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Trading name:	BOUIN'S SOLUTION				
Product code:	BOU-OT-X**	Revision date:	24.05.2019.	Version:	6

SECTI	ON 1 IDENTIFICATION O	F THE SUBS	TANCE/M	IIXTURE AND OF THE COMPANY/UNDERTAKING		
1.1.	Product identifier					
	Trading name: BOUIN'S SOLU					
	Chemical name:	-				
	Catalogue number:	BOU-OT-X*	BOU-OT-X**			
1.2.	Relevant identified uses	of the subst	tance or m	ixture and uses advised against		
	Uses:		Fixativ	ve for use in histopathology.		
	Uses advised against:		Only t	the identified uses are advised.		
	Reason why uses advised against:		medic and M	The product is intended for use only as an <i>in vitro</i> diagnostic medical device, registered at the Agency for Medicinal Products and Medical Devices and there is no reason to use it for other purposes.		
1.3.	Details of the supplier of the safety data sheet					
	Supplier:	Bio	oGnost Lto	Gnost Ltd.		
	Address:	M	Medjugorska 59, Zagreb			
	Telephone number:	+3	+385 1 2409997			
	Fax no.: +3		385 1 2404039			
	e-mail of competent pe	rson: <u>m</u>	msds@biognost.hr			
	National contact:	-				
1.4.	Emergency telephone number					
	National Protection and Rescue Director		ectorate:	112		
	Medical information:			+385 1 2348 342		
	Other information:			-		

SECTIO	SECTION 2 HAZARDS INFORMATION					
2.1.	Classification of the substance or mixture					
2.1.1.	Classification according to (EC) Regulation No). 1272/2008 (CLP)				
	Hazard class and category code:	Hazard class and category code: Hazard statements*:				
	Acute Tox. 4 H302					
	Acute Tox. 4 H312					
	Skin Irrit. 2 H315					
	Skin. Sens. 1	H317				
	Eye Irrit. 2	H319				
	Acute Tox. 4	H332				
	Carc. 2	H351				
2.1.2.	Additional information					
	-	-				
*For fu	ll text of Hazard- and EU Hazard-statements: see	e Section 16				



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2.2.	Label 1272/2008 (CLP)				
	Product identification:	BOUIN'S SOLUTION			
	Identification number:	-			
	Authorization no.:	-			
	Hazard pictograms:	GHS07 GHS08			
	Signal word:	Danger			
	Hazard statements:	 H302 Harmful if swallowed. H312 Harmful in contact with skin H315 Causes skin irritation H317 May cause an allergic skin reaction. H319 Causes serious eye irritation H332 Harmful if inhaled. H351 Suspected of causing cancer 			
	Precautionary statements:	 P280 Wear protective gloves/protective clothing/eye/protection/face protection. P301+P330+P331 IF SWALLOWED: rinse mouth. DO NOT induce vomiting. P302+P352 IF ON SKIN: Wash with plenty of water and soap. P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing. P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P308 + P313 IF exposed or concerned: Get medical advice/attention. 			
	Further information:	-			
2.3.	Other hazards				

SECTION 3 COMPOSITION/INFORMATION ON INGREDIENTS						
CAS/ EC/ Index no.	REACH Registration No	Mass %	Identification name	Classification according to Regulation (EC) No 1272/2008 (CLP)		



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50-00-0/ 200-001-8/ 605-001-00-5		-2119488953- -XXXX	< 10%		formaldehyc	le, 37%	Acu Skin Derr Acu Mut	te Tox. 3; H301 te Tox. 3; H311 Corr. 1B; H314 m. Sens. 1; H317 te Tox. 3; H331 agenicity 2; H34 :. 1B; H350	1
64-19-7/ 200-580-7/ 607-002-00-6	-		< 5 %		acetic acid, o	glacial		n. Liq. 3; H226 Corr. 1A; H314	
88-89-1/ 201-865-9/ 609-009-00-X	-		< 2 %		picric acid		Acu	te Tox. 3; H301 te Tox. 3; H311 te Tox. 3; H331	

SECTI	ON 4 FIRST AID MEASURES				
4.1.	Description of first aid measures				
	General notes:	If the suggested first aid measures do not prove sufficient, seek medical attention.			
	Following inhalation:	Remove person to fresh air. If breathing stops, immediately apply artificial respiration. If breathing difficulties occur, use emergency breathing apparatus. If the symptoms persist, immediately consult a physician.			
	Following skin contact:	Take off immediately all contaminated clothing. Immediately wash with plenty of water and soap for at least 20 minutes. Seek medical assistance if the symptoms of irritation remain.			
	Following eye contact:	Rinse out with plenty of water with the eyelid held wide open for at least 20 minutes. If the symptoms remain, immediately call in ophthalmologist.			
	Following ingestion:	Rinse the oral cavity; drink at most 1-2 glasses of water. Do not induce vomiting. Immediately consult a physician and show the container or label. In case of swallowing large quantities, transport the afflicted person to the hospital.			
	Self-protection of the first aider:	-			
4.2.	Most important symptoms and effects, both acute and delayed				
	Following inhalation:	Irritation of the mucous membrane of the nose/throat may occur (burning sensation, urge to sneeze, runny nose). High concentration may cause difficult breathing, coughing fits, chest tightness, headache, vertigo and drowsiness.			
	Following skin contact:	Irritation, redness with stinging and pain, skin cracking, rash, swelling, burns, blisters and delayed onset of inflammatory processes may occur.			



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	Following eye contact:	Depending on concentration and exposure time, mucosa stinging, lacrimation, redness and pain may occur, as well as bleeding, delayed onset of inflammatory processes and permanent eyesight damage.			
	Following ingestion:	Depending on concentration and exposure time, it may lead to stinging and digestive mucus damage, abdominal pain, nausea, vomiting (possibly of bloody content).			
4.3.	Indication of any immediate m	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:	No information available				
5.2.	Special hazards arising from the sub	ostance or mixture				
	Hazardous combustion products:	Possible liberation of toxic carbon monoxide and formaldehyde gases due to thermal decomposition (increased temperature). Explosive mixtures of formaldehyde vapors and air also present danger.				
5.3.	Advice for firefighters					
	Use a self-contained open-circuit compressed air breathing apparatus and fireproof clothing. Cool closed containers exposed to fire with water spray, in order to prevent explosion.					
5.4.	Additional information					
	Remove sources of heat and ignitio	n. Do not contaminate the environment with extinguishing media.				

SECTIO	TION 6 ACCIDENTAL RELEASE MEASURES					
6.1.	Personal precautions, protective equipment and emergency procedures					
6.1.1.	For non-emergency personnel					
	Protective equipment:	Use personal protective equipment (see Section 8).				
	Accident prevention methods:	Evacuate members of all non-essential personnel and those members without protective equipment. Avoid breathing vapors and avoid contact with skin and eyes. Remove all sources of sparks and ignition. Do not smoke.				
	Emergency procedures:	Mark the area using proper signs.				
6.1.2.	For emergency responders:					
	Use protective equipment; in case (see Section 8).	of inadequate ventilation use adequate airways protective equipment				
6.2.	Environmental precautions:					
	age system and waterways. In case of large spillage contact National (NPRD) on 112.					



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6.3.	Methods and material	Methods and material for containment and cleaning up				
6.3.1.	For creating barriers, covering and sealing: Sand or clay barriers.					
6.3.2.	Cleaning up:	Where possible, the substance can be absorbed by using inflammable material (sand, diatomaceous earth, vermiculite). Place the waste material in tightly closed impermeable containers. Store the substance in well ventilated storage rooms until disposal. Submit for disposal to the legal persons authorized by the Ministry of Environmental and Nature Protection. After disposal of the products, wash the area and involved materials with water.				
6.3.3.	Other information:	Do not use tools that may cause sparks.				
6.4.	Reference to other sec	tions				
	See Section 7 for information about secure handling. See Section 8 for information about personal protective equipment. See Section 13 for information about containment.					

SECTIO	DN 7 HANDLING AN STORAGE			
7.1.	Precautions for safe handling			
7.1.1.	Protection measures			
	Measures to prevent fire:	Use in well ventilated storage rooms. Keep away from sources of heat and ignition. Carry out measures for preventing static electricity.		
	Measures to prevent aerosol and dust generation	n: Secure proper ventilation.		
	Measures to protect the environment:	Prevent spilling into the sewage system and waterways.		
	Other measures:	-		
7.1.2.	Advice on general occupational hygiene:			
	Do not eat, drink or smoke in the workspace. The	proughly wash hands after work and before eating.		
7.2.	Conditions for safe storage, including any incom	patibilities		
	Technical measures and storage conditions:	Keep in tightly closed and upright set containers in a well ventilated storage rooms at temperatures ranging from 15 to 25 °C.		
	Packaging materials:	Manufacturer's original packaging.		
	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.		



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	Further information on storage conditions:	Do not place the unused material in the storage room and do not use empty containers for storing other chemicals. Do not store with incompatible materials (see Section 10).
7.3.	Specific end use(s)	
	Recommendations:	-
	Industrial sector specific solutions:	-

SECTIO	ON 8 EXPOSU	IRE CON	TROLS/PERSOI	NAL PROTECTION		
8.1.	Control par	ameters				
	Substance CAS No		Occupational e values/short		Biological limit values	
				ppm	mg/m ³	
Formal	ldehyde		50-00-0	2	2.5	-
Acetic	acid, glacial		64-19-7	10	25	-
Substa name:	ince _					
EC No:	-		CAS No:	-		
DNEL						
				Industrial		
Route	of		Acute	Acute	Chronic	c Chronic
expos	ure:	e	ffect local	effect systemic	effect loc	cal effect systemic
Oral		-		-	-	-
Inhalat	ion	1 mg/r (forma	m ³ aldehyde)	-	0.5 mg/m ³ (formaldehyd	9 mg/m ³ de) (formaldehyde)
Derma	I	-		-	0.037 mg/cm (formaldehyd	
Critical	l physical para	meters: s	olubility, flamm	ability, corrosivity:	-	
				Consumer		
Route	of		Acute	Acute	Chron	ic Chronic
expos	ure:	e	ffect local	effect systemic	effect lo	ocal effect systemic
Oral -		-		-	-	4.1 mg/kg (formaldehyde)
Inhalation -			-	0.1 mg/m ³ (formaldehyd	3.2 mg/m ³ (formaldehyde)	



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Dermal	-	-		0.012 mg/cm ² (formaldehyde)	120 mg/kg (formaldehyde)		
PNEC	1	1		l	1		
Environmental prote	ction target		PNEC				
Fresh water			0.47 mg/l ((formaldehyde)			
Freshwater sediment	S		2.44 mg/kg (formaldehyde)				
Marine water			0.47 mg/l (formaldehyde)				
Marine sediments			2.44 mg/kg (formaldehyde)				
Food chain	Food chain			No information available			
Microorganisms in se	Microorganisms in sewage treatment		0.19 mg/l (formaldehyde)				
Soil (agricultural)			0.21 mg/kg (formaldehyde)				
Air			No inform	ation available			
			•				

8.2.	Exposure controls				
8.2.1.	Appropriate engineering control	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:	No information available			
	Organisational measures to prevent exposure:	Organization of work in order to reduce other worker's influence during work process.			
	Technical measures to prevent exposure:	Secure proper workspace ventilation in order to keep concentration levels in air below permitted levels.			
8.2.2.	Personal protection equipment				
8.2.2.1.	Eye and face protection:	Safety glasses that stick to face (EN 166) or visor in case of lower levels of concentration in air; protective gas mask that covers the entire face in case of higher levels of concentration in air.			
8.2.2.2.	Skin protection				
		Protective gloves must be according to the EU Directive 89/686/EEC and standard EN 374. Full contact: Glove material: nitrile rubber			
	Hand protection:	Glove thickness: 0.40 mm Time until perforation: > 480 min			
		Splash contact:			
		Gloves material: polychloroprene			
		Glove thickness: 0.65 mm			
		Time until perforation: >240 min			

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	Other skin protection:	Wear protective suit with long sleeves (EN 340) that protects from chemicals and shoes that cover the entire foot.
8.2.2.3.	Respiratory protection:	Full face mask (EN 136) or half mask (EN 140) equipped with a recommended "ABEK" filter (EN 14387) used when concentration levels exceed GVI.
8.2.2.4.	Thermal hazards:	No information available
8.2.3.	Environmental exposure controls	
	Substance/mixture related measures to prevent exposure:	See Section 6
	Structural measures to prevent exposure:	Use modern equipment.
	Organisational measures to prevent exposure:	Adapt the work process to the required working conditions of the workplace.
	Technical measures to prevent exposure:	See Section 6

SECTI	SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES					
9.1.	Information on basic physical and chen	nical properties				
		Value	Method			
	Physical state:	liquid	No information available			
	Color:	yellow	No information available			
	Odor:	pungent	No information available			
	Odor threshold:	No information available	No information available			
	pH:	No information available	No information available			
	Melting point / freezing point;	No information available	No information available			
	Initial boiling point and boiling range:	No information available	No information available			
	Flash point:	No information available	No information available			
	Evaporation rate:	No information available	No information available			
	Flammability (solid, gas):	No information available	No information available			
	Upper/lower flammability or explosive limits:	No information available	No information available			
	Vapor pressure:	No information available	No information available			
	Vapor density:	No information available	No information available			
	Relative density:	No information available	No information available			
	Bulk density:	No information available	No information available			
	Solubility(ies):	No information available	No information available			
	Partition coefficient: n-octanol/water (log Kow):	No information available	No information available			



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	Auto-ignition temperature:	No information available	No information available
	Decomposition temperature:	No information available	No information available
	Viscosity:	No information available	No information available
	Explosive properties:	No information available	No information available
	Oxidizing properties:	No information available	No information available
9.2.	Other information		
	-		

SECTIO	ON 10 STABILITY AND REACTIVITY	
10.1.	Reactivity:	See subsections 10.3 through 10.5.
10.2.	Chemical stability:	The product is chemically stable under standard ambient conditions of storing and using (room temperature).
10.3.	Possibility of hazardous reactions:	No information available
10.4.	Conditions to avoid:	Sources of heat, sparks, ignition, and low temperature.
10.5.	Incompatible materials:	Highly oxidizing agents, acids, bases and different metals, steel manufactured by melting, copper.
10.6.	Hazardous decomposition products:	Carbon monoxides.

SECTION 11 TOXIC	OLOGICAL INFO	RMATION				
11.1. Informatio	n on toxicologica	effects				
Acute toxi	city:					
Route of exposure:	Method	Species	Dose LD ₅₀ /LC ₅₀ or ATE _{mix}	Exposure time		Results
Oral exposure:	No information available	rat	LD ₅₀	No information available	>200) mg/kg (formaldehyde)
Dermal exposure:	No information available	rabbit	LD ₅₀	No information available	>270 mg/kg (formaldehydd	
Inhalation exposure:	No information available	rat	LC ₅₀	4 h	0.58 mg/l (formaldehyde)	
Specific ta	rget organ toxicity	/ – single expc	sure (STOT SE):			
		Specific effe	cts	Target or	gan	Note
Oral exposure: No information		on available		-		-
Dermal exposure:	No information	No information available				-
Inhalation exposure	No information	on available		-		-



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Aspirati	on hazard:	ſ	possible respirat	ory system irritat	ion.		
Irritatior	n and corrosi	on					
		Exposure time	Species	Evaluation	Method	Note	
Skin corrosion/ir	ritation	lo information vailable	-	-	-	Causes skin irritation.	
Serious irritation	to eves.	lo information vailable	-	-	-	Causes serious eye irritation.	
Sensitiza	ation						
Dermal exposure	: May	cause allergic skin r	eaction.				
Inhalation exposi	ure: Aller	gic persons may dis	play irritation.				
Sympto	ms related to	the physical, chemi	cal and toxicolog	gical characterist	cs		
Oral exposure:		If swallowed it can cause severe burns to mouth and throat, and danger of esophagus and stomach perforation.					
Dermal exposure	•	ng on concentration and pain may occur	•		ompanied by se	ensation of	
Inhalation exposure:		ng on concentration s of breath. Inhalatic mage.	•	•		-	
Eye exposure:	Causes s	erious eye damage.	Fumes may caus	se lacrimal irritati	on (tearing), bli	ndness hazard.	
Repeate	ed dose toxici	ty (subacute, subchr	onic, chronic)				
	Dose	Exposure time	Species	Method	Evaluation	Note	
Subacute oral	No inform available	nation No information available	No information available	No information available	No information available	No information available	
Subacute dermal	No inform available	nation 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	
Subchronic oral	No inform available	nation No information	No information	No information	No information	No information	

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

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

Carcinogenicity:	Based on IARC tests conducted on rats, tumors appeared in nose and in pharynx. Other organisms do not yield positive results. If the operator adheres to the personal hygiene rules and uses personal protection listed in the exposure scenario, those hazards are non-existent.
Mutagenicity in vitro:	No information available.
Genotoxicity:	No information available.
Mutagenicity in vivo:	No information available.
Germ cell mutagenicity:	No information available.
Reproductive toxicity:	No information available.

