

CONGO RED PUCHTLER KIT

The kit contains:

Congo Red, Puchtler reagent Hematoxylin G1 Histanol 100 Sodium hydroxide, solution



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Trading name:	CONGO RED PUCHTLER REAGENT					
Product code:	CRPR-OT-X**	Date of compilation:	21 Dec 2022	Version:	4	

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

SECTIO	SECTION 2. Hazards identification					
2.1	Classification of the substance of	or mixture				
2.1.1	Classification according to Regu	ulation (EC) No 12	72/2008 (CLP)			
	Hazard class and catego	ory code:		Hazard statements*:		
	Carc. 1B H350					
2.1.2.	Additional information					
	-					
*For ful	l text of Hazard- and EU Hazard-	statements: see SI	ECTION 16			
2.2	Label elements					
	Product identification: CONGO RED PUCHTLER REAGENT					
	Identification number: -					
	Authorization number:	-				



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	Hazard pictograms:	GHS08			
	Signal word:	Danger			
	Hazard statements:	H350 May cause cancer.			
	Precautionary statements:	P280 Wear protective gloves/protective clothing/eye/protection/face protection.P308+P313 If exposed or concerned: Get medical advice/attention.			
	Supplemetal hazard information (EU):	-			
2.3	Other hazards				
	Endocrine Disrupting Prope	rties:			
	No known endocrine disrupting properties Results of PBT and vPvB assessment : According to the results of its assessment, this substance is not a PBT or a vPvB.				
		(Direct Red 28 C.I.) Included in the Candidate List of Substances of Very High Concern (SVHC) according to Regulation (EC) No. 1907/2006 (REACH).			

SECTION 3. Cor	SECTION 3. Composition/information on ingredients					
CAS/ EC/ Index number	REACH Registration No	Weight % content (or range)	Identification name	Classification according to Regulation (EC) No 1272/2008 (CLP)		
573-58-0/ 209-358-4/ 611-027-00-8	-	1 – 2 %	disodium 3,3'-[[1,1'-biphenyl]-4,4'- diylbis(azo)]bis(4- aminonaphthalene-1-sulphonate)	Carc. 1B; H350 Repr. 2; H361d		

SECT	ON 4. First aid measures	
4.1	Description of first aid measu	ires
	General notes:	If the suggested first aid measures do not prove sufficient, seek medical attention.
	Following inhalation:	Carry the afflicted person out of the contaminated area into a well- ventilated area or out for fresh air. In case of difficult breathing, provide the afflicted person with oxygen.
	Following skin contact:	Remove contaminated clothing. Immediately wash with plenty of water for at least 20 minutes. Seek medical assistance if the symptoms of irritation remain.



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	Following eye contact:	Rinse out with plenty of water with the eyelid held wide open for at least 20 minutes. If the symptoms remain, immediately call in ophthalmologist.		
	Following ingestion:	Rinse the oral cavity, drink 1-2 glasses of water. Immediately consult a physician and show the container or label. In case of swallowing large quantities, transport the afflicted person to the hospital.		
	Self-protection of the first aider:	-		
4.2	Most important symptoms and effects, both acute and delayed			
	Following inhalation:	Depending on concentration and exposure time, it may lead to mucosa irritation, cough, and dyspnea.		
	Following skin contact:	Depending on concentration and exposure time, it may lead to irritation, rash, skin drying and skin cracking.		
	Following eye contact:	Depending on concentration and exposure time, it may lead to irritation, tearing, redness and pain.		
	Following ingestion:	Depending on concentration and exposure time, it may lead to stinging and digestive mucus damage, abdominal pain, nausea, vomiting.		
4.3	Indication of any immediate medi	cal attention and special treatment needed		
	-			

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 su	ubstance or mixture			
	Hazardous combustion products: No information available				
5.3	Advice for firefighters				
	Use a self-contained open-circuit compressed air breathing apparatus and fireproof clothing.				
5.4	Additional information				
	Do not contaminate the environm	ent with extinguishing media.			

SECTIO	SECTION 6. Accidental release measures				
6.1	1 Personal precautions, protective equipment and emergency procedures				
6.1.1.	For non-emergency personnel				
	Protective equipment:	Use personal protective equipment (see Section 8).			



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	Accident prevention methods	Evacuate members of all non-essential personnel and those members without protective equipment. Avoid breathing vapors and avoid contact with skin and eyes. Do not smoke.		
	Emergency procedures:	Mark the area using proper signs.		
6.1.2.	For emergency responders:			
	Use protective equipment; in a (see Section 8).	case of inadequate ventilation use adequate airways protective equipment		
6.2	Environmental precautions:			
	Do not dispose of in sewage, drainage system and waterways. In case of large spillage contact Nation Protection and Rescue Directorate (NPRD) on 112.			
6.3	Methods and material for con	tainment and cleaning up		
6.3.1.	Bunding, covering of drains; capping procedures:	Sand or clay barriers.		
6.3.2.	Cleaning up:	Where possible, the substance can be absorbed by using absorbing material. Place the waste material in tightly closed impermeable containers. Store the substance in well ventilated storage rooms until disposal. Submit for disposal to the legal persons authorized by the Ministry of Environmental and Nature Protection. After disposal of the products, wash the area and and involved materials with water.		
6.3.3.	Other information:	Do not use incompatible materials (see Section 10).		
6.4	Reference to other sections			
	-			

SECTIC	DN 7. Handling and storage			
7.1	Precautions for safe handling			
7.1.1.	Protection measures			
	Measures to prevent fire:		Use in well ventilated storage rooms.	
	Measures to prevent aerosol and dust generation	ו:	Secure proper ventilation.	
	Measures to protect the environment:	Prevent spilling into the sewage system and waterways.		
	Other measures:		-	
7.1.2.	Advice on general occupational hygiene:			
	Do not eat, drink or smoke in the workspace. The	oroughly was	sh hands after work and before eating.	
7.2	Conditions for safe storage, including any incomp	oatibilities		
	Technical measures and storage conditions:	Keep in tightly closed and upright set containers in a well ventilated storage roomsat temperatures ranging from 15 to 25 °C.		
	Packaging materials:	Manufactu containers	irer's original packaging. Avoid metal	



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	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. Expos	ure contro	ols/personal	protec	tion				
8.1 Control pa	rameters							
Substance CAS No			0	Occupational exposure limit values/short term values		B	Biological limit values	
				ppm	m	ng/m³		
-		-		-		-		-
Substance name:	-							
EC No: - CAS No: -								
DNEL								
				Industrial				
Route of	A	cute		Acute	Chronic			Chronic
exposure:	effe	ct local	effec	t systemic	(effect local		effect systemic
Oral	-		-		-			-
Inhalation	-		-		-			-
Dermal	-		-		-			-
Critical physical par	ameters: s	olubility, flan	nmabilit	y, corrosivity:		-		
				Consumer				
Route of	А	cute		Acute		Chronic		Chronic
exposure:	effe	ct local	effec	t systemic	(effect local		effect systemic
Oral	-		-		-			-
Inhalation	-		-		-			-
Dermal	-		-		-			-
PNEC								



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Environm	ental protection target		PNEC		
Fresh wat	er		No information available		
Freshwate	er sediments		No information available		
Marine w	ater		No information available		
Marine se	diments		No information available		
Food chain			No information available		
Microorganisms in sewage treatment			No information available		
Soil (agric	cultural)	No information available			
Air			No information available		
8.2	Exposure controls				
8.2.1.	Appropriate engineering controls	S			
	Substance/mixture related measures to prevent exposure during identified uses:		Use the product in well ventilated rooms. Use personal protective equipment. Do not eat, drink or smoke in the workspace.		
	Structural measures to prevent exposure:		In accordance with Section 7.		
	Organisational measures to preve exposure:	ent	Organization of work in order to reduce other worker's influence during work process.		
	Technical measures to prevent exposure:		Secure proper workspace ventilation in order to keep concentration levels in air below permitted levels. Secure stations for rinsing eyes and showering.		
8.2.2.	Personal protection equipment				
8.2.2.1.	Eye and face protection:	levels o	glasses that stick to face (EN 166) or visor in case of lower of concentration in air; protective gas mask that covers the face in case of higher levels of concentration in air.		
8.2.2.2.	Skin protection	<u>I</u>			
	Hand protection:	Protec	ctive nitrile gloves, 0.11 mm thick (EN 374).		
	Other skin protection:		antistatic clothing made of natural fibers (such as cotton) ong sleeves (EN 340) and shoes that cover the entire foot.		
8.2.2.3.	Respiratory protection:	combii	le mask (EN 136) or half mask (EN 140) equipped with a ned "A1 + Form" filter (EN 143) used when concentration exceed GVI.		
8.2.2.4.	Thermal hazards:	No info	ormation available		
8.2.3.	Environmental exposure controls				
	Substance/mixture related measures to prevent exposure:	See Se	ction 6		



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

	Information on basic physical and	chemical properties	
		Value	Method
	Physical state:	liquid	No information available
	Colour:	red	No information available
	Odour/odour threshold:	biting/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:Lover and upper explosion limit:Flash point:Auto-ignition temperature:	No information available	No information available
		No information available	No information available
		No information available	No information available
		No information available	No information available
	Decomposition temperature:	No information available	No information available
	pH:	No information available	No information available
	Auto-ignition temperature: Decomposition temperature: pH: 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

SECTIO	ON 10. Stability and reactivity	
10.1	Reactivity:	The product is stable under normal working and storage conditions.



