EC ₅₀	No information available	No information available	No information available	No information available		-
	Known o	or predic	ted distributi	on in environm	ental compar	tments:			
	No infor	mation		on in environm	iental compar	tments:			
		mation tension:		on in environm Concentra		tments: Method			Note
	No infor	mation tension:	available		tion		able	-	Note
	No informat available	mation tension: e Nicion in	°C No Information vailable	Concentra No informa	tion	Method	able		Note
	No informat	mation tension: e Nicion in a	°C No nformation vailable	Concentra No informa	tion	Method	able		Note
Transpo	No informat available Adsorptiont	mation tension: e ion / des A/D co	°C No nformation vailable sorption efficient constant	Concentra No informa available	tion No in	Method formation avail	1	- Method	Note
•	No informat available Adsorptiont	mation tension: e ion / des A/D co	°C No nformation vailable sorption efficient	Concentra No informa available	tion No in	Method formation avail	1	- Method ormation	
Transpo Soil-wa Water-a	No informat available Adsorptiont ter No informat available	mation tension: e Notion in a a second description and descr	°C No nformation vailable sorption efficient constant	Concentra No information info	tion No in Evapo	Method formation avail pration rate mation	No info	- Method ormation ole ormation	Note



Page 13 of 16

Trading name:	SODIOW ACLIA	TE, SOLUTION	
Product code: NA-OT	-X** Date of compilation	n: 21 Dec 2022	Version: 5

12.5.	Results of PBT and vPvB assessment
	The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.
•	
12.6.	Endocrine disrupting properties
	The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.
12.7.	Other adverse effects
12.7.	No information available
	No information available
SECTIO	N 13. Disposal considerations
13.1.	Waste treatment methods
13.1.1.	Product/Packaging disposal:
	Submit for disposal to the legal person authorized by the Ministry of Environmental and Nature Protection.
13.1.2.	Waste codes/waste designations according to Law:
	No information available
13.1.3.	Waste treatment – relevant information:
	No information available
13.1.4.	Sewage disposal – relevant information:
	Waste must not be disposed of into the sewage system.
13.1.5.	Other disposal recommendations:
	Do not dispose of the product's remains into the sewage system. Submit the remains to the collectors authorized by the ministry in charge. Do not dispose of the packaging into the sewage system. Submit the packaging to the collectors authorized by the ministry in charge. Do not dispose of in places where ignition may occur.
12.1.6	Relevant Community provisions:
13.1.6.	71



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

Page 14 of 16

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

SECTION 14. Transport information	
Transporting/shipment by roa	ad (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	I (RID)
UN number:	Not subject to transport regulations.
UN proper shipping name:	-
Transport hazard class(es):	-
Packing group:	-
Environmentally hazardous:	-
Special precautions for user:	-
Inland waterway transport (AI	ON)
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	a (IMDG)
UN number:	Not subject to transport regulations.
UN proper shipping name:	-
Transport hazard class(es):	-
Packing group:	-
Environmentally hazardous:	-
Special precautions for user:	-
Transporting/shipment by air	(ICAO-TI/IATA-DGR)
UN number:	Not subject to transport regulations.
UN proper shipping name:	-
Transport hazard class(es):	-
Packing group:	-
Environmentally hazardous:	-



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

Page 15 of 16

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

Special precautions for user:		-
Further information:	-	

SECTIO	SECTION 15. Regulatory information				
15.1.	Safety, health and environmental regulations/legislation specific for the substance or mixture				
	EU regulations				
	Authorization and/or restrict	tions 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 (EC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC; Directive 2004/42/CE of the European Parliament and of the Council of 21 April 2004 on the limitation of emissions of volatile organic compounds due to the use of organic solvents in certain paints and varnishes and vehicle refinishing products and amending Directive 1999/13/EC; Council Directive 98/24/EC of 7 April 1998 on the protection of the health and safety of workers from the risks related to chemical agents at work; Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006; REACH Restrictions on the manufacturing, placing on the market and use of certain dangerous substances, mixtures and articles (Annex XVII);			
	Information according 1999, guideline)	/13/EC about limitation of emissions of volatile organic compounds (VOC-			
	National legislation:	Chemicals Act, Regulation on classification, packaging and labeling of dangerous substances, Ordinance on occupational exposure limit values and on biological limit values, Regulation on categories, types and classification of waste with a waste catalog and list of hazardous waste, Ordinance on writing Material safety data sheet, Transport of Hazardous Substances Act			
15.2.	Chemical safety assessment				
	None				

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



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

Page 16 of 16

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

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

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А	N	N	Е	Х	ı

Exposure scenario resulting to Chemical safety assessment