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	Summary of evaluation of the CMR properties:	No information available.
11.2.	Practical experiences:	
	Remarks relevant for classification:	No information available
	Other remarks:	No information available
11.3.	General notes:	
	-	

12.1. Toxicit	ty						
Acute (short-term) toxicity		Dose	Exposu time	re Species	Metho	d Evaluation	Note
Fish		LC ₅₀	96 hour	s Pimephales promelas	-	24.1 – 41 mg/l (formaldehyde)	-
Crustacea:		EC ₅₀	48 hour	water flea s (Daphnia magna)	-	2 mg/l (formaldehyde)	-
Algae/aquatic	plants	IC ₅₀	72 hour	s algae	-	2. 5 mg/l (formaldehyde)	-
Other organism	ns	-	-	-	-	-	-
Chronic (long-1 toxicity	term)	Dose	Exposu time	re Species	Metho	d Evaluation	Note
Fish		LC ₅₀	96 hour	s -	-	No information available	-
Crustacea:		EC ₅₀	48 hour	s -	-	No information available	-
Algae/aquatic	plants	IC ₅₀	72 hour	s -	-	No information available	-
Other organisn	ns	_	-	-	-	No information available	-
							·
12.2. Persist	tence a	nd degrada	bility				
Abioti	c degra	adation					
	Degr	adation hal	f-lives	Method		Evaluation	Note
Marine water	No inf	ormation av	vailable 1	No information ava	ailable	No information available	-
Fresh water	No inf	ormation av	vailable 🏾 🖡	No information ava	ailable	No information available	-
Air	No inf	ormation av	vailable I	No information ava	ailable	No information available	-



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Soil		No	informa	tion av	vailab	le N	o inforr	nation a	vailabl	e l	No informa	tion avai	lable	-
	Piede	arad	ation											
Biodegradation % Degradation Time (days) Method Evaluation								Note						
No info			No infor		-	lable		formatio	n	No i	nformation		_	Note
availabl		•			. ava		availa			-	lable			
	1													
12.3.	Bioac	cumı	ulative p	otenti	al									
	Partiti	on c	oefficier	nt: n-o	ctano	l/wate	r (log K	ow):					1	
Valu	Je		oncentra		pł	4	°C		thod		Evalua			Note
No informa	tion		informa ilable	tion	-		-	No info availabl		n	No inform available	ation	-	
availabl		ava	nabic					availabi	C		available			
	Bioco	ncen	tration f	actor	(BCF)									
V	alue			Spec				Method			Evaluatio	on		Note
No info		า	No info availab					ormatio	n		o informatio	on	-	
availabl	e		avallab	ne			availat	bie		av	ailable			
	Chror	nic ec	cotoxicity											
						Fxn	osure							
	Valu	е		Do	se	•	ime	Spe	cies		Method	Evalua	tion	Note
						No		No		No		No		
Chronic	toxicit	y on	fish	LC ₅₀		infor availa	mation	inforn availa			formation ailable	informa availab		-
- ·						No		No	DIE	No		No	ie	
Chronic toxicity on crustacea (<i>Daphnia</i>))	EC ₅₀			mation	inform			formation	information		-	
			/			availa	able	availa	ble	av	ailable	availab	le	
10.4	N 4 - I- 1	•••••	1											
12.4.	Mobil			ddiat	ibu+i-	on in -	nviron	nontal a	omnor	tmai	ate			
	NUOM	nor	predicte	a aist	IJUUTIO	n in e	nvironr	nental C	ompar	uner	ILS.			
	Surfac	-0 +0	ncion											
		alue		°C		C	oncentr	ation		M	lethod			Note



Page 14 of 17 Trading name: **BOUIN'S SOLUTION** Product code: BOU-OT-X** Revision date: 24.05.2019. Version: 6 No No information No information No information information available available available available Adsorption / desorption A/D coefficient Transport log Kow **Evaporation rate** Method Note Henry's constant No information No information No information No information Soil-water available available available available No information No information No information No information Water-air available available available available No information No information No information No information Soil-air available available available available 12.5. Results of PBT and vPvB assessment No information available Other adverse effects 12.6. No information 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: 15 01 10*: packaging that contains residual hazardous substances or is contaminated with hazardous substances 13.1.3. Waste treatment - relevant information: No information available Sewage disposal - relevant information: 13.1.4. Waste must not be disposed of into the sewage system.



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13.1.5. Other disposal recommendations:

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

13.1.6. Relevant Community provisions:

_

SECTION 14 TRANSPORT INFORMATION

Transporting/shipment by road	d (ADR)
UN number:	Not subject to marking regulations.
UN proper shipping name:	-
Transport hazard class(es):	-
Packing group:	-
Environmentally hazardous:	-
Special precautions for user:	-
Transporting/shipment by rail	(RID)
UN number:	Not subject to marking regulations.
UN proper shipping name:	-
Transport hazard class(es):	-
Packing group:	-
Environmentally hazardous:	-
Special precautions for user:	-
Inland waterway transport (AD	N)
UN number:	Not subject to marking regulations.
UN proper shipping name:	-
Transport hazard class(es):	-
Packing group:	-
Environmentally hazardous:	-
Special precautions for user:	-
Transporting/shipment by sea	(IMDG)
UN number:	Not subject to marking regulations.
UN proper shipping name:	-
Transport hazard class(es):	-
Packing group:	-
Environmentally hazardous:	-
Special precautions for user:	-
Transport in bulk according to Annex	Π -



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Trading name:	BOUIN'S SOLUTION							
Product code:	BOU-OT-X**	Revision date:	24.05.2019.	Version:	6			

of MARPOL 73/78 and the IBC code:	
Transporting/shipment by air	(ICAO-TI/IATA-DGR)
UN number:	3334
UN proper shipping name:	Aviation regulated liquid, n.o.s. (formaldehyde)
Transport hazard class(es):	9
Packing group:	Ш
Environmentally hazardous:	None
Special precautions for user:	-
Further Information.	de solutions, nonflammable, containing less than 25% of formaldehyde do to the ADR regulations.

SECTIO	ON 15 REGULATORY INFO	RMATION							
15.1.	Safety, health and environmental regulations/legislation specific for the substance or mixture								
	EU regulations								
	Authorization and/or restr	rictions of use							
	Authorizations:	-							
	Restrictions:	-							
	Other EU regulations:	 EC Regulation No. 1906/2007 and EC Regulation No. 1272/2008 of the European Parliament and the European Council; The European Commission Regulation No. 453/2006 of 2010 on changes and amendments to the Regulation (EC) No. 1907/2006 of the European Parliament and Council on registration, evaluation, authorization and restriction of chemical substances (REACH); EC Regulation No. 2037/200 of the European Parliament and Council from 29 June 2000 on substances that damage the ozone layer; EC Regulation No. 689/2008 of the European Parliament and Council from 17 June 2008 concerning the export and import of dangerous chemicals; EC Regulation No. 850/2004 of the European Parliament and Council from 29 April 2004 about persistent organic pollutants; 							
		Directive 2008/98/EC of the European Parliament and Council of 19 November 2008 on waste and repealing certain Directives							
	Information according 199 guideline)	99/13/EC about limitation of emissions of volatile organic compounds (VOC-							
	National legislation:	Chemicals Act, Regulation on classification, packaging and labeling of dangerous substances, Ordinance on occupational exposure limit values and on biological limit values, Regulation on categories, types and classification of waste with a waste catalog and list of hazardous waste, Ordinance on writing Material safety data sheet, Transport of Hazardous Substances Act							
15.2.	Chemical safety assessme	nt							

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Trading name:	BOUIN'S SOLUTION							
Product code:	BOU-OT-X**	Revision date:	24.05.2019.	Version:	6			

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SECTIO	ON 16 Other informa						
16.1.	Indication of chang	-					
16.2.	Abbreviations acronyms:	PBTStable, bioaccumulativevPvBStrongly stable and stroLD50Lethal dose, 50%LC50Lethal concentration, 50STOT - SESpecific target organ toSTOT - RESpecific target organ to	ngly bioaccumulative.)%				
16.3.	Key literature refere and source of data:	-					
16.4.	Classification and p 1272/2008 (CLP)	lure used to derive the classification for mixtu	re according to Regulation (EC)				
Classification according to CLP		Classification procedure	Classification procedure				
-		-					
16.5.	Relevant H stateme	number and full text)					
	H226 H301+H311+ H302+H312+ H314 H315 H317 H319 H341 H350 H351	 Flammable liquid and vapor. Toxic if swallowed, in contact with skin of Harmful if swallowed, in contact with skin causes severe skin burns and eye damage. Causes skin irritation. May cause allergic skin reaction. Causes serious eye irritation Suspected of causing genetic defects. May cause cancer. Suspected of causing cancer. 	in or if inhaled .				
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



Page 1 of 17

Trade name:		HEMATOXYLIN, WEIGERT A				
Product code:	HEMA-OT-X**	Date of compilation:	03 June 2019	Version:	4	

SECTI	ON 1. Identification of the	e substance/mi	xture and	of the company/undertaking		
1.1.	Product identifier					
	Trade name:	HEMATOXYLIN,	WEIGERT	A		
	Chemical name:	-				
	Catalogue number:	HEMA-OT-X**				
1.2.	Relevant identified uses of the substance or mixture and uses advised against					
	Uses:		For use i	n Hematoxylin W kit.		
	Uses advised against:		Only the	identified uses are advised.		
	Reason why uses advised	d against:	The product is intended for use only as an <i>in vitro</i> diagnostic medical device, registered at the Agency for Medicinal Products and Medical Devices and there is no reason to use it for other purposes.			
1.3.	Details of the supplier of the safety data sheet					
	Supplier:	BioGno	BioGnost Ltd.			
	Address:	Medju	Medjugorska 59, Zagreb			
	Telephone number:	+385 1	+385 1 2409997			
	Telefax:	+385 1	+385 1 2404039			
	e-mail of competent per	son: <u>msds@</u>	msds@biognost.hr			
	National contact:	-				
1.4.	Emergency telephone nu	umber				
	National Protection and	Rescue Director	ate:	112		
	Medical information:			+385 1 2348 342		
	Other information:			-		

SECTIC	SECTION 2. Hazards identification							
2.1.	Classification of the substanc	Classification of the substance or mixture						
2.1.1.	Classification according to Regulation (EC) No 1272/2008 (CLP)							
	Hazard class and category code: Hazard statements*:							
	Flam. Liq. 2		H225					
	Skin. Sens. 1		H317					
	Canc. 2		H351					
2.1.2.	Additional information							
	-							
*For ful	ll text of Hazard- and EU Hazard	d-statements: see	Section 16					
2.2.	Label elements							
	Product identification:	HEMATOXYLIN	N, WEIGERT A					
	Identification number:	-						



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Trade name:	HEMATOXYLIN, WEIGERT A							
Product code:	HEMA-OT-X**	Date of compilation:	03 June 2019	Version:	4			

	Authorisation number:	-
	Hazard pictograms:	GHS02 GHS07 GHS08
	Signal word:	Danger
	Hazard statements:	H225 Highly flammable liquid and vapor.H317 May cause an allergic skin reaction.H351 Suspected of causing cancer.
	Precautionary statement:	 P210 Keep away from heat/sparks/open flames/hot surfaces. Do not smoke. P280 Wear protective gloves/protective clothing/eye/protection/face protection. P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
	Supplemetal hazard information (EU)	-
2.3.	Other hazards	
	-	

SECTION 3. Composition/information on ingredients									
CAS/ EC/ Index number	REACH Registration No	Weight % content (or range)	Identification name	Classification (REGULATION) (EC) No 1272/2008 (CLP)					
107-21-1/ 203-473-3/ 603-027-00-1	01-2119456816- 28-xxxx	< 10	ethylene glycol	Acute Tox. 4, H302					



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Trade name: HEMATOXYLIN, WEIGERT A							
Product code:	HEMA-OT-X**	Date of compilation:		03 June 2019		Version:	4
64-17-5/ 200-578-6/ 603-002-00-5 121-79-9/ 204-498-2/ 607-198-00-3 123-31-9/ 204-617-8/ 604-005-00-4	01-2119457610- 43-xxxx -	≥ 50 < 3 < 5	ethanol propyl g hydroqu		Acut Skin Acut Cano Eye Skin Aqu	n. Liq. 2, H225 re Tox. 4, H302 Sens. 1 H317 re Tox. 4; H302 c. 2;H351 Dam. 1; H318 Sens. 1; H317 atic Acute 1; H4 a. 2; H341	.00

4.1.	Description of first aid measures					
	General notes:	If the suggested first aid measures do not prove sufficient, seek medical attention.				
	Following inhalation:	Carry the afflicted person out of the contaminated area into a well- ventilated area or out for fresh air. In case of difficult breathing, provide the afflicted person with oxygen.				
	Following skin contact:	Remove contaminated clothing. Thoroughly wash with water for 15 minutes.				
	Following eye contact:	Rinse the eyes using mild jet of clean water for at least 15 minutes with the eyelids held wide open.				
	Following ingestion:	Rinse the mouth thoroughly with water. If the afflicted person is conscious, provide them with large amounts of water. Consult a physician.				
	Self-protection of the first aider	-				
4.2.	Most important symptoms and effects, both acute and delayed					
	Following inhalation:	May cause eye irritation and upper respiratory system (stinging sensation, irritation). Bronchoconstriction is possible. Possible symptoms include CNS symptoms such as headache, vertigo, intoxication and loss of consciousness after exposure to higher levels of concentration.				
	Following skin contact:	Defatting, dry skin.				
	Following eye contact:	Splatter may cause discomfort, stinging sensation, conjunctival redness, corneal surface lesions.				
	Following ingestion:	It may lead to occurrence of strong sensation of stinging, headache, vertigo, intoxication and loss of consciousness after exposure to higher levels of concentration. If denaturants are present, dyspepsia may occur (such as vomiting).				



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Trade name:		HEMATOXYLIN, WEIGERT A							
Product code:	HEMA-OT-X**	Date of compilation:	03 June 2019	Version:	4				

No information available

SECTIC	SECTION 5. Firefighting measures						
5.1.	Extinguishing media						
	Suitable extinguishing media:	Small fire - water spray, dry powder, alcohol-resistant foam, CO ₂ Large fire - water spray or alcohol-resistant foam					
	Unsuitable extinguishing media:	Water jet					
5.2.	Special hazards arising from the substa	ance or mixture					
	Hazardous combustion products:	Incomplete combustion of the product.					
5.3.	Advice for firefighters						
	Use a self-contained open-circuit compressed air breathing apparatus and fireproof clothing. Cool closed containers exposed to fire with water spray or vapor.						
5.4.	Additional information						
	-						

SECTIO	DN 6. Accidental release r	neasures					
6.1.	Personal precautions, protective equipment and emergency procedures						
6.1.1.	For non-emergency pers	sonnel					
	Protective equipment:	quipment: When disposing of small quantities use protective clothing. When disposing of large quantities use self-contained open-circuit compressed air breathing apparatus or self-contained closed-circuit air breathing apparatus.					
	Accident prevention me	Secure a safety zone, remove all ignition sources, and in case of an accident inform the Emergency service (112) and the manufacturer or sender. Position a prohibition sign with symbols of flame and devices that cause sparks.					
	Emergency procedures:		Remove or neutralize all factors that may exacerbate the condition, use all allowed means of containing the situation and use recommended means of personal protection.				
6.1.2.	For emergency responde	ers:					
	Self-contained open-circ dissipation (fireproof clo	•	ed air breathing apparatus, a set for protecting the body from heat				
6.2.	Environmental precaution	ons:					
	Use sand protective barrier to prevent further spillage of chemicals. Prevent environmental pollution by not allowing the chemicals to enter the sewage system, surface water or groundwater.						
6.3.	Methods and material for	or containmen	t and cleaning up				
6.3.1.	Bunding, covering of drains; capping procedures:	Sand protec	Sand protective barrier or barriers made of similar materials				
6.3.2.	Cleaning up:	Sawdust, saı	nd, mineral adsorbents				



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Trade	name:	HEMATOXYLIN, WEIGERT A								
Product code: HEMA-OT-		HEMA-OT->	* Date of compilation: 03 June 2019		Version:	4				
6.3.3.	Other inf	Secure proper ventilation. Contact the responsible person; in case of larger spills and possible environmental pollution contact National Protection and								

0.3.3.	Other Information.	Rescue (112).					
6.4.	Reference to other section	Reference to other sections					
	-						

SECTIO	ON 7. Handling and storage					
7.1.	Precautions for safe handling					
7.1.1.	Protection measures					
	Measures to prevent fire:		Keep away from sources of ignition and heat. Do not use tools that cause sparks.			
	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. Thoroughly wash hands after work and before eating.					
7.2.	Conditions for safe storage, including any incompatibilities					
	Technical measures and storage conditions:		a well-ventilated place. Keep away from d direct solar radiation.			
	Packaging materials:	Manufa	cturer's original packaging.			
	Requirements for storage rooms and vessels:		Keep away from food and drink. Keep the containers tightly closed.			
	Advices for storage equipment: mus drai		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:	-				
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 term values	Biological limit values			
		ppm	mg/m ³				
Ethanol	64-17-5	1000/- 1900/-		-			
Ethylene glycol	107-21-1	20/40	52/104	-			