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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

11.1 Informatio	n on toxicological effe	ects						
Acute toxi	city:							
Route of exposure:	Method	Species Dose LD ₅₀ /LC ₅₀ or Exposure time				Results		
Oral:	No information available	rat	_	informatio ilable	n -			15.200 mg/kg
Dermal:	No information available	-	No information available		n -			-
Inhalation:	No information available						-	
Specific ta	rget organ toxicity – s	ingle exp	osure (S	TOT SE):				
	Specific e	ffects	Target o			-		Note
Oral:	No information avai	nformation available			No information available			
Dermal:	No information avai	ilable		No information available -				
Inhalation:	No information avai	ilable	No information available			_		
Aspiration	hazard:	٩	No inforr	mation ava	ilable.			
Irritation a	nd corrosion					1		
	Exposure tim	ne	Speci	ies E	Evaluation	Meth	od	Note
Skin corrosion/irritation:	No inform available	nation ii	lo nformati wailable	-	o formation vailable	No inforr available	mation	-
Serious eye damage/irritation	No inform available	nation ii	lo nformati ivailable			No information available		_
Sensitizatio	on							



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Respiratory sensi	tization: No in	formation avail	able					
Sympto	ms related to the p	hysical, chemic	al and toxicolog	ical characterist	ics			
Oral exposure:	and loss of c	onsciousness a	o occurrence of strong sensation of stinging, headache, vertigo, intoxication onsciousness after exposure to higher levels of concentration. If denaturants dyspepsia may occur (such as vomiting).					
Dermal exposure	: Defatting, di	y skin.						
Inhalation expos	Bronchocon	striction is poss ertigo, intoxica	sible. Possible s	tory system (stin /mptoms include consciousness a	e CNS symptom	s such as		
Eye exposure:	Splatter may lesions.	v cause discom	fort, stinging se	nsation, conjunc	tival redness, co	rneal surface		
Repeate	ed dose toxicity (sub	oacute, 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	-		
Subchronic inhalation			No information available	No information available	No information available	-		
Chronic oral	No information available	No information available	No information available	No information available	No information available	-		
Chronic dermal	No information available	No information available	No information available	No information available	No information available	-		



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Subacute oral N Subacute inhalation N Subacute inhalation N Subacute inhalation N Subchronic oral N Subchronic inhalation N Subchronic inhalation N Chronic oral N Chronic oral N Chronic inhalation N Genotoxicity: N Mutagenicity in via N Germ cell mutage Reproductive toxi Summary of end Summary of end The substance/m Components const		No No information information available available		No No information informatic available available		-		
Subacute dermal N Subacute inhalation N Subchronic oral N Subchronic dermal N Subchronic inhalation N Chronic oral N Chronic inhalation N Gernotoxicity: N Mutagenicity in via N Germ cell mutage Reproductive toxi Summary of properties: P 11.2 Information on ot 11.2.1 Endocrine disruption on ot The substance/m Components conse	rgan toxicity – repeated e	exposure (STOT	RE):					
Subacute dermal N Subacute inhalation N Subchronic oral N Subchronic dermal N Subchronic inhalation N Chronic dermal N Chronic inhalation N Chronic dermal N Chronic inhalation N Chronic inhalation N Chronic inhalation N Chronic dermal N Chronic inhalation N Chronic dermal N Chronic inhalation N Chronic inhalation N Chronic inhalation N Chronic dermal N Chronic inhalation N Chronic inhalation N Chronic inhalation N Chronic dermal N Chronic inhalation N Chronic inhalation N Chronic inhalation N Chronic dermal N Chronic inhalation N Chronic dermal N Chronic inhalation N Chronic inhalation N Chronic inhalation N Chronic dermal N Chronic dermal N Chronic inhalation N Chronic inhalation N Chronic inhalation N Chronic dermal N Chronic inhalation N Chr	Specific effect	cts	Target o	rgan		Note		
Subacute inhalation N Subchronic oral N Subchronic inhalation N Subchronic inhalation N Chronic oral N Chronic inhalation N Genotoxicity: N Mutagenicity in vality N Germ cell mutage N Germ cell mutage N Summary of properties: P 11.2 Information on ot The substance/m Components cons	No information available		No information	n available	-			
Subchronic oral N Subchronic dermal N Subchronic inhalation N Chronic oral N Chronic dermal N Chronic inhalation N N Chronic inhalation N N Summary of e properties: 11.2 Information on ot 11.2.1 Endocrine disrupt The substance/m components cons	No information available		No information	n available	-			
Subchronic dermal N Subchronic inhalation N Chronic oral N Chronic dermal N Chronic inhalation N Chronic dermal CMR effects (carcin Carcinogenicity in Vi Genotoxicity: Mutagenicity in Vi Germ cell mutage Reproductive toxi Summary of e properties: 11.2 Information on ot 11.2.1. Endocrine disrupt The substance/m components cons	No information available		No information	n available	-			
Subchronic inhalation N Chronic oral N Chronic dermal N Chronic inhalation N Chronic dermal CMR effects (carcing Carcinogenicity in Vi Genotoxicity: Mutagenicity in Vi Germ cell mutage Reproductive toxi Summary of e properties: 11.2 Information on ot 11.2.1. Endocrine disrupt The substance/m components cons	No information available		No information	n available	-			
Chronic oral N Chronic dermal N Chronic inhalation N Chronic inhalation N Chronic inhalation N CMR effects (carcin Carcinogenicity in vi Genotoxicity: Mutagenicity in vi Germ cell mutage Reproductive toxi Reproductive toxi 11.2 Information on ot 11.2.1. Endocrine disrupt The substance/m components cons	No information available		No information	n available	-			
Chronic dermal N Chronic inhalation N Chronic inhalation N CMR effects (carcinogenicity: Carcinogenicity: Mutagenicity in via Genotoxicity: Mutagenicity in via Germ cell mutage Reproductive toxi Summary of e 11.2 Information on ot 11.2.1 Endocrine disrupt The substance/m components cons	No information available		No information	n available	-			
Chronic inhalation N Chronic inhalation N CMR effects (carcinogenicity: Carcinogenicity: Mutagenicity in via Genotoxicity: Mutagenicity in via Germ cell mutage Germ cell mutage Reproductive toxi Summary of end Properties: 11.2 Information on ot 11.2.1 Endocrine disrupt The substance/m components construction	No information available		No information	n available	-			
CMR effects (carci Carcinogenicity: Mutagenicity <i>in vi</i> Genotoxicity: Mutagenicity <i>in vi</i> Germ cell mutage Reproductive toxi Summary of e properties: 11.2 Information on ot 11.2.1. Endocrine disrupt The substance/m components cons	No information available		No information	n available	-			
Carcinogenicity: Mutagenicity in vi Genotoxicity: Mutagenicity in vi Germ cell mutage Reproductive toxi Summary of e properties: 11.2 Information on ot 11.2.1. Endocrine disrupt The substance/m components cons	No information available		No information	n available	-			
11.2Information on ot11.2.1.Endocrine disruptThe substance/mcomponents cons	Mutagenicity <i>in vivo</i> : Germ cell mutagenicity: Reproductive toxicity:			No information available No information available No information available No information available Suspected of damaging the unborn child.				
11.2.1. Endocrine disrupt The substance/m components cons	ther hazards.							
The substance/m components cons								
Article 57(f) or regulation (EU) 2	mixture does not cont nsidered to have endocr erties according to REA r Commission Delegat 2017/2100 or Commissi 2018/605 at levels of 0.	ine CH ted ion						
11.2.2. Other information	ns:							



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12.1 Toxicity						
Acute (short-term) toxicity	Dose	Exposure time	Species	Method	Evaluation	Note
Fish	LC ₅₀	96 hours	No information available	No information available	No information available	-
Crustacea:	EC ₅₀	48 hours	No information available	No information available	No information available	-
Algae/aquatic plants	IC ₅₀	4 days	No information available	No information available	No information available	-
Other organisms	-	-	-	-	-	-
Chronic (long-term) toxicity	Dose	Exposure time	Species	Method	Evaluation	Note
Fish	LC ₅₀	96 hours	No information available	No information available	No information available	-
Crustacea:	EC ₅₀	48 hours	No information available	No information available	No information available	-
Algae/aquatic plants	IC ₅₀	72 hours	No information available	No information available	No information available	-
Other organisms	-	-	-	-	-	-

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



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	Biodegrada	ation								
% De	gradation	Time	(days)	Ν	/lethod		Evaluation		Note	
	lo information No information vailable available		nformation	n No information available			No information available		No information available	
10.0	D .	· · · · · · ·	• •							
12.3		lative potenti ater partition			<i>(</i>)					
Valu			pH	°C	Metho	d	Evalu	ation		Note
-	-		-		-	u	-		_	Note
	1	ration factor								
	alue	Spec			Method		Evaluation			Note
No information No available available			nformation	mation No infor available		on No information available		on	-	
	:									
	Chronic ec	otoxicity	1		1	1		I		1
	Value	Do		oosure ime	Species		Method	Eval	uation	Note
Chronic	toxicity on	fish LC ₅₀	No infor avail	mation able	No informati available		o formation vailable	No information available		-
	: toxicity on ea (<i>Daphnia</i>)	EC ₅₀	No infor avail	mation able	No informati available		o Iformation vailable	No inforn availa		-
		I								
12.4	Mobility in	soil								
	Known or J	predicted dist	ribution in e	environn	nental com	partme	nts:			
	No informa	ation available	e							
	Surface ter	ision:	I							
	Value	°C	C	oncentra	ation	Ν	/lethod			Note
	No information available	No informat available	ion ava	informa ailable		inforn ailable	nation	-		



SAFETY DATA SHEET

BI	OG	iN	OST ®	-	to Regulation (EC) by Regulation (EU) No. 2020/878	Page 13 of 17	,				
Trading	g nam	e:		CONGO RED PUCHTLER REAGENT								
Produc	t code	e:	CRPR-OT-X**	Da	te of compilation:	21 Dec 2022	Version:	4				
	Adso	rptior	n / desorption									
Transpo	ort		/D coefficient enry's constant	log Kow	Evaporation rate	Method	Note					
Soil-wat	No information		No information available	No information available	No information available	-						
Water-a	r-air No information available		No information available	No information available	No information available	-						
Soil-air	oil-air No information available		No information available	No information available	No information available	-						
12.5.	Resul	Its of I	PBT and vPvB asses	sment								
	accor	rding ⁻		7(f) or Comm	ission Delegated regu	d to have endocrine d llation (EU) 2017/2100						
12.6.	Endo	crine	disrupting properti	es								
	accor	rding ⁻	-	7(f) or Comm	ission Delegated regu	d to have endocrine d llation (EU) 2017/2100	1 31 1					
12.7.	Othe	r adve	erse effects									
	No in	nforma	ation available									

SECTION 13. Disposal considerations		
13.1	Waste treatment methods	

13.1.1.	Product/Packaging disposal:
	Submit for disposal to the legal person authorized by the Ministry of Environmental and Nature Protection.
13.1.2.	Waste codes/waste designations according to Law:
	Packaging that contains residual hazardous substances or is contaminated with hazardous substances



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13.1.3.	Waste treatment – relevant information:	
	No information available	
13.1.4.	Sewage disposal – relevar	nt information:
	Waste must not be dispos	sed of into the sewage system.
13.1.5.	Other disposal recommer	ndations:
	authorized by the ministr	oduct's remains into the sewage system. Submit the remains to the collectors y in charge. Do not dispose of the packaging into the sewage system. Submit ectors authorized by the ministry in charge.
13.1.6.	Relevant Community prov	visions:
	-	
	:	
SECTIO	N 14 TRANSPORT INFORM	IATION
	Transporting/shipment by r	road (ADR)
UN num	ber:	Not subject to transport regulations
UN prop	per shipping name:	-
Transpo	rt hazard class(es):	-
Packing	group:	-
Environr	nentally hazardous:	-
Special p	precautions for user:	-
	Transporting/shipment by r	rail (RID)
UN num	ber:	Not subject to transport regulations
UN prop	per shipping name:	-
Transpo	rt hazard class(es):	-
Packing	group:	-
Environr	nentally hazardous:	-
Special p	precautions for user:	-
	Inland waterway transport (ADN)
UN num	ber:	Not subject to transport regulations
UN prop	per shipping name:	-
Transpo	rt hazard class(es):	-
Packing	group:	-
Environr	nentally hazardous:	-
Special p	precautions for user:	-
	Transporting/shipment by s	sea (IMDG)



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Trading name:	CONGO RED PUCHTLER REAGENT				
Product code:	CRPR-OT-X**	Date of compilation:	21 Dec 2022	Version:	4

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

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



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Other	EU regulations:	Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC; Directive 2004/42/CE of the European Parliament and of the Council of 21 April 2004 on the limitation of emissions of volatile organic compounds due to the use of organic solvents in certain paints and varnishes and vehicle refinishing products and amending Directive 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);
Inform guidel	5	/13/EC about limitation of emissions of volatile organic compounds (VOC-
Natior	nal 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 Chemi	cal safety assessment	
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:	-	



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Trading name:	CONGO RED PUCHTLER REAGENT				
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16.4.	Classification and procedure used to derive the classification for mixture according to Regulation (EC) 1272/2008 (CLP)	
Classifie	cation	Classification procedure
-		-
16.5.	Relevant H statements (num	ber and full text)
	H: 350	May cause cancer.
	361d	Suspected of damaging the unborn child.
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



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Trading name:	HEMATOXYLIN G1					
Product code:	HEMG1-OT-X**	Revision date:	14 Nov 2022	Version:	7	

SECTI	ON 1 IDENTIFICATION (OF THE SUB	STANCE/MI	XTURE AND OF THE COMPANY/UNDERTAKING		
1.1.	Product identifier	Product identifier				
	Trading name:	ΗΕΜΑΤΟ	(YLIN G1			
	Chemical name:	-				
	Catalogue number:	HEMG1-C	HEMG1-OT-X**			
1.2.	Relevant identified use	s of the sub	ostance or mi	xture and uses advised against		
	Uses: Hematoxylin according to Gill for nuclear staining.					
	Uses advised against:		Only the i	dentified uses are advised.		
	Reason why uses advis	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 Production Medical Devices and there is no reason to use it for other put				
1.3.	Details of the supplier	of the safet	y data sheet			
	Supplier:	Supplier: B		BioGnost Ltd.		
	Address:	I	Medjugorska 59, Zagreb			
	Telephone number:	-	+385 1 2409997			
	Fax no.:	-	+385 1 2404039			
	e-mail of competent p	erson: <u>I</u>	msds@biognost.hr			
	National contact:	-	-			
1.4.	Emergency telephone	number				
	National Protection an	d Rescue Di	irectorate:	112		
	Medical information:			+385 1 2348 342		
	Other information:	Other information:		-		

SECTIO	SECTION 2 HAZARDS INFORMATION				
2.1.	Classification of the substance	e or mixture			
2.1.1.	Classification (REGULATION	(EC) No. 1272/2008	(CLP)		
	Hazard class and cate	egory code:	Hazard statements*:		
	Acute Tox. 4		H302		
2.1.2.	Additional information				
	-				
*For ful	l text of Hazard- and EU Hazar	d-statements: see S	Section 16		
2.2.	Label elements				
	Product identification: HEMATOXYLIN G1				
	Identification number: -				
	Authorization no.:	-			



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Trading name:	HEMATOXYLIN G1						
Product code:	HEMG1-OT-X**	Revision date:	14 Nov 2022	Version:	7		

	Hazard pictograms:	GHS07				
	Signal word:	Warning				
	Hazard statements:	H302 Harmful if swallowed.				
	Precautionary statements:	 P280 Wear protective gloves/protective clothing/eye/protection/face protection. P301 + P312 IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell. 				
	Supplemetal hazard information (EU):	-				
2.3.	Other hazards					
	Endocrine Disrupting Properties:					
	No known endocrine disrupt	ng properties				
	Results of PBT and vPvB as PBT or a vPvB.	sessment: According to the results of its assessment, this substance is not a				

SECTION 3 CO	SECTION 3 COMPOSITION/INFORMATION ON INGREDIENTS								
CAS/ EC/ Index no.	REACH Registration No	Weight % content (or range)	Identification name	Classification according to Regulation (EC) No 1272/2008 (CLP)					
107-21-1/ 203-473-3/ 603-027-00-1	01-2119456816- 28-xxxx	25 - 45 %	ethylene glycol	Acute Tox. 4, H302					

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



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Trading name:	HEMATOXYLIN G1					
Product code:	HEMG1-OT-X**	Revision date:	14 Nov 2022	Version:	7	

	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	er: Treat symptomatically.	
4.2.	Most important symptoms an	d effects, both acute and delayed	
	Following inhalation:	Inhalation of large amounts of vapors in inadequately ventilated perimeter may cause coughing, sneezing, headache and nausea.	
	Following skin contact:	Slight irritation. After short exposure, resorption effects are not likely. Long- term exposure may cause drying, cracking and tingling sensation of skin.	
	Following eye contact:	Direct eye contact may cause slight to moderate irritation, lacrimation and burning sensation. If the symptoms persist, immediately call a physician.	
	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 immediate medical attention and special treatment needed		
	-		

SECTIC	ON 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 of Cool closed containers exposed to	compressed air breathing apparatus and fireproof clothing. fire with water spray or vapor.		
5.4.	Additional information			
	Remove sources of heat and igniti Do not contaminate the environm			

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



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						Page 4	01.10
Tradin	g name:		HEMATOXYLIN G1				
Produ	Product code: HEMG1-OT-X*			Revision date: 14 Nov 2022 Version: 7			
	Accident	prevention methods	5:	members withou	ers of all non-esse It protective equipm on. Do not smoke.	•	
	Emergeno	cy procedures:		Mark the area usi	ng proper signs.		
6.1.2.	For emerg	gency responders:					
	Wear pro ⁻	tective equipment (s	see Secti	on 8).			
6.2.	Environm	ental precautions:					
	Do not dispose of in sewage, drainage system and waterways. In case of large Protection and Rescue Directorate (NPRD) on 112.				e spillage contact	National	
6.3.	Methods	and material for cor	ntainmen	t and cleaning up			
6.3.1.		covering of drains; procedures:	Sand o	r clay barriers.			
6.3.2.	Cleaning	up:	materia in tight ventilat person Protect	al (sand, diatomace Ily closed impermea ted storage rooms s authorized by the	ance can be absorbe ous earth, vermiculite able containers. Store until disposal. Submi Ministry of Environn of the products, wash	e). Place the wast e the substance in t for disposal to nental and Natur	e material n well the legal re
6.3.3.	Other info	ormation:	-				
6.4.	Reference	e to other sections					
	See Section 7 for information al See Section 8 for information al See Section 13 for information		about p	ersonal protective e	equipment.		

SECTIO	N 7 HANDLING AN 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:	-				
7.1.2.	Advice on general occupational hygiene:					
	Do not eat, drink or smoke in the workspace. Thoro	ughly wash hands after work and before eating.				
7.2.	Conditions for safe storage, including any incompat	ibilities				



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Trading name:		HEMAT	OXYLIN G1						
Product code:	HEMG1-OT-X**	HEMG1-OT-X** Revision date: 14 Nov 2022 Version: 7							
-									

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

SECTION 8 EXPOSU	RE CON	TROLS/PER	SONAL	PROTECTION			
8.1. Control para	meters						
Substance		CAS N	١o	•	exposure limit term values	Bio	ological limit values
				ppm	mg/m ³		
Ethylene glycol		107-2 ⁻	1-1	20/40	52/104	No infor	mation available
Substance - name:							
EC No: -		CAS No:	-				
DNEL					·		
				Industrial			
Route of	A	Acute		Acute	Chron	ic	Chronic
exposure:	effe	ect local	effe	ect systemic	effect lo	ocal	effect systemic
Oral	-		-		-		-
Inhalation	-		-		35 mg/ kg (ethylene gly	col)	
Dermal	-		-		-		106 mg/kg (ethylene glycol)
Critical physical parar	meters: s	olubility, fla	mmabili	ty, corrosivity:	-		
				Consumer			



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Trading r	name:				HEMATOXYLIN G1				
Product	code:	HEMG1-OT-X**		Revisio	on date:	14 Nov 2022	Version:	7	
Route of		Acute			-	Chronic	_	ronic	
exposure	:	effect local	ef	ffect sys	temic	effect local	effect s	systemic	
Oral		-	-			-	-		
Inhalation	1	-	-			7 mg/kg (ethylene glycol)	-		
Dermal		-	-			-	53 mg/kg (glycol)	ethylene	
PNEC									
Environme	ental prot	ection target			PNEC				
Fresh wate	er				10 mg/l	(ethylene glycol)			
Freshwate	er sedimer	nts			37 mg/kg	g (ethylene glycol)			
Marine wa	ater				1 mg/l (e	thylene glycol)			
Marine se	diments				3.7 mg/k	g (ethylene glycol)			
Food chai	in			No information available					
Microorga	anisms in	sewage treatment		199.5 mg/l (ethylene glycol)					
Soil (agric	cultural)				1.53 mg/	'kg (ethylene glycol)			
Air					No infor	mation available			
8.2.	Exposu	ire controls							
8.2.1.	Engine	ering measures							
	measu	ires to prevent exposure			Jse the product in well ventilated rooms. Use personal protect quipment. Do not eat, drink or smoke in the workspace.				
	Structu exposu	ural measures to prev ure:	vent	No information available					
	-	isational measures to it exposure:		-	ation of w work proce	ork in order to reduce ess.	e other worker's	influence	
	Techni exposu	cal measures to prev ire:				rkspace ventilation in els in air below permit			
8.2.2.	Person	al protection equipr	nent						
8.2.2.1.	Eye an	d face protection:		Safety <u>c</u> visor.	/ glasses that stick to face (preventing splashing) (EN 166) or				
8.2.2.2.	Skin pr	rotection							
	Hand p	protection:		Glove n Glove tl	naterial: ni hickness: ≥	according to standard trile rubber :0.11 mm ne: >480 min	d EN 374.		