Page 6 01 17									
			HEMATO	OXYL	IN, WEIGER ⁻	ТА			
HEMA-C	DT-X**	Date o	of compilat	tion:	03 June 2	2019	Version:	4	
			1			T			
	123-3	1-9	-/05		-/-		-		
	CAS No:	-							
			Industria	al					
. 4	Acute		Acute		Chron	ic	C	hronic	
· effe	ect local	effe	ect systemic		effect lo	ocal	effect	t systemic	
-		-			-		-		
-		-			0 0	col)	950 mg/r	n ³ (ethanol)	
							343 mg/k	g (ethanol)	
-		-			-		106 mg/kg (ethylene		
Critical physical parameters: solubility, flammability, corrosivity:									
Acute			Acute		Chronic		C	hronic	
effe	effect local		effect systemic		effect local		effect systemic		
-		-			-		-		
				7 mg/kg		114 mg/m ³ (ethanol)			
-		-			(ethylene glycol)				
							-	g (ethanol)	
				-		53 mg/kg (ethylene			
							giycoi)		
oction tar			DNE	r					
	jei								
				10 mg/l (ethylene glycol)					
ts			3.6 r	3.6 mg/kg (ethanol)					
			37 n	37 mg/kg (ethylene glycol)					
				0.79 mg/l (ethanol)					
Marine water				1 mg/l (ethylene glycol)					
Marine sediments				3.7 mg/kg (ethylene glycol)					
			no ii	nform	ation available	9			
sewage tre	eatment		199.	5 mg/	l (ethylene gly	/col)			
				-	-	vcol)			
				no information available					
	<pre></pre>	CAS No: CAS	123-31-9 CAS No: - Acute effect local effe - -	HEMA-OT-X** Date of compilation 123-31-9 -/05 I23-31-9 -/05 CAS No: - IACUTE Acute effect local effect systemic - - - - - - - - - - - - - - - - Acute Acute effect local effect systemic - - Acute Acute effect local effect systemic - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -	HEMA-OT-X**Date of compilation:123-31-9-/05123-31-9-/05CAS No:-IndustrialAcute effect localAcute effect localAcute effect systemicAcute effect localAcute effect systemic <t< td=""><td>HEMA-OT-X** Date of compilation: 03 June 2 123-31-9 -/05 -/- I23-31-9 -/05 -/- CAS No: - - CAS No: - - Industrial CAS No: - CAS No: - - Industrial CAS No: - Industrial - - Acute Acute Chron effect local effect local effect systemic - - - - - - - - - ameters: solubility, flammability, corrosivity: - - ameters: solubility, flammability, corrosivity: - - Acute Acute Chron effect local effect systemic effect local effect local effect systemic - - - - - - - - - - - - - - - - - - - - - - -</td><td>123-31-9 -/05 -/- CAS No: - -/- Industrial Acute Acute Chronic effect local effect systemic effect local - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -</td><td>HEMA-OT-X** Date of compilation: 03 June 2019 Version: 123-31-9 -/05 -/- - CAS No: - - - CAS No: - - - Acute Acute Chronic effect effect local effect systemic effect local effect - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - 106 mg/k glycol) - 106 mg/k - 0 -</td></t<>	HEMA-OT-X** Date of compilation: 03 June 2 123-31-9 -/05 -/- I23-31-9 -/05 -/- CAS No: - - CAS No: - - Industrial CAS No: - CAS No: - - Industrial CAS No: - Industrial - - Acute Acute Chron effect local effect local effect systemic - - - - - - - - - ameters: solubility, flammability, corrosivity: - - ameters: solubility, flammability, corrosivity: - - Acute Acute Chron effect local effect systemic effect local effect local effect systemic - - - - - - - - - - - - - - - - - - - - - - -	123-31-9 -/05 -/- CAS No: - -/- Industrial Acute Acute Chronic effect local effect systemic effect local - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -	HEMA-OT-X** Date of compilation: 03 June 2019 Version: 123-31-9 -/05 -/- - CAS No: - - - CAS No: - - - Acute Acute Chronic effect effect local effect systemic effect local effect - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - 106 mg/k glycol) - 106 mg/k - 0 -	



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

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Trade name:	HEMATOXYLIN, WEIGERT A					
Product code:	HEMA-OT-X**	Date of compilation:	03 June 2019	Version:	4	

8.2.	Exposure controls						
8.2.1.	Engineering measures						
Substance/mixture related measures prevent exposure during identified u			Use personal protective equipment. Do not eat, drink or smoke in the workspace.				
	Structural measures to prevent exposure:		No information available				
	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:		See Section 7.2				
8.2.2.	Personal protection equipment						
8.2.2.1.	Eye and face protection:	Safety glasses that stick to face (EN166) or visor in case of lower levels of concentration in air; protective gas mask that covers the entire face in case of higher levels of concentration in air.					
8.2.2.2.	Skin protection						
	Hand protection:	(0.4 m gloves Protec	case of coming into thorough contact, use butyl rubber gloves .4 mm thick). In case of contact with drops, use polychlorene oves (0.1 mm thick). otective gloves must be according to the EU Directive 016/425/EEC and standard EN 374.				
	Such a such a such a spilling suitab		uring everyday work use cotton clothing and suitable footwear, uch as rubber boots or shoes that cover the entire foot. In case o pilling hazard, use clothing made of impermeable material uitable for protection from liquid chemicals (Viton, PVC, himex) and footwear made from the same material.				
8.2.2.3.	Respiratory protection:		concentration level exceeds the GVI values, use full gas mask ped with brown filter A.				
8.2.2.4.	Thermal hazards:	No inf	ormation available				
8.2.3.	Environmental exposure controls	5					
	Substance/mixture related measures to prevent exposure:	See	e Section 6				
	Structural measures to prevent exposure:	Use	e modern equipment.				
	Organisational measures to prevent exposure:		Adapt the work process to the required working conditions of he workplace.				
	Technical measures to prevent		ee Section 6				

SECT	ION 9. Physical and chemical properties
9.1.	Information on basic physical and chemical properties

BIOGNOST®

Trade name: Product code:

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

 HEMATOXYLIN, WEIGERT A

 HEMA-OT-X**
 Date of compilation:
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		Value	Method
Ph	ysical state:	liquid	No information available
Co	lour:	brown	No information available
00	lour:	ethanol like	No information available
00	lour threshold;	No information available	No information available
p⊦	l:	No information available	No information available
Μ	elting point / freezing point;	No information available	No information available
	tial boiling point and boiling nge:	No information available	No information available
Fla	ish point:	20°C	No information available
Εv	aporation rate:	No information available	No information available
Fla	ımmability (solid, gas):	No information available	No information available
	per/lower flammability or plosive limits:	No information available	No information available
Va	pour pressure:	No information available	No information available
Va	pour density:	No information available	No information available
Re	lative density:	No information available	No information available
Bu	lk density:	No information available	No information available
So	lubility(ies):	Completely soluble in water	No information available
	rtition coefficient: n- tanol/water (log Kow):	No information available	No information available
Αι	to-ignition temperature:	No information available	No information available
De	composition temperature:	No information available	No information available
Vi	scosity:	No information available	No information available
Ex	plosive properties:	No information available	No information available
~	idising properties:	No information available	No information available

SECTIO	SECTION 10.: Stability and reactivity								
10.1.	Reactivity:	The product is stable under normal working and storage conditions.							
10.2.	Chemical stability:	The product is chemically stable under standard ambient conditions of storing and using (room temperature).							
10.3.	Possibility of hazardous reactions:	Risk of explosion after contact with strong acids, alkali metals, alkali metal oxides, nitric acid, oxidizing substances.							
10.4.	Conditions to avoid:	High temperatures, ignition sources, open flame.							
10.5.	Incompatible materials:	Oxidants, acids, alkali metals.							



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Trade name:		HEMATOXYLIN	, WEIGERT A		
Product code:	HEMA-OT-X**	Date of compilation:	03 June 2019	Version:	4
			:	:	1

10.6. Hazardous decomposition products:

Non-degradable if used in the described manner.

SECTION 11. Toxi	cological informa	ation							
11.1. Informatio	on on toxicologica	l effects							
Acute tox	icity:	:	-		-		1		
Route of exposure:	Method	Species	Effectiv LD ₅₀ /L ATE _m	C ₅₀ or	•	osure me		Results	5
Oral:	No information available	rat	LD ₅₀		-		7.060 mg/kg (ethanol) 7.712 mg/kg (ethylene glyco		
Dermal:	No information available	rabbit	LD ₅₀		-			>3.500mg (ethylene gl	-
Inhalation:	No information available	rat	LC ₅₀		4 h (etha	nol)	20	0.000 mg/l (e	ethanol)
Spacific +	arget organ toxicit	v – cinala a	nocura (CT						
specific to		y – single ex	(posure (ST		Targe	t organ		N	lote
Oral:	No information			No information available		ble	-		
Dermal:	No information	available		No info	ormatio	on availa	ble	-	
Inhalation:	No information	available		No information available -					
Respirato	ry irritation:		May cause	e respirat	tory irr	itation.			
Irritation	and corrosion								
	Exposure	time	Species	Evalu	ation	Met	hod	N	ote
Skin corrosion/irritation	ı: -	-		-		-		No available	information
Serious eye damage/irritation	-	-		-		-		No available	information
- ··· .									
Sensitizat Skin sensitization:		a vailabla							
Respiratory sensitization:	No information								
Symptom	s related to the pl	wsical char	nical and to	vicologi	cal cha	ractorict	ics		
Oral exposure:	It may lead to conscious of conscious of conscious present, dysper	ccurrence o Isness after	f strong se exposure to	nsation o o higher	of sting levels	ging, hea	adache, v	-	



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Trade name:			HEMATOXYL	IN, WEIGERT	Α						
Product code:	HEMA-OT-X*	HEMA-OT-X** Date of		compilation: 03 June 2019		ı: 4					
Dermal exposure:	Defatting, dry	skin.									
Inhalation exposure:	Bronchoconst headache, ver	May cause eye irritation and upper respiratory system (stinging sensation, irritation). Bronchoconstriction is possible. Possible symptoms include CNS symptoms such as headache, vertigo, intoxication and loss of consciousness after exposure to higher levels of concentration.									
Eye exposure:	Splatter may o lesions.	ause discomfo	rt, stinging sensa	tion, conjunctiv	al redness, corn	eal surface					
Repeate	d dose toxicity (su	bacute, subchr	onic, chronic)								
1	Dose	Exposure time	Species	Method	Evaluation	Note					
Subacute oral	No information available	No information available	No information available	No information available	No information available	-					
Subacute dermal	No information available	No information available	No information available	No information available	No information available	-					
Subacute inhalation	No information available	No information available	No information available	No information available	No information available	-					
Subchronic oral	No information available	No information available	No information available	No information available	No information available	-					
Subchronic dermal	No information available	No information available	No information available	No information available	No information available	-					
Subchronic inhalation	No information available	No information available	No information available	No information available	No information available	-					
Chronic oral	No information available	No information available	No information available	No information available	No information available	-					
Chronic dermal	No information available	No information available	No information available	No information available	No information available	-					
Chronic inhalation	No information available	No information available	No information available	No information available	No information available	-					
		•									
Specific	target organ toxic	· ·	•		ian	Note					
Specific Subacute oral	target organ toxic	ity – repeated e Specific effect mation availabl	ts	RE): Target org o information av		Note					

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Trade name:		HE	матоху	'LIN,	WEIGERT A	<u> </u>	age i	
Product code:	HEMA-OT-X**	Date of co	mpilation	•	03 June 2019	Ver	sion:	4
Subacute dermal No information available		n available	Ν	lo inf	ormation availabl	е	-	
Subacute inhalatior	n No informatio	n available	Ν	lo inf	ormation availabl	е	-	
Subchronic oral	No informatio	n available	Ν	lo inf	ormation availabl	e	-	
Subchronic dermal	No informatio	n available	Ν	lo inf	ormation availabl	e	-	
Subchronic inhalati	on No informatio	n available	Ν	lo inf	ormation availabl	e	-	
Chronic oral	No informatio	n available	Ν	lo inf	ormation availabl	е	-	
Chronic dermal	No informatio	n available	Ν	lo inf	ormation availabl	е	-	
Chronic inhalation	No informatio	n available	Ν	lo inf	ormation availabl	е	-	
CMR effec	ts (carcinogenicity; mu	utagenicity; re	eproductive	e toxic	city)			
Carcinoge	nicity:		No information available					
Mutagenio	city <i>in-vitro</i> :		No information available					
Genotoxic	ity:		No information available					
Mutagenio	city <i>in-vivo</i> :		No information available					
Germ cell	mutagenicity:		No information available					
Reproduct	tive toxicity:		No information available					
Summary properties		the CMR	-					
11.2. Practical e	xperiences:		÷					
Remarks r	elevant for classification	on:	No information available					
Other rem	arks:		No info	rmati	on available			
11.3. Note:								
-								

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	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)	-							



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Trade name:	HEMATOXYLIN, WEIGERT A							
Product code:	HEMA-OT-X**	Date of compilation:	03 June 2019	Version:	4			

Algae/aquatic plants	IC ₅₀	72 hours	algae	No information available	6.500- 13.000 mg/l (ethylene glycol)	-
Microorganisms	-	-	No information available	No information available	No information available	-
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	-
Microorganisms	-	-	-	-	-	-

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	-			

% Dogradati	on Time (da	avc)		Method	Evaluation	Note
% Degradati		ays)		wiethou	Evaluation	Note
_	_		_		_	-
	-		-		-	
12.3. Bioa	ccumulative poten	tial				
Part	tion coefficient: n-	octanol/wa	ater (log	Kow):		
Value	Concentration	рН	°C	Method	Evaluation	Note



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									Pag	ge 13	of 17
Trade na	me:				HEMA	TOXYLIN	N, WEIG	ERT A		-	
Product	code:	HEMA	λ-OT-Χ**	Date	of comp	ilation:	03 Jur	ne 2019	Versio	n:	4
		itration	factor (BCF))	N A - t la	1	F			NI -	4
Val No inform		No inf	Species ormation	Na	Metho informat		No infor	luation	Noir	No nformat	
available	nation	availat			ailable	lon	available		avail		lion
				:		i			:		
(Chronic ea	cotoxicit	У								
	Value		Dose	Exposure time	e	Species	Met	hod	Evalua	tion	Note
				No	No		No				
Chronic to	oxicity on	fish	LC ₅₀	informatio	n info	rmation	information		No inform available	ation	-
						ilable	available				
Chronic to	oxicity on		FC	No No information inf		rmation	No information		No information		_
crustacea	(Daphnia)	EC ₅₀			ilable	available		available		-
			1 1								
12.4. N	Mobility ir	n soil									
ŀ	Known or	predicte	ed distribut	ion in envir	onmenta	l compartn	nents:				
1	No inform	ation av	vailable								
S	Surface te	nsion:							-		
	Value		°C	Conce	entration		Method			Note	
	No	No		No info	rmation	No info	ormation				
	nformatic available		ormation ailable	availabl		availab			-		
I		<u>I</u>		i		İ					
1	Adsorptio	n / desc	orption								
Transport	•	VD coef enry's co		log k	low	Evaporat	ion rate	M	ethod		Note
Soil-wate	No	ir	nformation		rmation	No info	rmation	No i availabl	nformatior	ו -	
	No		formation	available No info	rmation	available No info	rmation		e nformatior	1	
Water-air	availa		normation	available	mation	available		availabl		' -	



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Trade n	ame:		HEM	ATOXYLI	N, WEIG	ERT A		
Product	code:	HEMA-OT-X**	X** Date of compile		ilation: 03 June 2019		Version:	4
		:	1		1		:	:
Soil-air	No avail	information able	No information available	No info available	rmation	No in available	formation -	
		PBT and vPvB asses	sment					
	No inform	nation available						
12.6.	Otheradu	erse effects						
		ation available						
	NO INIOITI							
SECTION	l 13. Disp	osal consideration	S					
13.1.	Waste t	reatment methods						
13.1.1.	Product	/Packaging disposa	:					
	Submit Protecti	for disposal to the l on.	egal person authori	zed by the	Ministry	of Environ	mental and N	ature
13.1.2.	Waste c	odes/waste designa	tions according to	Law:				
	No info	rmation available						
13.1.3.	Waste t	reatment – relevant	information:					
	No info	rmation available						
1011	Courago	disposal relevant	information					
13.1.4.		disposal – relevant nust not be dispose		o system				
	vvaste n	nust not be dispose	d of into the sewage	e system.				
13.1.5.	Other d	isposal recommend	ations:					
	Do not o	dispose of the prod	uct's remains into th	ne sewage	system. S	Submit the	remains to th	e collectors
		ed by the ministry i						
		kaging to the collec may occur.	tors authorized by t	he ministry	in charg	je. Do not i	dispose of in	places where
13.1.6.		t Community provis	ions:					
	-							
SECTION	N 14. Tran	sport information						
	Transport	ing/shipment by roa	ad (ADR)					
UN num	ber:		1170					
UN prop	er shippin	g name:	Ethanol solution	n				
Transpor	rt hazard c	lass(es):	3					

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Trade name:	HEMATOXYLIN, WEIGERT A					
Product code:	HEMA-OT-X**	Date of compilation:	03 June 2019	Version:	4	