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						Faye /				
Trading	name:			HEMATOXYLIN G1						
Product code: HEMG1-OT-X**				Revision date:	14 Nov 2022	Version:	7			
	Other	skin protection:			nade of natural fibers noes that cover the er		0			
8.2.2.3.	Respi	ratory protection:	filter f	otective full face mask (EN 136) or half mask (EN 140) equipped with a er for organic vapors, type "A" (boiling point >65°C) acording to EN 387) used when concentration levels exceed GVI.						
8.2.2.4.				formation available						
8.2.3.	Enviro	onmental exposure	controls							
	Substance/mixture related measures to prevent exposure:			e: See Section 6						
Structural measures to prevent exposure:				ent Use modern equipment.						
		Organisational measures to prevent exposure:		Adapt the work process to the required working conditions of th workplace.						
Technical measures to prevent exposure:				See Section 6						

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



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Tradir	ng name:		HEMATOXYLIN G1							
Product code:		HEMG1-OT-X**	Revision date:	14 Nov 20)22	Version:	7			
	Relative v	vapour density:	No information a	available	No inf	formation avai	ilable			
	Particle c	haracteristics:	No information available No information a							
9.2.	Other inf	ormation								

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

SECTION	ON 11 TOXIC	OLOGICAL INFORM	ATION			
11.1.	Informatio	n on hazard classes as	defined in Reg	ulation (EC) No 1272	2/2008	
	Acute toxic	ity:				
Route exposi	-	Method	Species	Effective dose LD ₅₀ /LC ₅₀ or ATE _{mixture}	Exposure time	Results
Oral ex	xposure:	anhydrous (ECHA)	rabbit	LD ₅₀	-	7.712 mg/kg (ethylene glycol)
Dermal exposure:		anhydrous (ECHA)	rat	LD ₅₀	-	>3.500mg/kg (ethylene glycol)
Inhalat exposi		No information available	-	LC ₅₀	-	-
	Specific tar	get organ toxicity – si	nale exposure ((STOT SE):		
			ic effects	Target	organ	Note
Oral o	xposure:	No information	available	No informatio	n availablo	
Utal e			available			-
	al exposure:	No information		No informatio		-
Derma	•	No information	available		n available	
Derma	al exposure:	No information	available	No informatio	n available	-
Derma	al exposure:	No information	available available	No informatio	n available	-
Derma	al exposure: tion exposure Respiratory	No information	available available	No informatio No informatio	n available	-



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Trading name:		HEMATOXYLIN G1				
Product code:	HEMG1-OT-X	** Re	evision date:	14 Nov 202	2 Version:	7
Skin irritation:	-	rabb	rabbit -		Slight irritatic glycol)	on (ethylene
Eye irritation:	24 h	rabb	it -	-	Slight irritatic glycol)	on (ethylene
Sensitiz						
Dermal exposure Inhalation	: No informatior	1 avallable				
exposure:	No information	n available				
	1					
Sympto	ms related to the p	hysical, chemic	al and toxicolo	gical characterist	ics	
Oral exposure:	No informat	ion available				
Dermal exposure	e: No informat	ion available				
Inhalation expos	ure: No informat	ion available				
Eye exposure:	Causes serio	ous eye damage	e			
_						
Repeate	ed dose toxicity (sul		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	-



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Trading name	•	HEMATOXYLIN G1							
Product code:	H	EMG1-OT-X*	·* [Revision	date:	14 Nov 2022	Ver	sion:	7
Chronic dermal		o information information ir		No information information information information		No information available		-	
Chronic No information in			No informatior available	No inform availal		No information available	No informa available	ation	-
Spacif	c target	t organ tovicit	v rapatad			25).			
speci	c targe	t organ toxicit	pecific effect				•		Note
Subacute oral			tion availabl		No	Target organ			Note
Subacute derm			tion availabl			information availa		-	
Subacute inhala			tion availabl					_	
Subacute innaia Subchronic ora			tion availabl			information available		_	
Subchronic der			tion availabl			information available		-	
Subchronic inh			tion availabl			o information available		_	
Chronic oral			tion availabl	n available No		lo information available		-	
Chronic dermal			tion availabl	n available No		information availa		-	
Chronic inhalat	on	No informa	tion availabl	n available No		o information available		-	
		1			i		:		
CMR e	ffects (d	carcinogenicit	y, mutagenio	tity, repro	ductive	toxicity)			
Carcin	ogenici	ty:	Current	t studies c	on test a	nimals did not ind	dicate carcin	ogenio	c effects.
Mutag	enicity	in-vitro:	Current	t in vitro	tests d	id not indicate m	nutagenic eff	ects.	
Genot	oxicity:		No info	ormation a	vailable				
Mutag	enicity	in-vivo:	Current	t in vivo	tests di	d not indicate m	utagenic eff	ects.	
Germ	cell mut	agenicity:	No info	No information available					
Repro	ductive	toxicity:	No tox organs		reprodu	ctive organs wa	s determine	ed in	reproductive
Summ	ary of e	valuation of t	he CMR prop	perties:	-				
11.2. Inform	ation o	n other hazard	ds:						
11.2.1. Endoc	rine disi	rupting prope	rties:	1					
	known ties tha	endocrine It affect huma	disrupting n health						
· · ·	informa								



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Trading name:	HEMATOXYLIN G1				
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12.1. Toxicity						
Acute (short-term) toxicity	Dose	Exposure time	Species	Method	Evaluation	Note
Fish	LC ₅₀	96 hours	Fish	No information available	72.860 mg/l (ethylene glycol)	-
Crustacea:	EC ₅₀	48 hours	water flea	No information available	>100 mg/l (ethylene glycol)	-
Algae/aquatic plants	IC ₅₀	8 days	algae	No information available	6.500-13.000 mg/l (ethylene glycol)	-
Microorganisms	LC ₅₀	72 hours	-	-	-	-
Chronic toxicity	Dose	Exposure time	Species	Method	Evaluation	Note
Fish	LC ₅₀	96 hours	No information available	No information available	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	-
				_	_	_

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

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



Page 12 of 16 Trading name: **HEMATOXYLIN G1** Product code: HEMG1-OT-X** Revision date: 14 Nov 2022 Version: 7 12.3. Bioaccumulative potential Partition coefficient: n-octanol/water (log Kow): °C Value Concentration Method Evaluation pН Note No information No information No information _ _ _ available available available **Bioconcentration factor (BCF)** Value Method Evaluation Note **Species** No information No information No information No information No information available available available available available Chronic ecotoxicity Exposure Value Dose Species Method Evaluation Note time No No No No information LC_{50} Chronic toxicity on fish information information information _ available available available available No No No No information Chronic toxicity on information information information EC_{50} _ crustacea (Daphnia) available available available available 12.4. Mobility in soil Known or predicted distribution in environmental compartments: No information available Surface tension: °C Value Concentration Method Note No No No information No information information information available available available available



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Trading name:	HEMATOXYLIN G1				
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	Adsorption / desorption				
Transpo	A/D coefficient Henry's constant	log Kow	Evaporation rate	Method	Note
Soil-wat	ter No information available	No information available	No information available	No information available	-
Water-a	air No information available	No information available	No information available	No information available	-
Soil-air	No information available	No information available	No information available	No information available	-
12.5.	Results of PBT and vPvB asses	scmont			
12.3.			contain any DPT or w	DVR substances	
	Based on available data, the p		Contain any PBT OF V	PVB SUDStances.	
12.6.	Endocrine disrupting propert				
12.0.	No known endocrine disrupti		affect the environm	opt	
	No known endochne disrupti	ng properties that		ient.	
107					
1 / /					
12.7.					
12.7.	No adverse effects are expect	ed.			
12.7.	No adverse effects are expect				
SECTIO	No adverse effects are expect N 13 DISPOSAL CONSIDERA				
SECTIO	No adverse effects are expect				
SECTIO 13.1.	No adverse effects are expect N 13 DISPOSAL CONSIDERA Waste treatment methods	ΓΙΟΝS			
SECTIO 13.1.	No adverse effects are expect N 13 DISPOSAL CONSIDERA Waste treatment methods Product/Packaging disposa	ΓΙΟΝS	rized by the Ministr	y of Environmental	and Nature
SECTIO 13.1.	No adverse effects are expect N 13 DISPOSAL CONSIDERA Waste treatment methods	ΓΙΟΝS	rized by the Ministr	y of Environmental	and Nature
SECTIO 13.1.	No adverse effects are expect No adverse effects are expect N 13 DISPOSAL CONSIDERAT Waste treatment methods Product/Packaging disposa Submit for disposal to the I	ΓΙΟΝS	rized by the Ministr	y of Environmental	and Nature
	No adverse effects are expect No adverse effects are expect N 13 DISPOSAL CONSIDERAT Waste treatment methods Product/Packaging disposa Submit for disposal to the I	FIONS I: egal person autho		y of Environmental	and Nature
SECTIO 13.1. 13.1.1.	No adverse effects are expect N 13 DISPOSAL CONSIDERA Waste treatment methods Product/Packaging disposa Submit for disposal to the I Protection.	FIONS I: egal person autho		y of Environmental	and Nature
SECTIO 13.1. 13.1.1.	No adverse effects are expect N 13 DISPOSAL CONSIDERA Waste treatment methods Product/Packaging disposa Submit for disposal to the l Protection. Waste codes/waste designa	FIONS I: egal person autho		y of Environmental	and Nature
SECTIO 13.1. 13.1.1.	No adverse effects are expect N 13 DISPOSAL CONSIDERA Waste treatment methods Product/Packaging disposa Submit for disposal to the l Protection. Waste codes/waste designa	FIONS I: egal person autho ations according to		y of Environmental	and Nature
SECTIO 13.1. 13.1.1. 13.1.2.	No adverse effects are expect N 13 DISPOSAL CONSIDERAT Waste treatment methods Product/Packaging disposa Submit for disposal to the I Protection. Waste codes/waste designation No information available	FIONS I: egal person autho ations according to		y of Environmental	and Nature
SECTIO 13.1. 13.1.1. 13.1.2.	No adverse effects are expect N 13 DISPOSAL CONSIDERAT Waste treatment methods Product/Packaging disposa Submit for disposal to the I Protection. Waste codes/waste designa No information available Waste treatment – relevant	FIONS I: egal person autho ations according to		y of Environmental	and Nature
SECTIO 13.1. 13.1.1. 13.1.2.	No adverse effects are expect N 13 DISPOSAL CONSIDERAT Waste treatment methods Product/Packaging disposa Submit for disposal to the I Protection. Waste codes/waste designa No information available Waste treatment – relevant	FIONS I: egal person autho ations according to information:		y of Environmental	and Nature



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Trading	name:		HEMAT	OXYLIN G1				
Product	code:	HEMG1-OT-X**	Revision date:	14 Nov 2022	Version:	7		
13.1.5.	Other di	sposal recommendation	s:					
		lispose of the product's ed by the ministry in cha	-	-				
		aging to the collectors a may occur.	uthorized by the minis	try in charge. Do not o	dispose of in pla	ices where		
13.1.6.	Relevant Community provisions:							
	-							
SECTION	14 TRAN	ISPORT INFORMATION						
-	Transporti	ng/shipment by road (A	DR)					
UN numb	per:		Not subject to transpor	t regulations.				
UN prope	er shipping	g name:	-					
Transport	t hazard cl	ass(es):	-					
Packing g	group:		-					
Environm	entally ha	zardous:	-					
Special p	recautions	s for user:	-					
-	Transporti	ng/shipment by rail (RID)					
UN numb	per:		Not subject to transpor	t regulations.				
UN prope	er shipping	g name:	-					
Transport	t hazard cl	ass(es):	-					
Packing g	group:		-					
	entally ha		-					
Special p	recautions	s for user:	-					
I	Inland wat	erway transport (ADN)						
UN numb	per:		Not subject to transpor	t regulations.				
UN prope	er shipping	g name:	-					
Transport	t hazard cl	ass(es):	-					
Packing g	group:		-					
	entally ha		-					
· · ·	recautions		-					
-	Transporti	ng/shipment by sea (IMI	DG)					
UN numb	per:		Not subject to transport regulations.					
	er shipping	-	-					
-	t hazard cl	ass(es):	-					
Packing g	•		-					
Environm	entally ha	zardous:	-					



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Trading name:	HEMATOXYLIN G1				
Product code:	HEMG1-OT-X**	Revision date:	14 Nov 2022	Version:	7

Special precautions for user:	-
Transporting/shipment by a	air (ICAO-TI/IATA-DGR)
UN number:	Not subject to transport regulations.
UN proper shipping name:	-
Transport hazard class(es):	-
Packing group:	-
Environmentally hazardous:	-
Special precautions for user:	-
Further information: The prod	luct is not subject to classification.

15.1.	Safety, health and enviror	nmental regulations/legislation specific for the substance or mixture			
	EU regulations				
	Authorization and/or restrictions of use				
	Authorizations:	-			
	Restrictions:	-			
	Other EU regulations:	 Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC; Directive 2004/42/CE of the European Parliament and of the Council of 21 April 2004 on the limitation of emissions of volatile organic compounds due to the use of organic solvents in certain paints and varnishes and vehicle refinishing products and amending Directive 98/24/EC of 7 April 1998 on the protection of the health and safety of workers from the risks related to chemical agents at work; Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006; REACH Restrictions on the manufacturing, placing on the market and use of certain dangerous substances, mixtures and articles (Annex XVII); 			



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Tradin	ig name:	HEMATOXYLIN G1					
Product code:		HEMG1-OT-	-X**	Revision date:	14 Nov 2022	Version:	7
	National	legislation:	dange and or classifi Ordina	rous substances, Ord n biological limit value cation of waste with	on classification, pack inance on occupatior es, Regulation on cate a waste catalog and li rial safety data sheet,	nal exposure limi egories, types ar ist of hazardous	t values nd waste,
15.2.	Chemical	safety assessme	ent				
	None						

SECTIO	CTION 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:	-				
16.4.	Classification and procedure u 1272/2008 (CLP)	sed to derive the classification for mixture according to Regulation (EC)				
Classifi	cation	Classification procedure				
-		-				
16.5.	Relevant H statements (number	er and full text)				
	H: 302	Harmful if swallowed.				
16.6.	Training advice:	-				
16.7.	Further information:	** "X" in the product code marks different volumes (different packagings the product) We are not responsible for consequences in case of failure to comply wir instructions for use or improper use of the product described in this material safety data sheet.				

ANNEX: EXPOSURE SCENARIO RESULTING TO CHEMICAL SAFETY ASSESSMENT

-



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Trading name:	HISTANOL 100				
Product code:	H100-X**	Revision date:	05 Dec 2022	Version:	6

1.1	Product identifier				
	Trading name:	HISTANOL 100			
	Chemical name:	Ethyl alcohol			
Catalogue number: H100-X**					
1.2	2 Relevant identified uses of the substance or mixture and uses advised against			nixture and uses advised against	
	Uses:		For use	in histocytology and cytology sample processing.	
	Uses advised against:		Only the identified uses are advised. Unsuitable for human comsumption.		
	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	Details of the supplier of the safety data sheet			
	Supplier:		BioGnost Ltd.		
	Address:		Medjugorska 59, Zagreb		
	Telephone number:		+385 1 2409997		
	Telefax.:		+385 1 2404039		
	e-mail of competent person:		msds@biognost.hr		
	National contact:		-		
1.4	Emergency telephone number				
	National Protection and Rescue Dire		ectorate:	112	
	National Protection al				
	Medical information:			+385 1 2348 342	

SECTIO	SECTION 2. Hazards identification				
2.1	Classification of the substance or mixture				
2.1.1	Classification according to Reg	ulation (EC) No 12	272/2008 (CLP)		
	Hazard class and categ	ory code:		Hazard statements*:	
	Flam. Liq. 2		H225		
2.1.2.	Additional information				
	-				
*For ful	I text of Hazard- and EU Hazard-	statements: see S	ECTION 16		
2.2	Label elements				
	Product identification:	HISTANOL 100			
	Identification number:	-			
	Authorization number:	-			



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Trading name:	HISTANOL 100				
Product code:	H100-X**	Revision date:	05 Dec 2022	Version:	6

	Hazard pictograms:	GHS02	
	Signal word:	Danger	
	Hazard statements:	H225 Highly flammable liquid and vapor.	
	Precautionary statements:	 P210 Keep away from heat, hot sparks, open flames and other ignition sources. No smoking. P233 Keep container tightly closed. P280 Wear protective gloves/protective clothing/eye/protection/face protection. P403+P235 Store in a well-ventilated place. Keep cool. 	
	Supplemetal hazard information (EU):	-	
2.3	3 Other hazards		
	The product has no other know	n specific hazards for human or environment.	
	Results of PBT and vPvB assessment: Based on available data, the product does not contain any PBT or vPvB substances. Endocrine disrupting property: Based on available data, does not contain endocrine disruptors.		

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	min. 99 %	ethanol	Flam. Liq. 2; H225

SECTION 4. First aid measures			
4.1	Description of first aid measure	25	
	General notes:	If the suggested first aid measures do not prove sufficient, seek medical attention.	
	Following inhalation:	Take the victim into fresh air, loosen his clothes and place him in a comfortable position. If breathing difficulty occurs, administer artificial respiration. In case of complaints call a physician.	
	Following skin contact:	Remove the contaminated clothes. Wash the skin surface under plenty of running water. Seek medical assistance if the symptoms of irritation remain.	



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Trading name:	HISTANOL 100					
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	Following eye contact:	In case of contact with eyes flush with water holding eyelids apart and moving the eyeballs (for at least 10 minutes). If the symptoms remain, immediately call in ophthalmologist.				
	Following ingestion:	Place the victim in a comfortable position. Rinse the mouth with clean water. If the victim is conscious induce vomiting.Do not give the victim anything orally, and do not induce vomiting if the victim is unconscious or suffers from convulsions.				
	Self-protection of the first aider:	-				
4.2	Most important symptoms and effects, both acute and delayed					
	Following inhalation:	Inhalation of larger quantities may affect the central nervous system.				
	Following skin contact:	Prolonged or repeated dermal contact may cause the defatting and dryness of the skin.				
	Following eye contact:	May irritate the eyes.				
	Following ingestion:	Ingestion of larger quantities may affect the central nervous system.				
4.3	Indication of any immediate medical attention and special treatment needed If larger quantities have entered the body, obtain medical treatment (gastric lavage, activated carbon).					

SECTI	ON 5. Firefighting measures				
5.1	Extinguishing media				
	Suitable extinguishing media:	Extinguishing powder, alcohol-resistant foam, water, carbon-dioxide.			
	Unsuitable extinguishing media:	Water with full jet.			
5.2	Special hazards arising from the su	ibstance or mixture			
	Hazardous combustion products:	Highly flammable liquid and vapour. In case of fire, smoke, and other combustion products (carbon monoxide, carbon dioxide) may be formed, the inhalation of such combustion products can have serious adverse effects on health. Vapours may form an explosive mix with air. Vapours may be ignited by open flames, sparks, electrical equipment, or static charge. Vapours may travel to great distances, ignite in contact with ignition sources and flash back to the primer source (container). Vapours of ethyl alcohol mix greatly with air and may form an explosive mixture. Air containing 3.3 – 19 % ethyl alcohol vapours may explode in contact with ignition sources. Diluting the mixture with large amounts of water results in the loss of its flammability (around 10 % concentration of ethyl alcohol).			
5.3	Advice for firefighters				
	Wear full protective clothing and self-contained breathing apparatus. Cool the fire affected containers with water spray. Use water spray to dissipate alcohol vapours.				
5.4	Additional information				
	-				



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Trading name:	HISTANOL 100					
Product code:	H100-X**	Revision date:	05 Dec 2022	Version:	6	

6.1	Personal precautions, protecti	ve equipment and emergency procedures				
6.1.1.	For non-emergency personne	I				
	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.				
	Emergency procedures:	Mark the area using proper signs.				
6.1.2.	For emergency responders:					
	Avoid contact with skin, eyes and clothing and inhaling gases, vapours and aerosols. Ensure adequative ventilation. Vapours may accumulate at floor level in low and confined spaces. Remove all heat, ign and spark sources, turn off machines. Ignition spark arrestor must not be operated in the danger ar spark-proof tools. Be aware of the risk of slipping.					
6.2	Environmental precautions:					
	Dispose of the spillage and the resulting waste according to the applicable environmental regulations. Do not allow the product and the resulting waste to enter sewers/soil/surface or ground water. Notify the respective authorities in accordance with local law in the case of environmental pollution immediately.					
6.3	Methods and material for con	tainment and cleaning up				
6.3.1.	Bunding, covering of drains; capping procedures:	Sand protective barrier or barriers made of similar materials.				
6.3.2.	Cleaning up: Cleaning up: Clean					
6.3.3.	Other information:	Secure proper ventilation. Do not use incompatible materials (see Section 10).				
6.4	Reference to other sections	Reference to other sections				
	See Section 7 for information on safe handling.					
		See Section 8 for information on personal protection equipment.				

SECTION 7. Handling and storage						
7.1	Precautions for safe handling					
7.1.1.	Protection measures					



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Trading name:	HISTANOL 100					
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	Measures to prevent fire:		Use in well ventilated storage rooms. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use non-sparkling tools and equipment.				
	Measures to prevent aerosol and dust generation	ו:	Ensure adequate 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 ea						
7.2	Conditions for safe storage, including any incompatibilities						
	Technical measures and storage conditions:	Store in a well-ventilated place, protected from sunlight away from sources of heat and ignition, in its original unopened and hermetically sealed packaging, away from oxidizing agents, food, feed and articles of consumption.					
	Packaging materials:	Manufacturer's original packaging. Keep away from food and drink. Keep the containers tightly closed.					
	Requirements for storage rooms and vessels:						
	Advices for storage equipment:	be resistar	e must be made of hard material; floors must nt to chemicals. There must be no drain that eads into sewage system. Secure proper				
	Further information on storage conditions:	and do n	ace the unused material in the storage room ot use empty containers for storing other Do not store with incompatible materials (see).				
7.3	Specific end use(s)						
	Recommendations:	-					
	Industrial sector specific solutions:	-					

SECTION 8. Exposure controls/personal protection							
8.1 Control parameters							
Substance	CAS No		exposure limit t term values	Biological limit values			
		ppm	mg/m ³	-			
Ethanol	64-17-5	1000/-	1900/-	-			
Substance name: -							