Packing group:	П
Environmental hazards:	No information available
Special precautions for user:	-
Transporting/shipment by rail (RI	(D)
UN number:	1170
UN proper shipping name:	Ethanol solution
Transport hazard class(es):	3
Packing group:	П
Environmental hazards:	No information available
Special precautions for user:	-
Transporting/shipment by inland	waterways (ADN)
UN number:	1170
UN proper shipping name:	Ethanol solution
Transport hazard class(es):	3
Packing group:	П
Environmental hazards:	No information available
Special precautions for user:	-
Transporting/shipment by sea (IN	/IDG)
UN number:	1170
UN proper shipping name:	Ethanol solution
Transport hazard class(es):	3
Packing group:	П
Environmental hazards:	No information available
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:	1170
UN proper shipping name:	Ethanol solution
Transport hazard class(es):	3
Packing group:	П
Environmental hazards:	No information available
Special precautions for user:	-
Further information: -	

SECTION 15. Regulatory information



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Trade name:	HEMATOXYLIN, WEIGERT A				
Product code:	HEMA-OT-X**	Date of compilation:	03 June 2019	Version:	4

15.1.	Safety, health and environmental regulations/legislation specific for the substance or mixture EU regulations Authorization and/or restrictions of use EU regulations				
	Authorizations:	-			
	Restrictions:	-			
	Other EU regulations:	 EC Regulation No. 1906/2007 and EC Regulation No. 1272/2008 of the European Parliament and the European Council; The European Commission Regulation No. 453/2006 of 2010 on changes and amendments to the Regulation (EC) No. 1907/2006 of the European Parliament and Council on registration, evaluation, authorization and restriction of chemical substances (REACH); EC Regulation No. 2037/200 of the European Parliament and Council from 29 June 2000 on substances that damage the ozone layer; EC Regulation No. 689/2008 of the European Parliament and Council from 17 June 2008 concerning the export and import of dangerous chemicals; EC Regulation No. 850/2004 of the European Parliament and Council from 29 April 2004 about persistent organic pollutants; Directive 2008/98/EC of the European Parliament and Council of 19 November 2008 on waste and repealing certain Directives 			
	Information according 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, Transport of Hazardous Substances Act			
15.2.	Chemical safety assessme	ent			
	None				

SECTIC	SECTION 16. Other information					
16.1.	Indication of changes:	-				
16.2.	Abbreviations and acronyms:	PBTStable, bioaccumulative and toxicvPvBStrongly stable and strongly bioaccumulative.LD ₅₀ Lethal dose, 50%LC ₅₀ Lethal concentration, 50%TCOJSpecific target organ toxicity - single exposure				
16.3.	Key literature references and source of data:	-				
16.4.	Classification and procedure used to derive the classification for mixture according to Regulation (EC) 1272/2008 (CLP)					
Classifie	cation	Classification procedure				



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Trade name:	HEMATOXYLIN, WEIGERT A				
Product code:	HEMA-OT-X**	Date of compilation:	03 June 2019	Version:	4

-			-
16.5.	Rele	evant H statements (num	ber and full text)
	H:	225 302 317 318 341 351 400	Highly flammable liquid and vapor. Harmful if swallowed. May cause an allergic skin reaction. Causes serious eye damage. Suspected of causing genetic defects. May cause cancer. Very toxic to aquatic life.
16.6.	Training advice:		-
16.7.			 ** "X" in the product code marks different volumes (different packaging of the product) We are not responsible for consequences in case of failure to comply with 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:	FERRI REAGENT, WEIGERT B					
Product code:	FR-OT-X**	Revision date:	03 June 2019	Version:	4	

SECTI	ON 1 IDENTIFICATION (OF THE SU	BSTANCE/M	IIXTURE AND OF THE COMPANY/UNDERTAKING		
1.1.	Product identifier					
	Trading name:	FERRI RE	AGENT, WEIG	GERT B		
	Chemical name:	-				
	Catalogue number:	FR-OT-X**				
1.2.	Relevant identified uses of the substance or mixture and uses advised against					
	Uses:		For use i	For use in Hematoxylin W kit.		
	Uses advised against:		Only the	Only the identified uses are advised.		
	Reason why uses advised against:		: medical	The product is intended for use only as an <i>in vitro</i> diagnostic medical device, registered at the Agency for Medicinal Products and Medical Devices and there is no reason to use it for other purposes		
1.3.	Details of the supplier of the safety data sheet					
	Supplier:		BioGnost Ltd.			
	Address:		Medjugorska 59, Zagreb			
	Telephone number:		+385 1 2409997			
	Fax no.:		+385 1 2404039			
	e-mail of competent person:		msds@biognost.hr			
	National contact:		-			
1.4.	Emergency telephone number					
	National Protection and Rescue Dir		Directorate:	112		
	Medical information:			+385 1 2348 342		
	Other information:			-		

SECTIO	ON 2 HAZARDS INFORMATIO	N			
2.1.	Classification of the substance or mixture				
2.1.1.	Classification (REGULATION (EC) No. 1272/2008 (CLP)				
	Hazard class and cate	gory code:	Hazard statements*:		
	Not identified as hazardous s	ubstance.	-		
2.1.2.					
	-				
*For fu	II text of Hazard- and EU Hazard	d-statements: see S	ection 16		
2.2.	Classification according to EC Directive Nr. 1272/2008 CLP)				
	Product identification:	FERRI REAGE	NT, WEIGERT B		
	Identification number:	-			
	Authorization no.:	-			
	Hazard pictograms:	-			
	Signal word:	-			

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Trading name:	FERRI REAGENT, WEIGERT B					
Product code:	FR-OT-X**	Revision date:	03 June 2019	Version:	4	

	Hazard statements:	-
	Precautionary statements:	-
	Further information:	-
2.3.	Other hazards	
	-	

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)			
7782-61-8/ 616-509-1/ -	-	< 0.5%	ferric nitrate nonahydrate	Skin Irrit. 2; H315 Eye Irrit. 2; H319			
7647-01-0/ 231-595-7/ 017-002-00-2	01-2119484862- 27-xxxx	< 1%	hydrochloric acid, 37%	Skin Corr. 1A; H314 Acute Tox. 3; H331			

SECT	ION 4 FIRST AID MEASURES		
4.1.	Description of first aid mea		
	General notes:	-	
	Following inhalation:	Carry the afflicted person out of the co ventilated area or out for fresh air. If b stops, immediately apply artificial resp mouth) and contact a physician.	reathing becomes erratic or it
	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 clean fingers. If the symptoms remain,	, , ,
	Following ingestion:	Do not induce vomiting. Make the afflicted person drink a glass or water. If spontaneous vomiting occurs, wash the mouth with wate then make the person drink 100-200 ml of water and seek medica attention.	
	Self-protection of the first a	Treat symptomatically.	
4.2.	Most important symptoms and effects, both acute and delayed		
	Following inhalation:	Inhalation of large amounts of vapors in inadequately ventilated may cause coughing, sneezing, headache and nausea.	
	Following skin contact:	ght irritation. After short exposure, resorp m exposure may cause drying, cracking a	
	Following eye contact:	rect eye contact may cause slight to mode Irning sensation.	erate irritation, lacrimation and

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Trading name:	FERRI REAGENT, WEIGERT B					
Product code:	FR-OT-X**	Revision date:	03 June 2019	Version:	4	

	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			
	-			

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

SECTIO	SECTION 6 ACCIDENTAL RELEASE MEASURES					
6.1.	Personal precautions, protect	ve equipment and emergency procedures				
6.1.1.	For non-emergency personne					
	Protective equipment:	Use personal protective equipment (see Section 8).				
	Accident prevention methods: Evacuate members of all non-essential personnel and those members without protective equipment. Remove all sources of sparks and ignition. Do not smoke.					
	Emergency procedures: Mark the area using proper signs.					
6.1.2.	For emergency responders:					
	Wear protective equipment (s	ee 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:	FERRI REAGENT, WEIGERT B					
Product code:	FR-OT-X**	Revision date:	03 June 2019	Version:	4	

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

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

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Trading name:	FERRI REAGENT, WEIGERT B					
Product code:	FR-OT-X**	Revision date:	03 June 2019	Version:	4	

8.1.	Control par	ameters							
	Substance		CAS No	)		l exposure limit rt term values	Biological limit values		
					ppm	mg/m ³			
Hydrog	gen chloride		7647-01	-0	5/10	8/15	-		
Substa name:	ince _								
EC No:									
DNEL									
					Industrial				
Route expos			Acute ect local	effe	Acute ect systemic	Chron effect lo			
Oral		-	-	_		-	-		
Inhalat	ion	-	-	-		-	-		
Derma	Dermal -			-		-	-		
Critical	physical para	meters: s	solubility, flam	mabili	ty, corrosivity:	-			
					Consumer				
Route	-		Acute		Acute	Chron			
expos	ure:	effe	ect local	effect systemic		effect lo	ocal effect systemic		
Oral		-		-		-	-		
Inhalat	ion	-		-		-	-		
Derma		-		-		-	-		
PNEC									
	nmental prote	ection tar	get		PNEC				
Fresh v						No information available			
	vater sedimen	ts				No information available			
Marine						No information available			
	e sediments					ormation availabl			
Food o						No information available			
	organisms in s	ewage tr	eatment			ormation availabl			
	gricultural)					ormation availabl			
Air					No info	rmation availabl	е		

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Trading name:	FERRI REAGENT, WEIGERT B							
Product code:	FR-OT-X**	Revision date:	03 June 2019	Version:	4			

8.2.1.	Engineering measures					
	Substance/mixture related 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 pre 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	Personal protection equipment				
8.2.2.1.	Eye and face protection:		Safety glasses that stick to face (preventing splashing) (EN 166) or visor.			
8.2.2.2.	Skin protection					
			tective gloves must be according to the EU Directive 2016/425/EEC and ndard EN 374. Glove material: nitrile rubber Glove thickness: ≥0.50 mm Break through time: >480 min			
	Other skin protection:		antistatic clothing made of natural fibers (such as cotton) with long s (EN 13034), and shoes that cover the entire foot (EN 10335).			
8.2.2.3.	Respiratory protection:	filter fo	tive full face mask (EN 136) or half mask (EN 140) equipped with a or organic vapors, type "A" (boiling point >65°C) acording to EN ) used when concentration levels exceed GVI.			
8.2.2.4.	Thermal hazards:	No inf	ormation available			
8.2.3.	Environmental exposure of	controls				
	Substance/mixture related measures to prevent expo		See Section 6			
	Structural measures to pre exposure:	event	Use modern equipment.			
	Organisational measures prevent exposure:	to	Adapt the work process to the required working conditions of the workplace.			
	Technical measures to pre exposure:	event	See Section 6			

SECTI	SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES					
9.1.	Information on basic physical and chemical properties					
		Value	Method			
	Physical state:	liquid	No information available			
	Color:	pale yellow	No information available			

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Trading name:	FERRI REAGENT, WEIGERT B						
Product code:	FR-OT-X**	Revision date:	03 June 2019	Version:	4		

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

SECTIC	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.			

SECTIO	SECTION 11 TOXICOLOGICAL INFORMATION			
11.1.	Information on toxicological effects			
	Acute toxicity:			

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

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						Pa	ige 8 01 16
Trading name:		FERF	RI REAG	ENT, WEIG	GERT B		
Product code:	FR-OT-X**	Revisior	n date:	03 June	2019	Version:	4
Route of exposure:	Method	Species	LD ₅	tive dose ₀ /LC ₅₀ or FE _{mixture}	Ехро	sure time	Results
Oral exposure:	No information available	-		LD ₅₀		-	-
Dermal exposure:	No information available	-		LD ₅₀		-	-
Inhalation	No information						

Specific target organ toxicity – single exposure (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	-		

_

Respiratory irritation:

available

exposure:

•

No information available

 $LC_{50}$ 

Irritation and corrosion						
	Exposure time	Species	Evaluation	Method	Note	
Skin irritation:	-	rabbit	-	-	-	
Eye irritation:	-	rabbit	-	-	-	

Sensitization					
Dermal exposure:	No information available				
Inhalation exposure:	No information available				

Symptoms re	lated to the physical, chemical and toxicological characteristics
Oral exposure:	Swallowing may cause irritation of mucosa, tingling sensation in the mouth, burning sensation; higher levels of concentration may cause nausea, abdominal pain and vomiting. In case of vomiting, aspiration causes coughing, difficult breathing. Higher levels of concentration may cause suffocation.
Dermal exposure:	Slight irritation. After short exposure, resorption effects are not likely. Long-term exposure may cause drying, cracking and tingling sensation of skin.
Inhalation exposure:	Inhalation of large amounts of vapors in inadequately ventilated perimeter may cause coughing, sneezing, headache and nausea.
Eye exposure:	Direct eye contact may cause slight to moderate irritation, lacrimation and burning sensation.

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Trading name:	FERRI REAGENT, WEIGERT B								
Product code:	FR-OT-X**	Revision date:	03 June 2019	Version:	4				

		Dose	Exposure time	Species		Method	Evaluatio	n Note	
Subacute oral	No i availal	nformation ole	No information available	No information available		No information available	No informatio available	on -	
Subacute dermal	No i availal	nformation ole	No information available	No informati available	on	No information available	No informatio available	on -	
Subacute inhalation	No i availal	nformation ole	No information available	No informati available	on	No information available	No informatio available	on -	
Subchronic oral	No information available		No information available	No information available		No information available	No informatio available	on -	
Subchronic dermal	No information available		No information available	No informati available	No on information available		No informatio available	on -	
Subchronic inhalation	No information available		No information available	No informati available	on	No information available	No informatio available	on -	
Chronic oral	No i availal	nformation ole	No information available	No information available		No information available	No informatio available	on -	
Chronic dermal	No i availal	nformation ole	No information available	No informati available	on	No information available	No informatio available	on -	
Chronic inhalation	No i availal	nformation ole	No information available	No informati available	on	No information available	No informatio available	on -	
Ĩ									
Specific	target o	5	y – repeated e	xposure (S	TOT R				
Cula a state d			pecific effects		NI. 1	Target orga		Not	te
Subacute oral Subacute dermal			tion available tion available			nformation avai		-	
Subacute dermai			tion available		No information available No information available			_	
Subchronic oral			tion available					_	
Subchronic derm	al		tion available		No information available No information available			_	
Subchronic inhal				nation available			No information available		
Chronic oral		No informa				nformation avai		-	

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Trading name:	FERRI REAGENT, WEIGERT B							
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Chroni	ic dermal	No informat	tion available		No information available	-				
Chroni	ic inhalation	No informat	tion available		No information available	-				
	CMR effects	(carcinogenicity	, mutagenicity	y, repro	ductive toxicity)					
	Carcinogenic	city:	Current s	tudies o	on test animals did not indicate ca	rcinogenic effects.				
	Mutagenicity in-vitro:		Current i	in vitro	tests did not indicate mutageni	c effects.				
	Genotoxicity	No inforn	nation	available						
	Mutagenicity	Current i	Current in vivo tests did not indicate mutagenic effects.							
	Germ cell mu	utagenicity:	No inform	No information available						
	Reproductive	e toxicity:	No toxic organs.	No toxicity on reproductive organs was determined in reproductive organs.						
	Summary of	Summary of evaluation of the CMR properties: -								
11.2.	Practical exp	eriences:								
	Remarks rele	evant for classific	cation:	No info	ormation available					
	Other remarks:			No information available						
11.3.	General note	es:								
	-									

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

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### SAFETY DATA SHEET

Trading nam	e:				FERRI REAG	ENT,	WEIGER	TB			
Product code	e: F	R-OT-X**		F	Revision date:	03.	June 201	.9 Ve	ersion:	4	
	1										
Fish	sh LC ₅₀ 96 hc		96 hou	urs No information			information		ormation le	-	
Crustacea:		EC ₅₀	48 hou	irc	No information available	-	o formation vailable		ormation le	-	
Algae/aquatic	plants	IC ₅₀	72 hou	irc	No information available		No information available		ormation le	-	
Other organis	ms	-	-		-	-		-		-	
Marine water	Deg No in	adation gradation ha formation av	ailable		Method					-	lote
Fresh water		formation av			information avail			formation available		-	
Air Soil		formation av formation av			information avail			o information available		-	
5011				110		ubic					
Biode	egradati	ion									
% Degradatio	n	Time (day	s)		Method		Evaluation			Note	
No informatio available		o infor ailable	mation	No in availa	formation ble		No information available		No information available		
		tive potentia									
		fficient: n-oc			<u> </u>						
Value	Concentration pH No information available		°C Method - No informatio available		on No informa available				Note		

avant	abie	available	available	
Bioconcen	tration factor (BCF)			
Value	Species	Method	Evaluation	Note
No information available	No information available	No information available		No information available

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Tradin	g nar	ne:				FER	RI RE	AGEI	NT, WEI	GERT	В			
Produc	ct coo	de:	FR-O	Г-Х**		Revisio	on dat	e:	03 June	2019	,	Version	2	1
	Chro	onic eco	otoxicit	y					1					
	Va	lue		Dose	Expo tin		Spec	ies	Meth	nod		Evaluatic	n	Note
Chronic	toxic	tity on f	ish	LC ₅₀	No inform availat	ation i	No nforma availab		No inform availab	availahle			ion	-
Chronic crustac		city on aphnia)		EC ₅₀	No inform availat	ation i	No nforma availab		No inform availab			informat ilable	ion	-
12.4.	Moł	oility in	soil											
	1	-		d distributi	on in en	vironmer	ntal co	mpar	ments:					
	Known or predicted distribution in environmental compartments:         No information available													
		ace ten												
		Value °C Concentratio							Metho	d			No	te
		rmatior lable		ormation ailable	No ii avail	nformatic able		No information available			-			
	Ads	orption	/ deso	rption										
Transpo	ort		/D coef nry's co	ficient onstant	log	j Kow	Eva	porati	tion rate Method		od		Note	
Soil-wa	ter	No availal		formation	No inf availab	ormation ble		nforn Iable	nation	No ir availa		nation	-	
Water-a	air	No availal		formation	No inf availat	ormation ble		nforn Iable	nation	No ir availa	-	nation	-	
Soil-air		No availal		formation	No inf availab	ormation ble				-	information -		-	
12.5.	Res	ults of F	PRT and	l vPvB asses	sment									
-2.3.		informa			Smerit									
12.6.	Oth	er adve	rse effe	ects										
12.0.														