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Trading nar	ne:					HIST	ANOL 100			
Product cod	de:	H100-X	**		Revisio	on date:	05 Dec 2022		Version:	6
					:		1			
EC No:		-	CAS No	:	-					
DNEL										
					In	dustrial		I		
Route of		Αсι			Acute		Chronic		Chronic	
exposure:		effect	local	effe	ct systemi	c	effect local	e	effect systemic	
Oral					-		-			
Inhalation		1900 mg (ethanol)		-		-		380 mg	/m ³ (ethanol)	
Dermal		-		-		-		343 mg	/kg (ethanol)	
Critical physi	cal para	meters: s	olubility,	flamm	ability, co	rrosivity:	-			
		_			Co	nsumer				
Route of		Ad	cute		Acute		Chronic		Chronic	
exposure:		effec	t local	effe	ct systemi	с	effect local	e	effect systemic	
Oral		-		-		-		87 mg/	kg bw/day (eth	anol)
Inhalation		950 m (ethan	0	-		-		114 mg	/m ³ (ethanol)	
Dermal		-		-		-		206 mg	/kg (ethanol)	
PNEC										
Environment	al prote	ction tar	get			PNEC				
Fresh water						0.96 mg/	l (ethanol)			
Freshwater s	ediment	S				3.6 mg/k	g (ethanol)			
Marine wate	r					0.79 mg/	l (ethanol)			
Marine sedin	nents					2.9 mg/k	g (ethanol)			
Food chain						380-720 mg/kg (ethanol)				
Microorganis	sms in se	ewage tr	eatment			580 mg/l (ethanol)				
Soil (agricult	ural)					0.63 mg/kg (ethanol)				
Air						no information available				
8.2	Exposur	sure controls								
8.2.1.	Approp	priate engineering controls								
		ostance/mixture related measures to vent exposure during identified uses:			In case of a hazardous material with no controlled concentration limit it is the employer's duty to keep concentration levels down to a minimum achievable by existing scientific and technological means, where the hazardous substance poses no harm to workers.				keep e by	
	Structur exposur	iral measures to prevent				In accordance with Section 7.				



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Trading na	ime:			HISTA	NOL 100		
Product code:		H100-X**	Rev	sion date: 05 Dec 2022		Version:	
Organ exposi		sational measures to re:	o prevent		on of work in order to re uring work process.	educe other worker'	S
			•	ce of work is proper for	0		

	Technical measures to prevent exp	oosure:	avoid spilling onto clothes and floors and to avoid contact with eyes and skin. Use according to general application methods and with adequate ventilation.		
			Use non-sparkling ventilation system.		
			Provide appropriate personal protective equipment, safety shower and eye-wash station.		
8.2.2.	Personal protection equipment				
8.2.2.1.	Eye and face protection:	•	propriate, chemical-proof protective glasses/face shield (EN 321-1:2022, EN 166).		
8.2.2.2.	Skin protection	A			
	Hand protection:	Use ap	propriate, chemical-resistant protective gloves (EN 374).		
	Other skin protection:	Use appropriate protective clothing.			
8.2.2.3.	Respiratory protection:	In case of normal usage and ventilation, it is not necessary. concentration of ethyl alcohol exceeds occupational exposure lim in the air, use a self-contained breathing apparatus. For she contact and if the oxygen content of the air is greater than 18 %, u a protective gas mask with filter A (EN 14837/A1).			
8.2.2.4.	Thermal hazards:	No the	rmal hazards known.		
8.2.3.	Environmental exposure controls				
	Substance/mixture related measures to prevent exposure:	See Se	ee Section 6		
	Structural measures to prevent exposure:	Use mo	lse modern equipment.		
	Organisational measures to prevent exposure:	Adapt workpl	pt the work process to the required working conditions of the kplace.		
	Technical measures to prevent exposure:	See Se			

SECTI	SECTION 9. Physical and chemical properties					
9.1	Information on basic physical and chemical properties					
		Method				
	Physical state:	liquid	No information available			
	Colour:	colourless	No information available			
	Odour/odour threshold:	ethanol like/no information available	No information available			
	Melting point / freezing point:	No information available	No information available			



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Trading name:		HISTAI	NOL 100		
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	Boiling point or initial boiling point and boiling range:	No information available	No information available				
	Flammability:	No information available	No information available				
	Lover and upper explosion limit:	lower: 3.3 Vol % upper: 19 Vol %	No information available				
	Flash point:	13 °C	No information available				
	Auto-ignition temperature:	363 °C	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:	in water completely miscible	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:	0.79 – 0.7921 (20°C)	No information available				
	Relative vapour density:	No information available	No information available				
	Particle characteristics:	No information available	No information available				
9.2	Other information	Other information					
	Explosive properties: the vapours from ethyl alcohol form an explosive mixture with air						

SECTI	SECTION 10. Stability and reactivity					
10.1	Reactivity:	See Section 10.5.				
10.2	Chemical stability:	Stable within normal temperature and general work conditions.				
10.3	Possibility of hazardous reactions:	See Section 10.5.				
10.4	Conditions to avoid:	Keep away from heat, sparks, open flames, strong heating and ignition sources. No smoking.				
10.5	Incompatible materials:	Strong oxidizing agents (inorganic strong acid, nitric acid, perchlorates, peroxy compounds, perchloric acid, permanganates etc.), alkali metals, alkali earth metals.				
10.6	Hazardous decomposition products:	Carbon monoxide and carbon dioxide.				

SECTIO	SECTION 11. Toxicological information								
11.1	11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008								
	Acute toxicity:								
Route of exposure:		Method	Species	Dose LD ₅₀ /LC ₅₀ or ATE _{mix}	Exposure time	Results			



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							Page 9 c	DT I/	
Trading name:				HIST	ANOL 100				
Product code:	H100-X**	H100-X**		Revision date:		05 Dec 2022		Version:	
Oral:	-	rat (ethan	ol)	LD ₅	0	-	7.0	60 mg/k	g
Dermal:	-	rabbit (etha	anol)	LD₅	0	-	>2().000 mg	j/l
Inhalation:	-	rat (ethan	iol)	LC ₅	0	4 h	>8	.000 mg	/I
o 10 -		••. • •							
Specific ta		oxicity – single	exposure	e (STOT SE)		Y			
		Specific effects			Target orga		No	ote	
Oral:		ation available			ormation avail		_		
Dermal:		ation available			ormation avail		-		
Inhalation:	No informa	ation available		No inf	ormation avail	able	-		
Aspiratio	a bazard:		No in	formation a	availablo				—
Aspiration	11182810.								
Irritation	and corrosion)							
	Exp	osure time	Sp	pecies	Evaluation	Method	N	ote	
Skin			_		-		_		
corrosion/irritatior	ו:		-		-	-	-		
Serious eye	-		-		-	-	-		
damage/irritation									
Sensitizat	ion								
Skin sensitization:	N	lo information a	available	•					
Respiratory sensiti	zation: N	lo information a	available	•					
. ,									
Symptom	s related to tl	he physical, che	emical ar	nd toxicolo	gical character	istics			
		ion of great	•					euphori	
Oral exposure:		ciousness and a g may occur. Re							d
			•		•	-			
Dermal exposure:	After pr cracking	rolonged or re 1 of skin.	peated	exposure	symptoms ma	y include: c	lefatting, d	ryness a	ino
Inhalation exposur	re: Inhalation membra	on of great quai anes.	ntities ma	ay cause di	zziness, eupho	ria and mild i	irritation of	the muco	วน
Eye exposure:	May cau	use irritation an	d rednes	SS.					
Repeated	dose toxicity	(subacute, sub		chronic)					
	Dose	Exposure time	e Sp	ecies	Method	Evaluati	on f	Note	



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Trading name:		HISTAI	ANOL 100			
Product code:	H100-X**	Revision date:	05 Dec 2022	Version:	6	

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

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



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Trading name:	HISTANOL 100						
Product code:	H100-X**	Revision date:	05 Dec 2022	Version:	6		

	CMR effects (carcinogenicity; mutagenicity; r	eproductive toxicity)
	Carcinogenicity: Ba	ased on available data, the classification criteria are not met.
	Mutagenicity <i>in vitro</i> : Ba	ased on available data, the classification criteria are not met.
	Genotoxicity: Ba	ased on available data, the classification criteria are not met.
	Mutagenicity <i>in vivo</i> : Ba	ased on available data, the classification criteria are not met.
	Germ cell mutagenicity: Ba	ased on available data, the classification criteria are not met.
	Reproductive toxicity: Ba	ased on available data, the classification criteria are not met.
	properties:	met.
11.2	Information on other hazards:	
11.2.1.	Endocrine disrupting properties:	
	Based on available data, does not contain endocrine disruptors.	
11.2.2.	Other informations:	
	-	

SECTION 12. Ecologie	SECTION 12. Ecological information							
12.1 Toxicity								
Acute (short-term) toxicity	Dose	Exposure time	Species	Method	Evaluation	Note		
Fish	LC ₅₀	96 hours	golden orf	No information available	8.140 mg/l /48 h (ethanol)	-		
Crustacea:	EC ₅₀	48 hours	daphnia magna	No information available	7.800 mg/l (ethanol)	-		
Algae/aquatic plants	IC ₅₀	4 days	algae	No information available	5.000 mg/l / 7d (ethanol)	-		
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	-		



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					-			Page 1	2 01 17	
Trading name	•			H	ISTANO	L 100				
Product code:	ŀ	1100-X**		Revision dat	te:	05 Dec 20)22	Vers	ion:	6
Crustacea:	Crustacea: EC ₅₀ 48 hours		48 hours	No informat available	into	information		No information - available		
Algae/aquatic plants IC_{50} 72 hou		72 hours	No informat available	into	ormation ilable	No infor available		-		
Other organism	IS	-	-	-	-		-		-	
12.2 Persist	~~~~~									
		nd degrada	Dility							
ADIOLIC	-	adation egradation h	alf-lives	Method		Evaluatio	n	Ν	Vote	
Marine water		nformation a		No information available		informatio ilable			NOLE	
Fresh water	No ii	nformation a	available	No information available		No information available		-		
Air	No information available		No information available		No information available		-			
Soil	oil No information available		available	No information available		No information available		-		
Biodeg	gradati	on								
% Degradatio	on	Time (days)	Method		Evaluatio	on	١	Vote	
No information available		No ir available	formation	No informatior available		informatio ilable		lo inform vailable	ation	
12.3 Bioacc	umula	tive potentia	al							
		er partition of		og Kow)						
Value		centration	рН	°C Met	hod	Evalu	uation		Note	
Log Pow: ~ 0.32	-			-		-			duct doe accumula	
Biocon	icentra	ition factor (BCF)							
Value		Speci		Method		Evaluat	ion		Note	



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Tradin	ig name:					H	HISTAN	NOL 10	D			0	
Produ	ct code:	H10	0-X**		Revis	sion da	ate:	05 D	ec 202	22		Version: 6	
BCF: 0.	66	No avail	inform able	ation	No info availabl		n	No info availab		on	-		
	Chronic	ecotoxic	-:+./										
	Value	ecoloxic	Dose		oosure ime	Spe	ecies	Meth	nod	Evalu	ation	Note	
Chroni	c toxicity o	on fish	LC ₅₀	No	mation	No inforr availa	mation Ible	No inform availab		No inform availab		-	
	c toxicity o cea (<i>Daphi</i>		EC ₅₀	No infor availa	mation able	No inforr availa	mation Ible	No inform availab		No inform availab		-	
12.4	Mobility	/ in soil											
	Known	or predic	ted distributi	on in e	environm	ental c	ompart	ments:					
	No info	rmation	available										
	Surface	tension:											
	Valu	ie	°C	C	oncentra	tion		Metho	bd			Note	
	No informa availabl	tion i	Vo nformation wailable	-	informat ailable	tion	No inf availat	ormation	n	-			
	Adsorpt	tion / des	sorption			1			1				
Transp	ort	-	coefficient 's constant	lo	og Kow	E١	vaporati	on rate	٩	Method		Note	
Soil-wa	ater	No availabl	information e	No ir availa	nformatic able		o inform ailable	nation	No in availa	formati Ible	on	-	
Water-	air	No availabl	information e	No ir availa	nformatic able		o inform ailable	nation	No in availa	formati Ible	on	-	
Soil-air	-	No availabl	information e	No ir availa	nformatic able		o inform ailable	nation	No in availa	formati Ible	on	-	
12.5			nd vPvB asses ble data, the p			ot cont	ain anv	PBT or v	PyR cul	hstance	<u> </u>		



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Trading name:		HISTAN	DL 100		
Product code:	H100-X**	Revision date:	05 Dec 2022	Version:	6

12.6.	Endocrine disrupting properties				
	Based on available data, does no	t contain endocrine disruptors.			
12.7.	Other adverse effects				
	Do not let the product or its resid	dues reach sewer system, waterways and soil.			
SECTION	N 13. Disposal considerations				
13.1	Waste treatment methods				
13.1.1.	Product/Packaging disposal:				
		Il person authorized by the Ministry of Environmental and Nature			
	Protection.				
1212	Marte ender (
13.1.2.	Waste codes/waste designatio	5			
	Packaging that contains residual hazardous substances or is contaminated with hazardous substances				
40.40					
13.1.3.					
	No information available				
13.1.4.	Sewage disposal – relevant info				
	Waste must not be disposed o	f into the sewage system.			
	·				
13.1.5.	Other disposal recommendation	ons: t's remains into the sewage system. Submit the remains to the collectors			
	authorized by the ministry in c	charge. Do not dispose of the packaging into the sewage system. Submit is authorized by the ministry in charge. Unused product residues may be			
13.1.6.	Relevant Community provision	is:			
	Disposal must be made accord	ling to official regulations.			
SECTION	N 14 TRANSPORT INFORMATIC)N			
	Transporting/shipment by road ((ADR)			
UN num	ber:	1170			
UN prop	er shipping name:	Ethanol solution			
Transpoi	rt hazard class(es):	3			
Packing	group:	Н			



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Trading name:	HISTANOL 100					
Product code:	H100-X**		Revision date:	05 Dec 2022	Version:	6
Environmentally ha	zardous:	-				
Special precautions	s for user:	-				
Transporti	ng/shipment by rail (RI	ID)				
UN number:		117	0			
UN proper shipping	g name:	Etha	anol solution			
Transport hazard cl	lass(es):	3				
Packing group:		II				
Environmentally ha	zardous:	-				
Special precautions	s for user:	-				
Inland wat	terway transport (ADN)	1				
UN number:		117	0			
UN proper shipping	g name:	Etha	anol solution			
Transport hazard cl	lass(es):	3				
Packing group:		П				
Environmentally ha	zardous:	-				
Special precautions	s for user:	-				
Transporti	ng/shipment by sea (IN	MDG)				
UN number:		117	0			
UN proper shipping	g name:	Etha	anol solution			
Transport hazard cl	lass(es):	3				
Packing group:		II				
Environmentally ha	zardous:	-				
Special precautions	s for user:	-				
Transport in bulk a of MARPOL 73/78 a	according to Annex II and the IBC code:	-				
Transporti	ng/shipment by air (IC	AO-T	I/IATA-DGR)			
UN number:		117	0			
UN proper shipping	g name:	Etha	anol solution			
Transport hazard cl	lass(es):	3				
Packing group:		II				
Environmentally ha	zardous:	-				
Special precautions	s for user:	-				
Further informatior	n: -					

SECTION 15. Regulatory information



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Trading name:	HISTANOL 100						
Product code:	H100-X**	Revision date:	05 Dec 2022	Version:	6		

	EU regulations	
	Authorization and/or rest	rictions of use
	Authorizations:	-
	Restrictions:	-
	Other EU regulations:	 Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC; Directive 2004/42/CE of the European Parliament and of the Council of 21 April 2004 on the limitation of emissions of volatile organic compounds due to the use of organic solvents in certain paints and varnishes and vehicle refinishing products and amending Directive 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; COMMISSION REGULATION (EU) 2020/878 of 18 June 2020 amending Annex II to Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH). REACH Restrictions on the manufacturing, placing on the market and use of certain dangerous substances, mixtures and articles (Annex XVII);
	Information according 19 guideline)	99/13/EC about limitation of emissions of volatile organic compounds (VOC-
	National legislation:	Chemicals Act, Regulation on classification, packaging and labeling of dangerous substances, Ordinance on occupational exposure limit values and on biological limit values, Regulation on categories, types and classification of waste with a waste catalog and list of hazardous waste, Ordinance on writing Material safety data sheet, Transport of Hazardous Substances Act
15.2	Chemical safety assessme	ent
	None	

SECTION 16. Other information				
16.1 Indication of ch	nges: -			



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		-				Page 17 of 17				
Tradin	g name:			HISTA	NOL 100					
Produc	ct code:	H100-X**		Revision date:	05 Dec 2022	Version:	6			
16.2	Abbrevia	ations and acronyms:	route Good IMD0 IATA GHS3 EINE CAS3 DNE LC50 LD50	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 GoodsIATA: International Maritime Code for Dangerous GoodsIATA: International Air Transport AssociationGHS: Globally Harmonised System of Classification and Labelling of ChemicalsEINECS: European Inventory of Existing Commercial Chemical SubstancesCAS: Chemical Abstracts Service (division of the American Chemical Society)DNEL: Derived No-Effect Level (UK REACH)LC50: Lethal concentration, 50 percentLD50: Lethal dose, 50 percentPBT: Persistent, Bioaccumulative and Toxic						
16.3.	Key litera source o	ature references and f data:		Manufacturer's MSDS file.						
16.4.	Classifica 1272/20	-	used to derive the classification for mixture according to Regulation (EC)							
Classific	cation		Classification procedure							
_			-							
16.5.	Relevant	H statements (num	per 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 packagings of the product) We are not responsible for consequences in case of failure to comply with instructions for use or improper use of the product described in this material safety data sheet. 						

ANNEX: Exposure scenario resulting to chemical safety assessment

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Trading name:	SODIUM HYDROXIDE, SOLUTION					
Product code:	NH-OT-X**	Date of compilation:	21 Dec 2022	Version:	3	

SECTI	ON 1. Identification of t	he subst	ance/mixture a	and of the company/undertaking		
1.1.	Product identifier					
	Trading name:	SODIUN	M HYDROXIDE,	HYDROXIDE, SOLUTION		
	Chemical name:	-				
	Catalogue number:	NH-OT	-X**			
1.2.	Relevant identified uses of the substance or mixture and uses advised against			xture and uses advised against		
	Uses:		For use with	Congo Red Puchtler kit.		
	Uses advised against:		Only the ide	ntified uses are advised.		
	Reason why uses advis against:	sed	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 saf	Ifety data sheet BioGnost Ltd. Medjugorska 59, Zagreb			
	Supplier:					
	Address:					
	Telephone number:		+385 1 24099	997		
	Fax no.:		+385 1 24040	039		
	e-mail of competent p	erson:	<u>msds@biogn</u>	<u>ost.hr</u>		
	National contact:		-			
1.4.	Emergency telephone	number				
	National Protection an	d Rescue	Directorate:	112		
	Medical information:			+385 1 2348 342		
	Other information:			-		

SECTIO	ON 2. Hazards identification	N 2. Hazards identification							
2.1.	Classification of the substanc	e or mixture							
2.1.1.	Classification according to Re	gulation (EC) No 1	272/2008 (CLP)						
	Hazard class and cate	gory code:	Hazard statements*:						
	Not identified as hazardous s	ubstance.	-						
2.1.2.	Additional information	Additional information							
	-	-							
*For fu	ll text of Hazard- and EU Hazar	d-statements: see S	Section 16						
2.2.	Label elements								
	Product identification:	SODIUM HY	DROXIDE, SOLUTION						
	Identification number:	Identification number: -							
	Authorization no.:	Authorization no.: -							
	Hazard pictograms:	-							



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Trading name:	SODIUM HYDROXIDE, SOLUTION			
Product code:	NH-OT-X**	Date of compilation:	21 Dec 2022	Version: 3

	Signal word:	-
	Hazard statements:	-
	Precautionary statements:	-
	Further information:	-
2.3.	Other hazards	
	Endocrine Disrupting Propert	ies:
	No known endocrine disrupting	properties
	Results of PBT and vPvB asses	ssment: 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)	
1310-73-2/ 215-185-5/ 011-002-00-6	-	0.7 - 1%	sodium hydroxide	Skin Corr. 1A; H314	

SECTI	ON 4. First aid measures			
4.1.	Description of first aid measured	Jres		
	General notes:	-		
Following inhalation: Following skin contact:		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.		
		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 ai	der: Treat symptomatically.		
4.2.	Most important symptoms and 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.		