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Trading name:	FERRI REAGENT, WEIGERT B							
Product code:	FR-OT-X**	Revision date:	03 June 2019	Version:	4			
<u></u>								

SECTIO	N 13 DISPOSAL CONSIDE	RATIONS						
13.1.	Waste treatment metho	ds						
	1							
13.1.1.	Product/Packaging dispo	posal:						
	Submit for disposal to the Protection.	ne legal person authorized by the Ministry of Environmental and Nature						
13.1.2.	Waste codes/waste desi	gnations according to Law:						
	No information available	2						
13.1.3.	Waste treatment – releva	ant information:						
	No information available							
13.1.4.	Sewage disposal – releva	ant information:						
	Waste must not be dispo	osed of into the sewage system.						
13.1.5.	Other disposal recomme	endations:						
	authorized by the minist	roduct's remains into the sewage system. Submit the remains to the collectors ry in charge. Do not dispose of the packaging into the sewage system. Submit llectors authorized by the ministry in charge. Do not dispose of in places where						
13.1.6.	Relevant Community pro	ovisions:						
	-							
SECTIO	N 14 TRANSPORT INFORI	MATION						
	Transporting/shipment by	road (ADR)						
UN num	ıber:	Not subject to transport regulations.						
UN prop	per shipping name:	-						
Transpo	rt hazard class(es):	-						
Packing	group:	-						
Environr	mentally hazardous:	-						
Special p	precautions for user:	-						
	Transporting/shipment by	rail (RID)						
UN num	ıber:	Not subject to transport regulations.						
UN prop	per shipping name:	-						
-	rt hazard class(es):	-						

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Trading name:	FERRI REAGENT, WEIGERT B									
Product code:	FR-OT-X**		Revision date:	03 June 2019	Version:	4				
Packing group:		-								
Environmentally ha	zardous:	-								
Special precautions	for user:	-								
Inland wat	erway transport (ADN	1)								
UN number:		Not	subject to transpo	rt regulations.						
UN proper shipping	g name:	-								
Transport hazard cl	ass(es):	-								
Packing group:		-								
Environmentally ha	zardous:	-								
Special precautions	for user:	-								
Transporti	ng/shipment by sea (	IMDG)								
UN number:		Not	subject to transpo	rt regulations.						
UN proper shipping	g name:	-								
Transport hazard cl	ass(es):	-								
Packing group:		-								
Environmentally ha	zardous:	-								
Special precautions	for user:	-								
Transporti	ng/shipment by air (I	CAO-T	I/IATA-DGR)							
UN number:		Not subject to transport regulations.								
UN proper shipping	g name:	-								
Transport hazard cl	ass(es):	-								
Packing group:		-								
Environmentally hazardous:										
Special precautions for user:										
Further information	Further information: The product is not subject to classification.									

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

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Trading name:	FERRI REAGENT, WEIGERT B					
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	Other EU regulations:	<ul> <li>EC Regulation No. 1906/2007 and EC Regulation No. 1272/2008 of the European Parliament and the European Council;</li> <li>The European Commission Regulation No. 453/2006 of 2010 on changes and amendments to the Regulation (EC) No. 1907/2006 of the European Parliament and Council on registration, evaluation, authorization and restriction of chemical substances (REACH);</li> <li>EC Regulation No. 2037/200 of the European Parliament and Council from 29 June 2000 on substances that damage the ozone layer;</li> <li>EC Regulation No. 689/2008 of the European Parliament and Council from 17 June 2008 concerning the export and import of dangerous chemicals;</li> <li>EC Regulation No. 850/2004 of the European Parliament and Council from 29 April 2004 about persistent organic pollutants;</li> <li>Directive 2008/98/EC of the European Parliament and Council of 19 November 2008 on waste and repealing certain Directives</li> </ul>
	Information according 1999 guideline)	9/13/EC about limitation of emissions of volatile organic compounds (VOC-
	National legislation:	Chemicals Act, Regulation on classification, packaging and labeling of dangerous substances, Ordinance on occupational exposure limit values and on biological limit values, Regulation on categories, types and classification of waste with a waste catalog and list of hazardous waste, Ordinance on writing Material safety data sheet, Transport of Hazardous Substances Act
15.2.	Chemical safety assessmen	t
	None	

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

### SAFETY DATA SHEET

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

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Trading name:	FERRI REAGENT, WEIGERT B					
Product code:	FR-OT-X** Revision date: 03 June 2019 Version				4	
	3			:	i i i i i i i i i i i i i i i i i i i	

	H: H314		Causes severe skin burns and eye damage.
	H315		Causes skin irritation.
	H319		Causes serious eye irritation.
	H331		Toxic if inhaled.
16.6.	Training advice:		-
			** "X" in the product code marks different volumes (different packagings of the product)
16.7.	Furt	her 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:	A.F.O.G. REAGENT				
Product code:	AFOG-OT-X**	Date of compilation:	26 June 2019	Version:	4

SECTI	ON 1: Identification of t	he substance	e/mixture	and of the company/undertaking		
1.1	Product identifier					
	Trading name:	A.F.O.G. RE	REAGENT			
	Chemical name:	-				
	Catalogue number:	AFOG-OT->	<b>〈</b> **			
1.2	Relevant identified use	es of the subs	tance or n	nixture and uses advised against		
	Uses:		For use	with A.F.O.G. (Acid Fuchsin Orange G) 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 of the safety data sheet					
	Supplier:		BioGnost Ltd.			
	Address:	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	ECTION 2. Hazards identification					
2.1	Classification of the substan	ce or mixture				
2.1.1	Classification according to R	Regulation (EC) No 127	72/2008 (CLP)			
	Hazard class and cat	egory code:	Hazard statements*:			
	Not identified as hazardous	substance.	-			
2.1.2.	Additional information					
	-					
*For fu	ll text of Hazard- and EU Haza	ord-statements: see SE	CTION 16			
2.2	Label elements					
	Product identification:	A.F.O.G. REAGEN	Г			
	Identification number: -					
	Authorization number:	Authorization number: -				
	Hazard pictograms:	-				



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Trading name:	A.F.O.G. REAGENT					
Product code:	AFOG-OT-X**	Date of compilation:	26 June 2019	Version:	4	

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

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)		
3244-88-0/ 221-816-5/ -	-	< 2	3-(1-(4-amino-3-methyl-5- sulphonatophenyl)-1-(4-amino-3- sulphonatophenyl)methylene)cyclohex a-1,4-dienesulphonic acid	Skin Irrit. 2; H315 Eye Irrit. 2 ; H319		

SECT	ION 4. First aid measures					
4.1	Description of first aid measures					
	General notes:	If the suggested first aid measures do not prove sufficient, seek medical attention.				
	Following inhalation:	Carry the afflicted person out of the contaminated area into a well- ventilated area or out for fresh air. In case of difficult breathing, provide the afflicted person with oxygen.				
	Following skin contact:	Remove contaminated clothing. Immediately wash with plenty of water for at least 20 minutes. Seek medical assistance if the symptoms of irritation remain.				
	Following eye contact:	Rinse out with plenty of water with the eyelid held wide open for at least 20 minutes. If the symptoms remain, immediately call in ophthalmologist.				
	Following ingestion:	Rinse the mouth thoroughly with 1-2 glasses of water. Immediately consult a physician and show the container or label. In case of swallowing large quantities, transport the afflicted person to the hospital.				
	Self-protection of the first aider:	-				
4.2	Most important symptoms and 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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	A.F.O.G. REAGENT									
AFOG-OT-X** Date of compilation: 26 June 2019 Version: 4										
	FOG-OT-X**			FOG-OT-X**       Date of compilation:       26 June 2019       Version:         According to our findings, chemical, physical and toxicological						

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

SECTIO	SECTION 5. Firefighting measures					
5.1	Extinguishing media					
	Suitable extinguishing media: water spray, dry powder, CO ₂ or alcohol resistant foam					
	Unsuitable extinguishing media: Water with full jet					
5.2	Special hazards arising from the substance or mixture					
	Hazardous combustion products: no information available					
5.3	Advice for firefighters					
	Use a self-contained open-circuit compressed air breathing apparatus and fireproof clothing.					
5.4	Additional information					
	Cool endangered receptacles with water spray. Collect contaminated fire fighting water separately. Do not contaminate the environment with extinguishing media.					

SECTIC	SECTION 6. Accidental release measures							
6.1	Personal precautions, protective equipment and emergency procedures							
6.1.1.	For non-emergency personne							
	Protective equipment: Use personal protective equipment (see Section 8).							
	Accident prevention methods: Evacuate members of all non-essential personnel and those mem without protective equipment. Avoid breathing vapors and a contact with skin and eyes. Do not smoke. Keep away from ign sources.							
	Emergency procedures: Mark the area using proper signs.							
6.1.2.	For emergency responders:							
	Use protective equipment; in a (see Section 8).	case of inadequate ventilation use adequate airways protective equipment						
6.2	Environmental precautions:							
	Do not dispose of in sewage, drainage system and waterways. In case of large spillage contact National Protection and Rescue Directorate (NPRD) on 112.							
6.3	Methods and material for containment and cleaning up							
6.3.1.	Bunding, covering of drains; capping procedures:	Sand protective barrier or barriers made of similar materials.						



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

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Trading name:		A.F.O.G. REAGENT							
Product code:	AFOG-OT-X**	Date of compilation:	26 June 2019	Version:	4				

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:	information: Secure proper ventilation. Do not use incompatible materials (see Section 10).				
6.4	Reference to other sections					
	See Section 7 for information on safe handling.					
	See Section 8 for information on personal protection equipment.					
	See Section 13 for disposal information.					

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



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Trading name:	A.F.O.G. REAGENT							
Product code:	AFOG-OT-X**	Date of compilation:	26 June 2019	Version:	4			

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

SECTIO	ON 8. Expos	ure contro	ols/perso	onal protec	tion				
8.1	Control pa	rameters							
	Substance					cupational exposure limit alues/short term values		Biological limit values	
					p	opm	mg/m ³		
-				-		-	-	-	
Substa	nce name:	-							
EC No:	:	-	CAS No	: -					
DNEL									
					Ind	ustrial			
Route	of	Αςι	ıte	Acut	te		Chronic	Chronic	
exposi	ure:	effect	local	effect sys	stemic		effect local	effect systemic	
Oral	Dral			-		-			
Inhalat	ion	-		-		-		-	
Derma		-		-		-		-	
Critical	l physical pai	ameters: s	olubility,	flammabilit	ty, corr	osivity:	-		
					Con	sumer			
Route	of	Ad	cute	Acut	te	Chronic		Chronic	
exposi	ure:	effec	t local	effect sys	stemic	c effect local		effect systemic	
Oral		-		-		-		-	
Inhalat		-		-		-		-	
Derma		-		-		-		-	
PNEC									
Enviror	nmental prot	ection tar	get			PNEC			
Fresh v	water					no information available			
Freshw	ater sedime	nts				no information available			
Marine water					no information available				
Marine sediments					no information available				
Food c	hain					no information available			
Microc	organisms in	sewage tr	eatment			no information available			
Soil (ag	gricultural)					no information available			
Air						no information available			



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



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Trading name:		A.F.O.G. REAC	GENT		
Product code:	AFOG-OT-X**	Date of compilation:	26 June 2019	Version:	4

Technical measures to prevent See Section 6 exposure:

	Information on basic physical and	chemical properties	
		Value	Method
	Physical state:	liquid	No information available
	Colour:	violet red	No information available
	Odour:	No information available	No information available
	Odor threshold:	No information available	No information available
	pH:	1.0 - 1.1	No information available
	Melting point / freezing point;	No information available	No information available
	Initial boiling point and boiling range:	No information available	No information available
	Flash point:	No information available	No information available
	Evaporation rate:	No information available	No information available
	Flammability (solid, gas):	No information available	No information available
	Upper/lower flammability or explosive limits:	No information available	No information available
	Vapour pressure:	No information available	No information available
	Vapour density:	No information available	No information available
	Relative density:	No information available	No information available
	Bulk density:	No information available	No information available
	Solubility(ies):	No information available	No information available
	Partition coefficient: n- octanol/water (log Kow):	No information available	No information available
	Auto-ignition temperature:	No information available	No information available
	Decomposition temperature:	No information available	No information available
	Viscosity:	No information available	No information available
	Explosive properties:	No information available	No information available
	Oxidising properties:	No information available	No information available
).2	Other information		

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



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Trading name:		A.F.O.G. REAC	GENT		
Product code:	AFOG-OT-X**	Date of compilation:	26 June 2019	Version:	4

10.2	Chemical stability:	The product is chemically stable under standard ambient conditions of storing and using (room temperature).
10.3	Possibility of hazardous reactions:	No dangerous reactions known.
10.4	Conditions to avoid:	Avoid heat, sparks, open flames and other ignition sources.
10.5	Incompatible materials:	No further relevant information available.
10.6	Hazardous decomposition products:	No dangerous decompostion products known.

Route o [.] exposur	Acute toxici		ogical effects							
		ty:								
-	Metho		Species	Do	se LD ₅₀ /LC ₅₀ or ATE _{mix}	Exposure t	ime	Results		
Oral:		-	-		-	-		-		
Dermal:		-	-		-	-		_		
Inhalatio	on:	-	-		-	-		-		
	Specific tarc	iet organ to	oxicity – single e	xposure (S	fot se):					
		-	Specific effects	<u> </u>	Target o	organ		Note		
Oral:		No informa	ation available		No information a	-				
Dermal:	Permal: No information available				No information a	-				
Inhalatic	on:	No informa	ation available		No information a	available	-			
	Aspiration hazard:				nation available.					
	Irritation an	d corrosion								
		Exp	osure time	Speci	es Evaluati	on Method		Note		
Skin corrosio	n/irritation:	-		-	-	-	-			
Serious damage	eye /irritation	-		-	-	-	-			
	Sensitizatio	า								
Skin sen	sitization:	1	o information a	/ailable.						
Respirat	ory sensitizat	tion: N	o information av							
126	, · · · · · · · · · · · · · · · · ·									
	Symptoms r	elated to th	e physical cher	nical and to	oxicological chara	ctoristics				



Subchronic oral

No information available

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

Trading name:				A.F.O.G	. REAGE	NT			
Product code:	A	FOG-OT-X**	Da	Date of compilation: 26 June 2019				Version:	4
Dermal exposure			-	ıh skin. May cau					
Inhalation exposi	ure:			ise respiratory	tract irrita	ation.			
Eye exposure:		May cause ey	e irritation.						
<b>.</b> .				• • • • • • •					
Кереате	ea aos	e toxicity (sub	acute, subchro	onic, chronic)					
		Dose	Exposure time	Species	Metho	bd	Evaluatior	n Note	
Subacute oral	No information available		No information available	No information available	No inform availal		No informatic available	on -	
Subacute dermal	No information available		No information available	No information available	No inform availal		No informatic available	on -	
Subacute inhalation			No information available	No information available	No information available		information informatio		
Subchronic oral	No information available		No information available	No information available	No inform availat		No informatic available	on -	
Subchronic dermal		information lable	No information available	No information available	No information available		No informatic available	on -	
Subchronic inhalation		information lable	No information available	No information available	No inform availat		No informatic available	on -	
Chronic oral	No avail	information lable	No information available	No information available	No inform availat		No informatic available	on -	
Chronic dermal	No avai	information lable	No information available	No information available	No inform availat		No informatic available	on -	
Chronic inhalation	No information available		No information available	No information available	No inform availat		No informatic available	on -	
<b>C</b>	<b>4</b>								
Specific	targe	t organ toxicit	,	xposure (STOT		Farget a	raan	Note	<u></u>
Subacute oral		No informa	Specific effect	.15	Target organ No information available			-	-
Subacute orai			tion available				n available	-	
Subacute inhalat			tion available					-	
				No information available			-		