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

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Tradin	ig name:			SODIUM HYDROXID	E, SOLUTION	
Product code:		NH-OT-X**		Date of compilation:	21 Dec 2022	Version: 3
Following eye contact:		eye contact:		ng to our findings, chemi stance have not been ent		xicological properties of
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				

SECTIO	ECTION 5. Firefighting measures			
5.1.	Extinguishing media			
	Suitable extinguishing media:	Small fire - water spray, dry powder, CO ₂ Large fire - water spray or alcohol-resistant foam		
	Unsuitable extinguishing media:	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 of Cool closed containers exposed to	compressed air breathing apparatus and fireproof clothing. fire with water spray or vapor.		
5.4.	Additional information			
	Remove sources of heat and igniti Do not contaminate the environm			

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



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Trading name:	SODIUM HYDROXIDE, SOLUTION			
Product code:	NH-OT-X**	Date of compilation:	21 Dec 2022	Version: 3

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

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 inco	mpatibilities				
	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:	-				



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Trading name:	SODIUM HYDROXIDE, SOLUTION				
Product code:	NH-OT-X**	Date of compilation:	21 Dec 2022	Version: 3	

8.1. Control para	ameters						
Substance				•	al exposure limit ort term values	Biological limit values	
				ppm	mg/m ³		
-		-		-	-	No information available	
Substance							
EC No: -		CAS No:	-				
DNEL							
				Industrial			
Route of exposure:		Acute ect local	effe	Acute ect systemic	Chronic effect local	Chronic effect systemic	
Oral	-		-		-	-	
Inhalation	-		-		-	-	
Dermal	-		-		-	-	
Critical physical para	meters: s	solubility, fla	mmabilit	ty, corrosivity:	-		
				Consumer			
Route of exposure:		Acute ect local	effe	Acute ect systemic	Chronic effect local	Chronic effect systemic	
Oral	-		-		-	-	
Inhalation	-		-		-	-	
Dermal	-		-		-	-	
PNEC							
Environmental prote	ction tar	get		PNEC	PNEC		
Fresh water				No info	No information available		
Freshwater sediment	s			No info	No information available		
Marine water				No info	No information available		
Marine sediments			No info	No information available			
Food chain			No info	No information available			
Microorganisms in se	ewage tr	eatment		No info	ormation available		
Soil (agricultural)				No info	No information available		
Air				No info	No information available		



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Trading name:	SODIUM HYDROXIDE, SOLUTION							
Product code:	NH-OT-X**	Date of compilation:	21 Dec 2022	Version:	3			

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

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



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Trading name:	SODIUM HYDROXIDE, SOLUTION						
Product code:	NH-OT-X**	Date of compilation:	21 Dec 2022	Version: 3			

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

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

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



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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:	available		LD ₅₀	-	-	
Inhalation exposure:	No information available	-	LC ₅₀	-	-	
Specific tar	get organ toxicity – s	ingle exposure	e (STOT SE):			
	Specific	effects	Target organ		Note	
Oral exposure:	No information	available	No information available	-		
Dermal exposure:	No information	available	No information available	-		
Inhalation exposure	: No information	available	No information available	-		
Irritation a	nd corrosion			Meth		
	Exposure time	Species	Evaluation	Meth od	Note	
Skin irritation:	-	-	-			
Eye irritation:	-	-	-			
Sensitizatio	on					
Dermal exposure:	No information avai	lable				
Inhalation exposure:	No information avai	lable				
Contractor				:		
Oral exposure:	No information a		d toxicological characterist	ICS		
Dermal exposure:	No information a					
Inhalation exposure						
Eye exposure:	No information a					



Subchronic inhalation

Chronic oral

Chronic dermal

No information available

No information available

No information available

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	-	Dose	Exposure time	Spee	cies	Method	Evaluation	Note
Subacute oral	No info availab	ormation lle	No information available	-	rmation able	No information available	No informatior available	n -
	No info availab	ormation lle	No information available	formation information		No information available	No informatior available	n -
	No info availab	ormation lle	No information available	No		No information available	No informatior available	n -
Subchronic oral	No info availab	ormation lle	NoNoNoinformationinformationinformationavailableavailableavailable		No informatior available	n -		
	No info availab	ormation lle	No information available			No information available	No informatior available	n -
	No information available		No information available	No information available		No information available	No informatior available	n -
Chronic oral	No information available		No information available	No information available		No information available	No informatior available	n -
Chronic dermal	No information inf		No information available		rmation able	No information available	No informatior available	n -
	No info availab	ormation lle			rmation lable	No information available	No informatior available	n -
Spacific t	araata	raan tovicit	y – repeated e	VDOCU		DE).		
Specific to	arget 0	-	cific effects	rposu		Target organ		Note
Subacute oral		•	ation available		No infor	mation available		-
Subacute dermal		No informa	ation available		No infor	mation available	9	-
Subacute inhalatio	on	No informa	ation available		No infor	mation available	2	-
Subchronic oral		No informa	ation available		No infor	mation available	9	-
					mation available			

No information available

No information available

No information available

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Chronic	inhalation	No informat	ion available	No information available	-
	CMR effects	(carcinogenicity	, mutagenicity, r	eproductive toxicity)	
	Carcinogenic	ity:	Based on av	vailable data, the classification criteri	a are not met.
	Mutagenicity	in-vitro:	Based on av	vailable data, the classification criteri	a are not met.
	Genotoxicity:		Based on av	vailable data, the classification criteri	a are not met.
	Mutagenicity	in-vivo:	Based on av	vailable data, the classification criteri	a are not met.
	Germ cell mu	itagenicity:	Based on av	vailable data, the classification criteri	a are not met.
	Reproductive	toxicity:	Based on av	vailable data, the classification criteri	a are not met.
11.2	Information of	on other hazard	s:		
11.2.1.		srupting proper			
	contain con have endocr according to Commission 2017/2100 c	ince/mixture nponents cons ine disrupting REACH Artic Delegated regu or Commission 05 at levels c	properties le 57(f) or ulation (EU) Regulation		
11.2.2.	Other inform	ations:			
	-				

SECTION 12. Ecological information									
12.1. Toxicity									
Acute toxicity	Dose	Exposure time	Species	Method	Evaluation	Note			
Fish	LC ₅₀	96 hours	No information available	No information available	-	-			
Crustacea:	EC ₅₀	48 hours	No information available	No information available	-	-			
Algae/aquatic plants	IC ₅₀	8 days	No information available	No information available	-	-			
Microorganisms	LC ₅₀	72 hours	-	-	-	-			



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

12.2. Persistence and degradability

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

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

12.3.	Bioaccumulative potent	tial				
	Partition coefficient: n-o	octanol/wa	ater (log	Kow):		
Valu	e Concentration	рН	°C	Method	Evaluation	Note
-	No information available	-	-	No information available	No information available	-



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V	/alue	Species		Species Method		Evaluation	Note		è
No information available		No avail	informati able	on No inform available	nation	tion No information available		No information availab	
	Chronic	ecotoxi	city						
	Value		Dose	Exposure time	Species	Method	Eva	luation	Note
Chronie	c toxicity c	on fish	LC ₅₀	No information available	No informatio available	No n information available	No information available		-
	c toxicity o ea (<i>Daphn</i>		EC ₅₀	No information available	No informatio available	No information available	No info availab	ormation ble	-
				on in environm	iental comp	artments:			
		rmation tension:	available	on in environm		artments: Method			Note
	No infor Surface t Value No	rmation tension: e	available °C No		tion	Method			Note
	No infor Surface t Value	rmation tension: e tion i	available °C	Concentra	tion		able	-	Note
	No infor Surface t Value No informat	rmation tension: e tion i	available °C No nformation	Concentra No informa	tion	Method	able		Note
	No infor Surface t Value No informat	rmation tension: e fion i e a	available °C No nformation available	Concentra No informa	tion	Method	able		Note
Transpo	No infor Surface t Value No informat available Adsorpti	rmation tension: e i tion i e a ion / de A/D co	available °C No nformation available	Concentra No informa	tion No	Method			
Transpo Soil-wa	No infor Surface t Value No informat available Adsorpti ort	ion / de A/D co Henry's	available °C No nformation available sorption efficient	Concentra No informa available	tion No	Method information avail poration rate rmation		- Method ormation	Note Note
	No infor Surface t Value No informat available Adsorption ort No ava ava	ion / de A/D co Henry's	available °C No nformation available sorption efficient constant	Concentra No informa available log Kow	tion No tion No Eva on No infc availab	Method information avail poration rate rmation e rmation	No infe availab	- Method ormation ble ormation	



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12.5.		PBT and vPvB assess			
	according	to REACH Article 57(ot contain components considere f) or Commission Delegated reg vels of 0.1% or higher.		
12.6.	Endocrine	disrupting properties	S		
	according	to REACH Article 57(ot contain components considere f) or Commission Delegated reg vels of 0.1% or higher.		
12.7.	Other adv	erse effects			
	No inform	ation available			
	N 13. Disp	osal considerations			
13.1.	Waste tr	eatment methods			
13.1.1.	Product,	/Packaging disposal:			
	Submit Protection		gal person authorized by the Mir	nistry of Environme	ntal and Nature
13.1.2.	Waste c	odes/waste designati	ons according to Law:		
	No infor	mation available			
13.1.3.	Waste tr	reatment – relevant ir	nformation:		
	No infor	mation available			
13.1.4.	Sewage	disposal – relevant in	formation:		
			of into the sewage system.		
	4				
13.1.5.	Other di	sposal recommendat	ions:		
	authoriz the pack	ed by the ministry in	ct's remains into the sewage syst charge. Do not dispose of the p rs authorized by the ministry in	ackaging into the s	ewage system. Submit
13.1.6.	Relevan	t Community provisio	ons:		
	4				



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



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		-		-		
Special precautions	s for user:	-				

Further information:

	ON 15. Regulatory inform				
15.1.	Safety, health and environmental regulations/legislation specific for the substance or mixture				
	EU regulations				
	Authorization and/or rest	trictions of use			
	Authorizations: -				
	Restrictions:	-			
	Other EU regulations:	 Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC; Directive 2004/42/CE of the European Parliament and of the Council of 21 April 2004 on the limitation of emissions of volatile organic compounds due to the use of organic solvents in certain paints and varnishes and vehicle refinishing products and amending Directive 98/24/EC of 7 April 1998 on the protection of the health and safety of workers from the risks related to chemical agents at work; Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006; REACH Restrictions on the manufacturing, placing on the market and use of certain dangerous substances, mixtures and articles (Annex XVII); 			
	Information according 1999/13/EC about limitation of emissions of volatile organic compounds (VOC- guideline)				
	National legislation:	Chemicals Act, Regulation on classification, packaging and labeling of dangerous substances, Ordinance on occupational exposure limit values and on biological limit values, Regulation on categories, types and classification of waste with a waste catalog and list of hazardous waste, Ordinance on writing Material safety data sheet, Transport of Hazardous Substances Act			
15.2.	Chemical safety assessment				
	None				

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



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Trading name: Product code:		SODIUM HYDROXIDE, SOLUTION						
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16.2.	Abbreviations and acronyms:		ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road) IMDG: International Maritime Code for Dangerous Goods IATA: International Air Transport Association GHS: Globally Harmonised System of Classification and Labelling of Chemicals EINECS: European Inventory of Existing Commercial Chemical Substances CAS: Chemical Abstracts Service (division of the American Chemical Society) DNEL: Derived No-Effect Level (UK REACH) LC50: Lethal concentration, 50 percent LD50: Lethal dose, 50 percent PBT: Persistent, Bioaccumulative and Toxic vPvB: very Persistent and very Bioaccumulative					
16.3.	Key literat source of	ture references and data:	-					
16.4.	Classificat 1272/200	tion and procedure used to derive the classification for mixture according to Regulation (EC) 8 (CLP)						
Classification		(Classification procedure					
-	-							
16.5.	Relevant I	evant H statements (number and full text)						
	H: 314	(auses severe skin burns and eye damage.					
16.6.	Training a	idvice:						
16.7.	Further in	formation:	** "X" in the product code marks different volumes (different packagings of the product) We are not responsible for consequences in case of failure to comply with instructions for use or improper use of the product described in this material safety data sheet.					

ANNEX:

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Exposure scenario resulting to Chemical safety assessment