No information available -



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

Page 10 of 16 Trading name: A.F.O.G. REAGENT Product code: AFOG-OT-X** Date of compilation: 26 June 2019 Version: 4 Subchronic dermal No information available No information available -Subchronic inhalation No information available No information available _ Chronic oral No information available No information available -Chronic dermal No information available No information available -Chronic inhalation No information available No information available _ CMR effects (carcinogenicity; mutagenicity; reproductive toxicity) Based on available data, the classification criteria are not met. Carcinogenicity: Mutagenicity in vitro: Based on available data, the classification criteria are not met. Genotoxicity: Based on available data, the classification criteria are not met. Mutagenicity in vivo: Based on available data, the classification criteria are not met. Germ cell mutagenicity: Based on available data, the classification criteria are not met. Reproductive toxicity: Based on available data, the classification criteria are not met. Summary of evaluation of the CMR Based on available data, the classification criteria are not properties: met. 11.2 Practical experiences: No information available Classification observations: Other observations: No information available 11.3 General notes: _

SECTION 12. Ecologi	cal informat	ion								
12.1 Toxicity										
Acute (short-term) toxicity	Dose	Exposure time	Species	Method	Evaluation	Note				
Fish	LC ₅₀	96 hours	No information available	No information available	No information available	-				
Crustacea:	EC ₅₀	48 hours	No information available	No information available	No information available	-				
Algae/aquatic plants	IC ₅₀	4 days	No information available	No information available	No information available	-				
Other organisms	-	-	-	-	-	-				



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Trading name:		A.F.O.G. REAG	ENT		
Product code:	AFOG-OT-X**	Date of compilation:	26 June 2019	Version:	4

Chronic (long-t toxicity	erm)	Dose	Exposur time	e	Species	Method	Eva	aluation	Note
Fish		LC ₅₀	96 hours		No information available	NoNoinformationinformationavailableavailable		mation able	-
Crustacea:		EC ₅₀	48 hours	No information available		No No information inform available availab		mation able	-
Algae/aquatic p	lgae/aquatic plants IC ₅₀		72 hours		No information available	No information available	No infori availa	mation able	-
Other organism	าร	-	-	-		-	-		-
		nd degrada	bility						
Abiotio			alf_lives		Method	Evaluatio	20		Note
	Degradation half-lives		No	information	No informatio		Note		
Marine water	No ir	nformation a	available		lable	available		-	
Fresh water	No ir	No information available		No information available		No information available		-	
Air	No ir	lo information available			information lable	No information available		-	
Soil	No ir	nformation a	available		No information No informavailable available		on	-	
Biodeg	gradati	on							
% Degradatio		Time (	days)		Method	Evaluatio	on		Note
No information available		No ir available	formation	No information available		No information available		No information available	
12.3 Bioacc	umulat	ive potentia	al						
Octano	ol-wate	er partition o	coefficient (l	og K	ow)				
Value	Conce	entration	рН	°C	Method	Evalu	uation		Note
				-	-	-		-	

										Pa	age 12 of 16	)
	g name:				A.F.O.G. REAGENT			-				
Produ	ct code:	AFOG-OT-X**	Date		e of co	mpilatio	on:	26 Jur	ne 2019		Version:	4
	Bioconcentra	ation factor (BCF)										
١	/alue	Species		N	Vethoo	d		Evaluati	on		Note	
No information No available availa		-			No information available			informati lable	on	-		
		· · ·										
Chronic ecotoxicity Value		Dose	Exposure time		Sp	Species		Method Evalu		aluation Note		9
Chronic toxicity on fish		h LC ₅₀		No information available		No information available		rmation lable			-	
	c toxicity on cea ( <i>Daphnia</i> )	EC ₅₀	No information available		No information available			rmation lable	No information available		-	
12.4	Mobility in s	oil										
	No informat		on in e	environm	nental o	compart	ment	5:				
	Surface tens											
	Value No information available	No No information information		Concentration No information No information available availab		Method Iformation able			- Note			

#### Adsorption / desorption

Transport	port A/D coefficient Henry's constant		log Kow	Evaporation rate	Method	Note
Soil-water	No i available	nformation	No information available	No information available	No information available	-
Water-air	No i available	nformation	No information available	No information available	No information available	-
Soil-air	No i available	nformation	No information available	No information available	No information available	-



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

Page 13 of 16 Trading name: A.F.O.G. REAGENT Product code: AFOG-OT-X** Date of compilation: 26 June 2019 Version: 4 Not applicable. 12.6 Other adverse effects No further relevant information 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: 15 01 10*: Packaging that contains residual hazardous substances or is contaminated with hazardous substances 13.1.3. Waste treatment - relevant information: No information available 13.1.4. Sewage disposal – relevant information: Waste must not be disposed of into the sewage system. 13.1.5. Other disposal recommendations: Do not dispose of the product's remains into the sewage system. Submit the remains to the collectors authorized by the ministry in charge. Do not dispose of the packaging into the sewage system. Submit the packaging to the collectors authorized by the ministry in charge. 13.1.6. **Relevant Community provisions:** Disposal must be made according to official regulations. **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: _



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

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



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Trading name:	A.F.O.G. REAGENT						
Product code:	AFOG-OT-X**	Date of compilation:	26 June 2019	Version:	4		

	Authorization and/or rest	rictions of use
	Authorizations:	-
	Restrictions:	-
	Other EU regulations:	<ul> <li>EC Regulation No. 1906/2007 and EC Regulation No. 1272/2008 of the European Parliament and the European Council;</li> <li>Regulation (EC) No. 1907/2006 of the European Parliament and Council on registration, evaluation, authorization and restriction of chemical substances (REACH);</li> <li>EC Regulation No. 2037/200 of the European Parliament and Council from 29 June 2000 on substances that damage the ozone layer;</li> <li>EC Regulation No. 689/2008 of the European Parliament and Council from 17 June 2008 concerning the export and import of dangerous chemicals;</li> <li>EC Regulation No. 850/2004 of the European Parliament and Council from 29 April 2004 about persistent organic pollutants;</li> <li>Directive 2008/98/EC of the European Parliament and Council of 19 November 2008 on waste and repealing certain Directives</li> </ul>
	Information according 199 guideline)	99/13/EC about limitation of emissions of volatile organic compounds (VOC-
	National legislation:	Chemicals Act, Regulation on classification, packaging and labeling of dangerous substances, Ordinance on occupational exposure limit values and on biological limit values, Regulation on categories, types and classification of waste with a waste catalog and list of hazardous waste, Ordinance on writing Material safety data sheet, Transport of Hazardous Substances Act
15.2	Chemical safety assessme	nt
	None	

SECTIO	SECTION 16. Other information				
16.1	Indication of changes:	-			
		PBT	Stable, bioaccumulative and toxic		
		vPvB	Strongly stable and strongly bioaccumulative.		
16.2	Abbreviations and acronyms:	LD ₅₀	Lethal dose, 50%		
		LC ₅₀	Lethal concentration, 50%		
		тсој	Specific target organ toxicity - single exposure		
16.3.	Key literature references and source of data:	-			
16.4. Classification and procedure used to derive the classification for mixture according to Regul 1272/2008 (CLP)			e classification for mixture according to Regulation (EC)		
Classifie	cation (	Classification procedure			
-	-	-			
16.5.	5.5. Relevant H statements (number and full text)				



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Trading name:	A.F.O.G. REAGENT						
Product code:	AFOG-OT-X**	Date of compilation:	26 June 2019	Version:	4		

	H: H315 H319	Causes skin irritaion. Causes serious eye irritation.
16.6.	Training advice:	-
		** "X" in the product code marks different volumes (different packagings of the product)
16.7.	Further information:	We are not responsible for consequences in case of failure to comply with instructions for use or improper use of the product described in this material safety data sheet.



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Trading name:					
Product code:	FMK1-OT-X**	Date of compilation:	04 July 2019	Version:	3

SECTI	ON 1: Identification of t	he substance	e/mixture	and of the company/undertaking		
1.1	Product identifier					
	Trading name:	PHOSPHON	IOLYBDIC	ACID, 1% SOLUTION		
	Chemical name:	-	-			
	Catalogue number:	FMK1-OT-X	FMK1-OT-X**			
1.2	Relevant identified use	es of the subst	tance or m	nixture and uses advised against		
	Uses:		For use v	with special staining kits.		
	Uses advised against:		Only the	identified uses are advised.		
	Reason why uses advis	ed against:	The product is intended for use only as an <i>in vitro</i> diagnostical device, registered at the Agency for Medicinal Products Medical Devices and there is no reason to use it for other purpost			
1.3	Details of the supplier	of the safety	data shee	t		
	Supplier:		BioGnost Ltd.			
	Address:		Medjugorska 59, Zagreb			
	Telephone number:		+385 1 2409997			
	Telefax.:		+385 1 2404039			
	e-mail of competent p	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 substan	Classification of the substance or mixture			
2.1.1	Classification according to R	egulation (EC) No 12	72/2008 (CLP)		
	Hazard class and cat	egory code:	Hazard statements*:		
	Not identified as hazardous	substance.	-		
2.1.2.	Additional information				
	-				
*For fu	ll text of Hazard- and EU Haza	rd-statements: see S	ECTION 16		
2.2	Label elements				
	Product identification:	PHOSPHOMOLY	BDIC ACID, 1% SOLUTION		
	Identification number: -				
	Authorization number: -				
	Hazard pictograms:	-			



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Trading name: PHC		OSPHOMOLYBDIC ACID, 1% SOLUTION			
Product code:	FMK1-OT-X**	Date of compilation:	04 July 2019	Version:	3

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

SECTION 3. Co	SECTION 3. Composition/information on ingredients					
CAS/ EC/ Index number	REACH Registration No	Weight % content (or range)	Identification name	Classification according to Regulation (EC) No 1272/2008 (CLP)		
51429-74-4/ 234-713-5/ -	-	≤ 1%	molybdophosphoric acid	Ox. Sol. 3; H272 Skin Corr. 1B; H314		

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



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Trading name: PHOSPHOMOLYBDIC ACID, 1% SOLUTION					
Product code:	FMK1-OT-X**	Date of compilation:	04 July 2019	Version:	3
According to our findings, chemical, physical and toxicological					

	Following ingestion:	properties of the substance have not been entirely tested.
4.3	Indication of any immediate	e medical attention and special treatment needed
	-	

SECTIO	SECTION 5. Firefighting measures				
5.1	Extinguishing media				
	Suitable extinguishing media: water spray, dry powder, CO ₂ or alcohol resistant foam				
	Unsuitable extinguishing media: Water with full jet				
5.2	Special hazards arising from the substance or mixture				
	Hazardous combustion products: no information available				
5.3	Advice for firefighters				
	Use a self-contained open-circuit compressed air breathing apparatus and fireproof clothing.				
5.4	Additional information				
	Cool endangered receptacles with water spray. Collect contaminated fire fighting water separately. Do not contaminate the environment with extinguishing media.				

SECTIC	SECTION 6. Accidental release measures				
6.1	Personal precautions, protective equipment and emergency procedures				
6.1.1.	For non-emergency personnel				
	Protective equipment:	Use personal protective equipment (see Section 8).			
	Accident prevention methods: Evacuate members of all non-essential personnel and those members without protective equipment. Avoid breathing vapors and avo contact with skin and eyes. Do not smoke. Keep away from ignition sources.				
	Emergency procedures:	Mark the area using proper signs.			
6.1.2.	For emergency responders:				
	Use protective equipment; in c (see Section 8).	ase of inadequate ventilation use adequate airways protective equipment			
6.2	Environmental precautions:				
	Do not dispose of in sewage, drainage system and waterways. In case of large spillage contact National Protection and Rescue Directorate (NPRD) on 112.				
6.3	Methods and material for containment and cleaning up				
6.3.1.	Bunding, covering of drains; capping procedures:	Sand protective barrier or barriers made of similar materials.			



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Trading name:	PHOSPHOMOLYBDIC ACID, 1% SOLUT				
Product code:	FMK1-OT-X**	Date of compilation:	04 July 2019	Version:	3

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

SECTIO	FION 7. Handling and storage				
7.1	Precautions for safe handling				
7.1.1.	Protection measures				
	Measures to prevent fire:		Use in well ventilated storage rooms. Keep away from sources of ignition and heat. Do not use tools that cause sparks. Do not smoke.		
	Measures to prevent aerosol and dust generation	on:	Secure proper ventilation.		
	Measures to protect the environment:		Prevent spilling into the sewage system and waterways.		
	Other measures:		Protect against electrostatic charges.		
7.1.2.	Advice on general occupational hygiene:				
	Do not eat, drink or smoke in the workspace. Thoroughly wash hands after work and before eating.				
7.2	Conditions for safe storage, including any incon	npatibilities			
	Technical measures and storage conditions:	well ventil	ghtly closed and upright set containers in a ated storage rooms at temperatures ranging 25 °C. Protect from heat and direct sunlight.		
	Packaging materials:	Manufactu	ırer's original packaging.		
	Requirements for storage rooms and vessels:	Keep away tightly clos	r from food and drink. Keep the containers sed.		
	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 ro and do not use empty containers for storing other chemicals. Do not store with incompatible materia (see Section 10).			



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Trading name:	PHOSPHOMOLYBDIC ACID, 1% SOLUTION								
Product code:	FMK1-OT-X**	Date of compilation:	04 July 2019	Version:	3				

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

SECTION 8. Expos	sure contro	ols/perso	nal protec	tion				
8.1 Control p	arameters							
Substance					ccupational exposure limit /alues/short term values		Biological limit values	
				р	pm	mg/m ³		
-		-			-	-	-	
Culture a none								
Substance name: EC No:	-	CAS No: -						
DNEL	-	CAS NO	: -					
DNEL								
					ustrial			
Route of	Acute Acute			Chronic		Chronic		
exposure:	effect	local	effect systemi		effect local		effect systemic	
Oral	-		-		-		-	
Inhalation	-		-		-		-	
Dermal	-	- I I. 1114 .	- -				-	
Critical physical pa	rameters: s	solubility,	fiammabilit	-	-	-		
					sumer			
Route of		cute			Chronic		Chronic	
exposure:	effec	t local	effect systemic		effect local		effect systemic	
Oral	-		-		-		-	
Inhalation	-		-		-		-	
Dermal	-		-		-		-	
PNEC								
Environmental protection target				PNEC				
Fresh water			I	no information available				
Freshwater sediments			I	no information available				
Marine water				1	no information available			
Marine sediments				I	no information available			
Food chain				I	no information available			
Microorganisms in sewage treatment				1	no information available			
Soil (agricultural)				1	no information available			
Air					no information available			



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Trading name:	PHOSPHOMOLYBDIC ACID, 1% SOLUTION							
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8.2	Exposure controls						
8.2.1.	Appropriate engineering controls						
	Substance/mixture related measu prevent exposure during identifie		Use the product in well ventilated rooms. Use personal protective equipment. Do not eat, drink or smoke in the workspace.				
	Structural measures to prevent 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:	Safety glasses that stick to face (EN 166) or visor in case of lower levels of concentration in air; protective gas mask that covers the entire face in case of higher levels of concentration in air.					
8.2.2.2.	Skin protection						
	Hand protection:		otective gloves have to satisfy the specification of ation (EU) 2016/425 and the related standard EN 374. Glove material: nitrile rubber Glove thickness: 0.40 mm Time until perforation: > 480 min				
	Other skin protection:	footwe entire imperr	g everyday work use cotton clothing (EN 340) and suitable ear, such as rubber boots (EN 20345) or shoes that cover the foot. In case of spilling hazard, use clothing made of meable material suitable for protection from liquid chemical . PVC, himex) and footwear made from the same material.				
8.2.2.3.	Respiratory protection:	with a	tive full face mask (EN 136) or half mask (EN 140) equipped filter for organic vapors, type "A" (boiling point >65°C) ng to EN 14387) used when concentration levels exceed GV				
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	ection 6				
	Structural measures to prevent exposure:	Use m	odern equipment.				
	Organisational measures to prevent exposure:	Adapt workpl	the work process to the required working conditions of the lace.				



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Trading name:	PHOSPHOMOLYBDIC ACID, 1% SOLUTION								
Product code:	FMK1-OT-X**	Date of compilation:	04 July 2019	Version:	3				

Technical measures to prevent See Section 6 exposure:

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

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



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Trading name:	PHOSPHOMOLYBDIC ACID, 1% SOLUTION						
Product code:	FMK1-OT-X**	Date of compilation:	04 July 2019	Version:	3		

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

11.1 Inform	ation on toxicological e	effects					
Acute t	oxicity:						
Route of exposure:	Method	Species	Dos	e LD ₅₀ /LC ₅₀ or ATE _{mix}	Exposure ti	me	Results
Oral:	No information available	-	No in availa	formation Ible	_		_
Dermal:	No information available	-	No in availa	formation Ible	_		-
Inhalation:	No information available	-	No in availa	formation Ible	_		-
Specifi	c target organ toxicity	– single expo	sure (ST	OT SE):			
	Specifi	c effects		Target o	rgan		Note
Oral:	No information a	vailable		No information available		-	
Dermal:	No information a	vailable		No information available		-	
Inhalation:	No information a	vailable		No information available -			
Aspirat	ion hazard:	N	o inform	ation available.			
Irritatic	on and corrosion						
	Exposure	time	Specie	s Evaluatio	on Method		Note
Skin corrosion/irritat	ion:	-		-	-	-	
Serious eye damage/irritation		-		-	-	-	
Sensitiz	zation						
Skin sensitizatio	n: No infor	mation availa	able.				
Respiratory sens	sitization: No infor	mation availa	abla				



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Trading name:			PHOS	PHOMOLYBD		, 1% SO	LUTION		
Product code:	۶N	/K1-OT-X**	Da	ate of compila	tion:	04 July	2019	Version:	3
Sympton	ms rel	ated to the ph	nysical, chemic	al and toxicolog	jical cha	racteristic	S		
Oral exposure:		Harmful if sw	vallowed.						
Dermal exposure	:	Harmful if ab	sorbed throug	gh skin. May cau	ıse skin i	rritation.			
Inhalation exposi	ure:	Harmful if inl	haled. May ca	use respiratory t	ract irrit	ation.			
Eye exposure:		May cause ey	ye irritation.						
Repeate	ed dos	e toxicity (sub	acute, subchro	onic, chronic)					
I I		Dose	Exposure time	Species	Metho	od	Evaluation	Note	
Subacute oral	No avail	information able	No information available	No information available	No inforn availa	nation ble	No informatio available	n -	
Subacute dermal	No avail	information able	No information available	No information available	No inforn availa	nation ble	No informatio available	n -	
Subacute inhalation	No avail	information able	No information available	No information available	No inforn availa	nation ble	No informatio available	n -	
Subchronic oral	No avail	information able	No information available	No information available	No inforn availa	nation ble	No informatio available	n -	
Subchronic dermal	No avail	information able	No information available	No information available	No inforn availa	nation ble	No informatio available	n -	
Subchronic inhalation	No avail	information able	No information available	No information available	No inforn availa	nation ble	No informatio available	n -	
Chronic oral	No avail	information able	No information available	No information available	No inforn availa	nation ble	No informatio available	n -	
Chronic dermal	No avail	information able	No information available	No information available	No inforn availa	nation ble	No informatio available	n -	
Chronic inhalation	No avail	information able	No information available	No information available	No inforn availa	nation ble	No informatio available	n -	
<b>C</b>	<b>.</b>								
Specific	target	organ toxicit		exposure (STOT	-	<b>T</b> /		<b>N</b> 1 .	
Subscuts and		No informa-	Specific effe	CTS		Target or	-	Note	
Subacute oral Subacute dermal			ition available			ormation ormation		-	



FMK1-OT-X**

Trading name:

Product code:

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 Date of compilation:
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11.3	General notes:						
	Other observat	tions:	No informa	tion available			
	Classification observations:			tion available			
11.2	Practical exper						
	Summary of properties:	evaluation of the CM	Based on available data, the classification criteria are not met.         CMR       Based on available data, the classification criteria are not met.				
	Reproductive t	oxicity:					
	Germ cell muta		Based on availa	ble data, the classification c	riteria are not met.		
	Mutagenicity i	n vivo:	Based on available data, the classification criteria are not met.				
	Mutagenicity <i>in vitro</i> : Genotoxicity:		Based on availa	ble data, the classification c	riteria are not met.		
			Based on available data, the classification criteria are not met.				
	Carcinogenicit	y:	Based on available data, the classification criteria are not met.				
	CMR effects (c	arcinogenicity; mutagenicity	; reproductive t	oxicity)			
Chronic	inhalation	No information available		No information available	-		
	dermal	No information available		No information available	-		
Chronic		No information available		No information available	-		
	onic inhalation	No information available		No information available	-		
	onic dermal	No information available		No information available	-		
	nronic oral No information available			No information available	-		
	te inhalation	No information available		No information available	-		

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



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Trading name:	PHOSPHOMOLYBDIC ACID, 1% SOLUTION							
Product code:	FMK1-OT-X**	Date of compilation:	04 July 2019	Version:	3			

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	-	-	-	-	-	-

12.2	Persiste	nce and degradability			
	Abiotic	degradation			
		Degradation half-lives	Method	Evaluation	Note
Marine	water	No information available	No information available	No information available	-
Fresh v	vater	No information available	No information available	No information available	-
Air N		No information available	No information available	No information available	-
Soil		No information available	No information available	No information available	-
	Biodegr	radation			
% D	egradatio	n Time (days)	Method	Evaluation	Note
No inf	ormation	No information available	No information available	No information available	No information available

12.3	Bioaccumulative potential							
	Octanol-water partition coefficient (log Kow)							
Value Concentration pH °C Method Evaluation					Note			
-	-	-	-	-	-	-		



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Trading n	ame:			Ρ	HOSPH	омо	LYBDIC	ACID,	1% SC	OLUTIO			
Product c	ode:	FMK:	1-OT-X**		Date	of co	mpilatio	on:	04 July	/ 2019	1	Version:	3
Bi	ioconcen	tration	factor (BCF)										
Valu			Species		N	/lethoo	1	E١	aluatio	on		Note	
No informa available	ation	No availa	inform ble	ation	No info availabl		on	No info availab		on	-		
Cl	hronic ed	cotoxici	ity										
Ň	Value		Dose	-	oosure ime	Spe	ecies	Meth	nod	Evalua	ation	Note	
Chronic to	xicity on	fish	LC ₅₀	No infor availa	mation able	No inforr availa	mation able	No inform availab		No informa availab		-	
Chronic to: crustacea (	-	')	EC ₅₀	No infor availa	mation able	No inforr availa	mation able	No inform availab		No informa availab		-	
12.4 M	1obility ir	n soil	·		· · ·								
-	<b>,</b>		ted distributi	on in e	environm	ental o	compart	ments:					
N	o inform	ation a											
Si	urface te	nsion:											
N	Value	N	°C	C	oncentra	tion		Metho	d			Note	
in	o Iformatic vailable	on in	o formation vailable		informat ailable	tion	No inf availat	ormation ble	ו	-			
A	dsorptio		•										
Transport			efficient constant	lo	og Kow	E١	/aporati	on rate		Method		Note	
Soil-water	No availa		nformation	No ir availa	nformatic able		o inform ailable	ation	No ir availa	formatic able		-	
Water-air	No availa		nformation	No ir availa	nformatic able		o inform ailable	ation	No ir availa	iformatic able	on	-	



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Trading	g name:		PHOSPHO	MOLYBDIC ACI	D, 1% SOLUTION					
Produc	t code:	ode: FMK1-OT-X** Date of compilation: 04		04 July 2019	Version:	3				
Soil-air	No avail	information able	No information available	No information available	No information available	-				
12.5	Results of	PBT and vPvB asses	sment							
12.5	Not applic		Sillen							
	Not applic									
12.6	Other adv	erse effects								
	No furthe	r relevant information	on available.							
	-	osal consideration	S							
13.1	1 Waste treatment methods									
13.1.1.	Product	/Packaging disposa	<b>.</b>							
10.1.1.		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: 15 01 10*: Packaging that contains residual hazardous substances or is contaminated with hazardous									
	substan		ontains residual h	azardous substan	ces or is contaminate	ed with hazardo	ous			
13.1.3.	Waste ti	reatment – relevant	information:							
		mation available								
13.1.4.	Sewage	disposal – relevant	information:							
	Waste n	nust not be dispose	d of into the sewa	ge system.						
1215	<u></u>									
13.1.5.	Other disposal recommendations: Do not dispose of the product's remains into the sewage system. Submit the remains to the collectors									
	authoriz	ed by the ministry i	n charge. Do not	dispose of the pa	ckaging into the sewa					
13.1.6.		the packaging to the collectors authorized by the ministry in charge. Relevant Community provisions:								
		I must be made acc		egulations.						
	: •									
SECTIO	N 14 TRAN	ISPORT INFORMA	TION							
	Transport	ing/shipment by roa	ad (ADR)							
UN num	nber:		Not subject t	o transport regula	ations					
UN pro	per shippin	g name:	-							



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Trading name:		PHOSPHOMOLYBDIC ACI	D, 1% SOLUTION		
Product code:	FMK1-OT-X**	Date of compilation:	04 July 2019	Version:	3
	1		1	:	
Transport hazard cl	ass(es):	-			
Packing group:		-			
Environmentally ha	zardous:	-			
Special precautions	for user:	-			
Transporti	ng/shipment by rail (RI	D)			
UN number:		Not subject to transport regul	ations		
UN proper shipping	g name:	-			
Transport hazard cl	ass(es):	-			
Packing group:		-			
Environmentally ha	zardous:	-			
Special precautions	for user:	-			
Inland wat	erway transport (ADN)				
UN number:		Not subject to transport regul	ations		
UN proper shipping	g name:	-			
Transport hazard cl	ass(es):	-			
Packing group:		-			
Environmentally ha	zardous:	-			
Special precautions	s for user:	-			
Transporti	ng/shipment by sea (IN	1DG)			
UN number:		Not subject to transport regul	ations		
UN proper shipping	g name:	-			
Transport hazard cl	ass(es):	-			
Packing group:		-			
Environmentally ha	zardous:	-			
Special precautions	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-TI/IATA-DGR)			
UN number:		Not subject to transport regul	ations		
UN proper shipping	g name:	-			
Transport hazard cl	ass(es):	-			
Packing group:		-			
Environmentally ha	zardous:	-			
Special precautions	s for user:	-			
Further information	n: –				



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Trading name:		PHOSPHOMOLYBDIC ACI	D, 1% SOLUTION		
Product code:	FMK1-OT-X**	Date of compilation:	04 July 2019	Version:	3

SECTI	ON 15. Regulatory informa	ation			
15.1	Safety, health and environmental regulations/legislation specific for the substance or mixture				
	EU regulations				
	Authorization and/or rest	rictions of use			
	Authorizations:	-			
	Restrictions:	-			
		EC Regulation No. 1906/2007 and EC Regulation No. 1272/2008 of the European Parliament and the European Council; Regulation (EC) No. 1907/2006 of the European Parliament and Council on registration, evaluation, authorization and restriction of chemical substances (REACH);			
	Other EU regulations:	<ul> <li>EC Regulation No. 2037/200 of the European Parliament and Council from 29 June 2000 on substances that damage the ozone layer;</li> <li>EC Regulation No. 689/2008 of the European Parliament and Council from 17 June 2008 concerning the export and import of dangerous chemicals;</li> <li>EC Regulation No. 850/2004 of the European Parliament and Council from 29 April 2004 about persistent organic pollutants;</li> <li>Directive 2008/98/EC of the European Parliament and Council of 19 November 2008 on waste and repealing certain Directives</li> </ul>			
	Information according 19 guideline)	99/13/EC about limitation of emissions of volatile organic compounds (VOC-			
	National legislation:	Chemicals Act, Regulation on classification, packaging and labeling of dangerous substances, Ordinance on occupational exposure limit values and on biological limit values, Regulation on categories, types and classification of waste with a waste catalog and list of hazardous waste, Ordinance on writing Material safety data sheet, Transport of Hazardous Substances Act			
15.2	Chemical safety assessme	ent			
	None				

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



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Trading name:		PHOSPHOMOLYBDIC ACI	D, 1% SOLUTION		
Product code:	FMK1-OT-X**	Date of compilation:	04 July 2019	Version:	3

16.4.	Classification and procedure used to derive the classification for mixture according to Regulation (EC) 1272/2008 (CLP)					
Classifi	cation	Classification procedure				
-		-				
16.5.	Relevant H statements (numl	per and full text)				
	H: H272	May intesify fire ; oxidiser.				
	H314	Causes severe skin burns and eye damage.				
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:		HCL REAGENT, A	F.O.G.		
Product code:	HCLAF-OT-X**	Date of compilation:	27 June 2019	Version:	4

SECTI	ON 1: Identification of t	he substance	e/mixture	and of the company/undertaking	
1.1	Product identifier				
	Trading name:	HCL REAGE	NT, A.F.O.	G.	
	Chemical name:	-			
	Catalogue number:	HCLAF-OT-	X**		
1.2	Relevant identified use	s of the subs	tance or n	nixture and uses advised against	
	Uses:		For use	with special staining kits in histopathology.	
	Uses advised against:		Only the	e identified uses are advised.	
	Reason why uses advis	ed against:	The product is intended for use only as an <i>in vitro</i> diagnos medical device, registered at the Agency for Medicinal Products a Medical Devices and there is no reason to use it for other purpose		
1.3	Details of the supplier	of the safety	data shee	t	
	Supplier:		BioGnost Ltd.		
	Address:		Medjugorska 59, Zagreb		
	Telephone number:		+385 1 2409997		
	Telefax.:		+385 1 2404039		
	e-mail of competent p	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:			-	

SECTIC	CTION 2. Hazards identification					
2.1	Classification of the substance	or mixture				
2.1.1	Classification according to Reg	gulation (EC) No 12	272/2008 (CLP)			
	Hazard class and cated	jory code:	Hazard statements*:			
	Flam. Liq. 2		H225			
2.1.2.	Additional information					
	-					
*For fu	ll text of Hazard- and EU Hazard	-statements: see S	SECTION 16			
2.2	Label elements					
	Product identification:	HCL REAGENT,	A.F.O.G.			
	Identification number:	-				
	Authorization number:	-				



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Trading name:	HCL REAGENT, A.F.O.G.				
Product code:	HCLAF-OT-X**	Date of compilation:	27 June 2019	Version:	4

	Hazard pictograms:	GHS02
	Signal word:	Danger
	Hazard statements:	H225 Highly flammable liquid and vapor.
	Precautionary statements:	<ul> <li>P210 Keep away from heat/sparks/open flames/hot surfaces Do not smoke.</li> <li>P233 Keep container tightly closed.</li> <li>P280 Wear protective gloves/protective clothing/eye/protection/face protection.</li> </ul>
	Supplemetal hazard information (EU):	-
2.3	Other hazards	
	-	

SECTION 3. Co	SECTION 3. Composition/information on ingredients						
CAS/ EC/ Index number	REACH Registration No	Weight % content (or range)	Identification name	Classification according to Regulation (EC) No 1272/2008 (CLP)			
64-17-5/ 200-578-6/ 603-002-00-5	01-2119457610-43- xxxx	≥ 50%	ethanol	Flam. Liq. 2; H225			
7647-01-0/ 231-595-7/ 017-002-00-2	01-2119484862-27- xxxx	< 1%	hydrochloric acid, 37%	Skin Corr. 1A; H314 Acute Tox. 3; H331			

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



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Trading name:	HCL REAGENT, A.F.O.G.				
Product code:	HCLAF-OT-X**	Date of compilation:	27 June 2019	Version:	4

	Following ingestion:	Rinse the mouth thoroughly with 1-2 glasses of water. Immediately consult a physician and show the container or label. In case of swallowing large quantities, transport the afflicted person to the hospital.		
	Self-protection of the first aider:	-		
4.2	Most important symptoms and eff	fects, both acute and delayed		
	Following inhalation:	Depending on concentration and exposure time, it may lead to mucosa irritation, cough, and dyspnea.		
	Following skin contact:	Depending on concentration and exposure time, it may lead to irritation, rash, skin drying and skin cracking.		
	Following eye contact:	Depending on concentration and exposure time, it may lead to irritation, tearing, redness and pain.		
	Following ingestion:	Depending on concentration and exposure time, it may lead to stinging and digestive mucus damage, abdominal pain, nausea, vomiting.		
4.3	Indication of any immediate medi	Indication of any immediate medical attention and special treatment needed		
	-			

SECTIO	SECTION 5. Firefighting measures				
5.1	Extinguishing media				
	Suitable extinguishing media:	all fire - water spray, dry powder, CO ₂ ge fire - water spray or alcohol resistant foam			
	Unsuitable extinguishing media: Wa	ter with full jet			
5.2	Special hazards arising from the substa	nce or mixture			
	Hazardous combustion products: For	mation of toxic gases is possible during heating or in case of fire.			
5.3	Advice for firefighters				
	Use a self-contained open-circuit compressed air breathing apparatus and fireproof clothing.				
5.4	Additional information				
	Cool endangered receptacles with wate contaminate the environment with extin	er spray. Collect contaminated fire fighting water separately. Do not nguishing media.			

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



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

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Trading name:	HCL REAG		ENT, A.F.O.G.		
Product code:	HCLAF-OT-X**	Date of compilation:	27 June 2019	Version:	4

	Emergency procedures:	Mark the area using proper signs.	
6.1.2.	For emergency responders:		
	Use protective equipment; in (see Section 8).	case of inadequate ventilation use adequate airways protective equipment	
6.2	Environmental precautions:		
	Do not dispose of in sewage, Protection and Rescue Directo	drainage system and waterways. In case of large spillage contact National prate (NPRD) on 112.	
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:	Where possible, the substance can be absorbed by using absorbing material. Place the waste material in tightly closed impermeable containers. Store the substance in well ventilated storage rooms until disposal. Submit for disposal to the legal persons authorized by the Ministry of Environmental and Nature Protection. After disposal of the products, wash the area and and involved materials with water.	
6.3.3.	Other information:	Secure proper ventilation. Do not use incompatible materials (see Section 10).	
6.4	Reference to other sections		
	See Section 7 for information on safe handling. See Section 8 for information on personal protection equipment. See Section 13 for disposal information.		

SECTIC	ION 7. Handling and storage					
7.1	Precautions for safe handling					
7.1.1.	Protection measures					
	Measures to prevent fire:		Use in well ventilated storage rooms. Keep away from sources of ignition and heat. Do not use tools that cause sparks. Do not smoke.			
	Measures to prevent aerosol and dust generatio	า:	Secure proper ventilation.			
	Measures to protect the environment:		Prevent spilling into the sewage system and waterways.			
	Other measures:		Protect against electrostatic charges.			
7.1.2.	Advice on general occupational hygiene:					
	Do not eat, drink or smoke in the workspace. Thoroughly wash hands after work and before eating.					
7.2	Conditions for safe storage, including any incompatibilities					
	Technical measures and storage conditions:	well ventila	htly closed and upright set containers in a ated storage rooms at temperatures ranging 25 °C. Protect from heat and direct sunlight.			



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Trading name:	HCL REAGENT, A.F.O.G.				
Product code:	HCLAF-OT-X**	Date of compilation:	27 June 2019	Version:	4

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

SECTION 8. Exposure controls/personal protection								
8.1 Control p	parameter	ſS						
Substance		CA	CAS No		Occupational exposure limit values/short term values		Biological limit values	
				рр	m	mg/m ³		-
Ethanol		64	-17-5	100	0/-	1900/-	-	
Hydrogen chlorid	e	764	7-01-0	5/3	10	8/15	-	
Substance name:	-					•		
EC No:	-	CAS No	): -					
DNEL								
				Indu	strial			
Route of	A	cute	Acu	ite		Chronic		Chronic
exposure:	effe	ct local	effect sy	/stemic		effect local		effect systemic
Oral	-		-		-			-
Inhalation	-		-		-			950 mg/m ³ (ethanol)
Dermal	-		-		-			343 mg/kg (ethanol)
Critical physical pa	arameters	: solubility,	flammabil	ity, corro	sivity:	-		
				Cons	umer			1
Route of		Acute	Αςι	ute		Chronic		Chronic
exposure:	eff	ect local	effect sy	/stemic		effect local		effect systemic
Oral	-		-		-			-
Inhalation	-		-		-			114 mg/m ³ (ethanol)
Dermal	-		-		-			206 mg/kg (ethanol)



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Trading name:	HCL REAGENT, A.F.O.G.				
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PNEC					
Environm	ental protection target		PNEC		
Fresh wat	er		0.96 mg/l (ethanol)		
Freshwate	er sediments		3.6 mg/kg (ethanol)		
Marine w	ater		0.79 mg/l (ethanol)		
Marine se	ediments		no information available		
Food cha	in		no information available		
Microorg	anisms in sewage treatment		no information available		
Soil (agrio	cultural)		0.63 mg/kg (ethanol)		
Air			no information available		
8.2	Exposure controls				
8.2.1.	Appropriate engineering controls				
	Substance/mixture related measures to prevent exposure during identified uses:Structural measures to prevent exposure:		Use the product in well ventilated rooms. Use personal protective equipment. Do not eat, drink or smoke in the workspace.		
			In accordance with Section 7.		
	Organisational measures to prever exposure:	nt	Organization of work in order to reduce other worker's influence during work process.		
	Technical measures to prevent exp	oosure:	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 of	glasses that stick to face (EN 166) or visor in case of lower of concentration in air; protective gas mask that covers the face in case of higher levels of concentration in air.		
8.2.2.2.	Skin protection				
	Hand protection:	The protective gloves have to satisfy the specification of Regulation (EU) 2016/425 and the related standard EN 37 Glove material: nitrile rubber Glove thickness: 0.40 mm Time until perforation: > 480 min			
	Other skin protection:	footwe entire imperr	everyday work use cotton clothing (EN 340) and suitable ear, such as rubber boots (EN 20345) or shoes that cover the foot. In case of spilling hazard, use clothing made of neable material suitable for protection from liquid chemicals PVC, himex) and footwear made from the same material.		



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Trading name:	HCL REAGENT, A.F.O.G.				
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8.2.2.3.	Respiratory protection:	Protective full face mask (EN 136) or half mask (EN 140) equipped with a filter for organic vapors, type "A" (boiling point >65°C) acording to EN 14387) used when concentration levels exceed GVI.
8.2.2.4.	Thermal hazards:	No information available
8.2.3.	Environmental exposure controls	
	Substance/mixture related measures to prevent exposure:	See Section 6
	Structural measures to prevent exposure:	Use modern equipment.
	Organisational measures to prevent exposure:	Adapt the work process to the required working conditions of the workplace.
	Technical measures to prevent exposure:	See Section 6

Information on basic p	physical and c	hemical properties	
		Value	Method
Physical state:		liquid	No information available
Colour:		colourless	No information available
Odour:		biting	No information available
Odor threshold:		No information available	No information available
pH:		1.2 -1.4	No information available
Melting point / freezir	ng point;	No information available	No information available
Initial boiling point an range:	d boiling	No information available	No information available
Flash point:		23 °C	No information available
Evaporation rate:		No information available	No information available
Flammability (solid, ga	is):	No information available	No information available
Upper/lower flammab explosive limits:	ility or	No information available	No information available
Vapour pressure:		No information available	No information available
Vapour density:		No information available	No information available
Relative density:		No information available	No information available
Bulk density:		No information available	No information available
Solubility(ies):		No information available	No information available
Partition coefficient: n octanol/water (log Kov		No information available	No information available
Auto-ignition tempera	ature:	No information available	No information available



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Trading name:	HCL REAGENT, A.F.O.G.				
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	Decomposition temperature:	No information available	No information available
	Viscosity:	No information available	No information available
	Explosive properties:	No information available	No information available
	Oxidising properties:	No information available	No information available
9.2	Other information		
	-		

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

SECTION 11. To	oxicological info	rmation					
11.1 Inform	ation on toxicolog	jical effects					
Acute t	toxicity:						
Route of exposure:	Method	Species	Do	se LD ₅₀ /LC ₅₀ or ATE _{mix}	E	xposure tim	e Results
Oral:	-	rat (ethanol	)	LD ₅₀		-	7.060 mg/kg
Dermal:	-	-		-		-	-
Inhalation:	-	rat (ethanol	)	LC ₅₀		4 h	20.000 mg/l
÷							
Specifi	c target organ tox	icity – single ex	posure (S	TOT SE):			
	S	pecific effects		Targe	t organ		Note
Oral:	No informat	ion available		No information	n availa	ble -	
Dermal:	No informat	ion available	No information available -				
Inhalation:	No informat	ion available	No information available -				
Aspirat	ion hazard:		No inform	nation available			
i							
Irritatio	on and corrosion						
	Expo	sure time	Speci	es Evalua	ation	Method	Note
Skin corrosion/irritat	ion:		-	-		-	-



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Trading name:				HCL REAGENT, A.F.O.G.						
Product code:	H	CLAF-OT-X*	* D	ate of compila	ation:	27 Jur	ie 2019	Version:	4	
Serious eye damage/irritatior	٦	-	-		-	-		-		
Sensitiza	ation									
Skin sensitization	n:	No in	formation ava	ilable.						
Respiratory sensi	tizatic	on: No in	formation ava	ilable.						
	ms rel			cal and toxicolo	gical cha	racterist	ics			
Oral exposure:			tion available.							
Dermal exposure			tion available.							
Inhalation expose	ure:		tion available.							
Eye exposure:		NO Informa	tion available.							
Repeate	ed dos	e toxicity (su	bacute, subchr	onic, chronic)						
		Dose	Exposure time	Species	Meth	od	Evaluation	Note		
Subacute oral	No avail	information able	No information available	No information available	No inforr availa	mation able	No informatio available	n -		
Subacute dermal	No avail	information able	No information available	No information available	No inforr availa	mation able	No informatio available	n -		
Subacute inhalation	No avail	information able	No information available	No information available	No inforr availa	mation able	No informatio available	n -		
Subchronic oral	No avail	information able	No information available	No information available	No inforr availa	mation able	No informatio available	n -		
Subchronic dermal	No avail	information able	No information available	No information available	No inforr availa	mation able	No informatio available	n -		
Subchronic No informatio inhalation available			No information available	No information available	No inforr availa	mation able	No informatio available	n -		
Chronic oral	No avail	information able	No information available	No information available	No inforr availa	mation able	No informatio available	n -		
Chronic dermal	No avail	information able	No information available	No information available	No inforr availa	mation able	No informatio available	n -		



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Trading name:		HCL REAGENT, A	.F.O.G.		
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Chronic inhalatio	No n ava	information iilable	No information available	No information available	No information available	No informatio available	on -	
	Specific targ	et organ toxicit	v – repeated e	xposure (STOT	RE):			
	<u>-</u>		Specific effec	•	Target o	rgan	[	Note
Subacute	oral	No informa	tion available		No information	-	-	
Subacute	e dermal	No informa	tion available		No informatior	n available	_	
Subacute inhalation No informat		tion available		No informatior	n available	-		
Subchronic oral No inf		No informa	tion available		No informatior	n available	-	
Subchronic dermal		No informa	tion available		No information	n available	-	
		No informa	ition available		No informatior	n available	-	
Chronic o	oral	No informa	tion available		No information	n available	-	
Chronic c	dermal	No informa	ation available		No information available		-	
Chronic i	nhalation	No informa	tion available		No information	n available	-	
	Carcinogenic Mutagenicity Genotoxicity	in vitro:		Based on available data, the classification criteria are not metBased on available data, the classification criteria are not metBased on available data, the classification criteria are not met				
	Mutagenicity				able data, the cla			
	Germ cell mi Reproductive				able data, the cla able data, the cla			
	Reproductiv	e toxicity.		based off avail		SSIIICATION		not met.
	Summary o properties:	of evaluation	of the CN	1R Based on met.	available data, t	he classifica	ation crite	eria are not
11.2	Practical exp	eriences:						
	Classification observations: Other observations:			No information available				
				No inform	nation available			
11.3	General note	25:						
	-							

SECTIO	ON 12. Ecological information
12.1	Toxicity



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

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Trading name:		HCL REAGENT, A	A.F.O.G.		
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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	-	-	-	-	-	-

	000	ana aegradabinty			
Abioti	c degr	radation			
	D	egradation half-lives	Method	Evaluation	Note
Marine water		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	-
1					
Biodeg	gradat	ion			
% Degradation		Time (days)	Method	Evaluation	Note
No information available		No information available	No information available	No information available	No information available



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Tradir	ng name:					HCL	REAGE	NT, A.F.O.G.			ge 12 01 10	
Produ	ict code:	HCL	CLAF-OT-X** Date of compilation:			on: 27 Jur	ne 2019	V	'ersion:	4		
12.3	Bioaccun	nulative	potential									
	Octanol-	water pa	artition coe	efficient	(log Kow	)						
Valu	ue Ce	oncentra	ation	рН	°C	M	ethod	Evalu	ation		Note	
-			-			-		-		-		
	Bioconce	entration	n factor (BC	F)								
	Value		Species		١	Methoo	b	Evaluati	on		Note	
	No information available		info able	mation	No information available		on	No information available		-		
	Chronic e	ecotoxic	ity									
	Value		Dose		oosure time	Sp	ecies	Method	Evaluat	tion	Note	
Chroni	ic toxicity o	n fish	LC ₅₀	No infor avail	rmation lable	No infori availa	mation able	No information available	No informat available		-	
	ic toxicity or cea ( <i>Daphni</i>		EC ₅₀	No infor avail	rmation lable	No infor availa	mation able	No information available	No informat available		-	
12.4	Mobility	in soil										
	Known o	r predic	ted distrib	ution in o	environm	nental o	compart	ments:				
	No inforr	mation a	available									
	Surface t	ension:										
	Value	<u>;                                    </u>	°C	C	Concentra	ation	1	Method			Note	
	No informati available	ion in	lo nformation vailable		o informa ailable	ition	No inf availat	ormation ple	-			



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Trading name:		HCL REAGENT,	A.F.O.G.		
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	Adsorption / desorption								
Transpo	rt A/D coefficient Henry's constant	log Kow	Evaporation rate	Method	Note				
Soil-wat	er No information available	No information available	No information available	No information available	-				
Water-a	ir No information available	No information available	No information available	No information available	-				
Soil-air	No information available	No information available	No information available	No information available	-				
10 5									
12.5	Results of PBT and vPvB ass	essment							
	Not applicable.								
12.6	Other adverse effects								
12.0	No further relevant information	ion available							
SECTIO	N 13. Disposal consideratio	ns							
13.1	Waste treatment methods								
13.1.1.	Product/Packaging disposal:								
	Submit for disposal to the Protection.	legal person autho	rized by the Ministr	y of Environmental	and Nature				
13.1.2.	Waste codes/waste designations according to Law:								
	15 01 10*: Packaging that substances	contains residual h	azardous substance	s or is contaminate	d with hazardous				
13.1.3.	Waste treatment – relevar	t information:							
	No information available								
13.1.4.	Sewage disposal – relevan								
	Waste must not be dispos	ed of into the sewa	ige system.						
13.1.5.	Other disposal recommen	dations:							
	Do not dispose of the product's remains into the sewage system. Submit the remains to the collectors authorized by the ministry in charge. Do not dispose of the packaging into the sewage system. Submit the packaging to the collectors authorized by the ministry in charge.								
	Relevant Community provisions:								



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Disposal must be made accord	ing to official regulations.
SECTION 14 TRANSPORT INFORMATIO	N
Transporting/shipment by road (	ADR)
UN number:	1170
UN proper shipping name:	Ethanol solution
Transport hazard class(es):	3
Packing group:	Ш
Environmentally hazardous:	-
Special precautions for user:	-
Transporting/shipment by rail (R	ID)
UN number:	1170
UN proper shipping name:	Ethanol solution
Transport hazard class(es):	3
Packing group:	П
Environmentally hazardous:	-
Special precautions for user:	-
Inland waterway transport (ADN)	
UN number:	1170
UN proper shipping name:	Ethanol solution
Transport hazard class(es):	3
Packing group:	Ш
Environmentally hazardous:	-
Special precautions for user:	-
Transporting/shipment by sea (IN	MDG)
UN number:	1170
UN proper shipping name:	Ethanol solution
Transport hazard class(es):	3
Packing group:	Ш
Environmentally hazardous:	-
Special precautions for user:	-
Transport in bulk according to Annex II of MARPOL 73/78 and the IBC code:	-
Transporting/shipment by air (IC	AO-TI/IATA-DGR)
UN number:	1170
UN proper shipping name:	Ethanol solution



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Trading name:		HCL REAGENT, A	NT, A.F.O.G.		
Product code:	HCLAF-OT-X**	Date of compilation:	27 June 2019	Version:	4

Transport hazard class(es):	3	
Packing group:	Π	
Environmentally hazardous:	-	
Special precautions for user:	-	
Further information: -		

15.1	Safety, health and environmental regulations/legislation specific for the substance or mixture			
	EU regulations			
	Authorization and/or rest	rictions of use		
	Authorizations:	-		
	Restrictions:	-		
	Other EU regulations:	<ul> <li>EC Regulation No. 1906/2007 and EC Regulation No. 1272/2008 of the European Parliament and the European Council;</li> <li>Regulation (EC) No. 1907/2006 of the European Parliament and Council on registration, evaluation, authorization and restriction of chemical substances (REACH);</li> <li>EC Regulation No. 2037/200 of the European Parliament and Council from 29 June 2000 on substances that damage the ozone layer;</li> <li>EC Regulation No. 689/2008 of the European Parliament and Council from 17 June 2008 concerning the export and import of dangerous chemicals;</li> <li>EC Regulation No. 850/2004 of the European Parliament and Council from 29 April 2004 about persistent organic pollutants;</li> <li>Directive 2008/98/EC of the European Parliament and Council of 19</li> </ul>		
	Information according 19 guideline)	November 2008 on waste and repealing certain Directives 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 assessment			
	None			

SECTION 16. Other information		
16.1	Indication of changes:	-



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Trading name:			HCL REAGENT, A.F.O.G.						
Product code: HCLAF-OT-X**			HCLAF-OT-X**	Date of compilation:		27 June 2019	Version:	4	
			1				1	ĩ	
				PBT	Stable, bioaccumulative and toxic				
				vPvB	PvB Strongly stable and strongly bioaccumulative.				
16.2	Abb	Abbreviations and acronyms:		LD ₅₀	LD ₅₀ Lethal dose, 50%				
				LC ₅₀	50 Lethal concentration, 50%				
				TCOJ	Specific target	Specific target organ toxicity - single exposure			
16.3.		Key literature references and source of data:							
16.4.		sificati 2/2008	•	ised to a	derive the classification for	mixture according t	o Regulation (EC	)	
Classif	icatior	I		Classific	ation procedure				
-	-		-						
16.5.	Relevant H statements (r			er and f	ull text)				
	H		;	Highly f	lammable liquid and vapo	r.			
	H:	H314	L	Causes severe skin burns and eye damage.					
		H331		Toxic if inhaled.					
16.6.	Trai	ning a	dvice:	-					
				** "X" in the product code marks different volumes (different packagings of the product)					
16.7.	Fur	ir		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

-