

LADEWIG TRICHROME KIT

The kit contains:

Ferri reagent, Weigert B
Hematoxylin, Weigert A
Ladewig reagent
Phosphotungstic acid, 1% solution



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Trading name:	FERRI REAGENT, WEIGERT B						
Product code:	FR-OT-X**	Revision date:	21 Dec 2022	Version:	5		

1.1.	Product identifier				
	Trading name:	FERRI REAGENT, WEIGERT B			
	Chemical name:	-			
	Catalogue number:	FR-OT-X**			
1.2.	Relevant identified us	es of the subst	tance or mix	xture and uses advised against	
	Uses:		For use in	special staining kits.	
	Uses advised against:		Only the i	dentified uses are advised.	
	Reason why uses advi	sed against:	medical d	uct is intended for use only as an <i>in vitro</i> diagnostic evice, registered at the Agency for Medicinal Products and Devices and there is no reason to use it for other purposes	
1.3.	Details of the supplier	Details of the supplier of the safety data sheet			
	Supplier: Bi		ioGnost Ltd.		
	Address:	М	Medjugorska 59, Zagreb		
	Telephone number: +		+385 1 2409997		
	Fax no.: +		+385 1 2404039		
	e-mail of competent p	person: <u>m</u>	msds@biognost.hr		
	National contact:	-			
1.4.	Emergency telephone number				
	National Protection ar	nd Rescue Dire	ectorate:	112	
	Medical information:			+385 1 2348 342	
	Other information:			-	

SECTIO	SECTION 2 HAZARDS INFORMATION						
2.1.	Classification of the substance or mixture						
2.1.1.	Classification according to Regula	tion (EC) No 12	72/2008 (CLP)				
	Hazard class and category	code:		Hazard statements*:			
	Not identified as hazardous substance						
2.1.2.	Additional information						
	-						
*For ful	l text of Hazard- and EU Hazard-sta	atements: see Se	ection 16				
2.2.	Classification according to EC Dire	ective Nr. 1272/	2008 CLP)				
	Product identification:	FERRI REAGEN	NT, WEIGERT B				
	Identification number: -						
	Authorization no.:						
	Hazard pictograms:	-					



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

SECTION 3 COMPOSITION/INFORMATION ON INGREDIENTS						
CAS/ EC/ Index no.	REACH Registration No	Weight % content (or range)	Identification name	Classification according to Regulation (EC) No 1272/2008 (CLP)		
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. 1B; H314 STOT SE 3; H335		

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



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		Inhelation of large amounts of vanors in inadequately ventilated norimeter
	Following inhalation:	Inhalation of large amounts of vapors in inadequately ventilated perimeter may cause coughing, sneezing, headache and nausea.
	Following skin contact:	Slight irritation. After short exposure, resorption effects are not likely. Longterm exposure may cause drying, cracking and tingling sensation of skin.
	Following eye contact:	Direct eye contact may cause slight to moderate irritation, lacrimation and burning sensation.
	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, protective ed	quipment and emergency procedures				
6.1.1.	For non-emergency personnel	For non-emergency personnel				
	Protective equipment: Use personal protective equipment (see Section 8).					
	Accident prevention methods: Evacuate members of all non-essential personnel and those members without protective equipment. Remove all sources of sparks and ignition. Do not smoke.					
	Emergency procedures: Mark the area using proper signs.					
6.1.2.	For emergency responders:					
	Wear protective equipment (see Section 8).					



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

SECTIO	ON 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. The	proughly wash hands after work and before eating.			
7.2.	Conditions for safe storage, including any incomp	patibilities			
	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.			



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	Further ir	ner 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 e	nd use(s)								
	Recomm	endations:				-				
	Industrial	sector spe	cific solutio	ns:		-				
	ON 8 EXPO		TROLS/PER	RSONAL	PROTI	ECTION				
8.1.	Control p	arameters			I			I		
	Culturation of	_	CAC	NI -			exposure limit term values	D:	. 1	Santa and bank
	Substance	е	CAS	NO		opm	mg/m ³	BIC	ological limit values	
Hvdro	gen chloride	<u> </u>	7647-0	01-0	1	5/10	8/15			
y	9			<u> </u>			-, -			
Substa	-									
EC No:	:		CAS No:	-						
DNEL										
					Ind	ustrial				
Route expos			Acute ect local	Acute effect systemic			Chronic effect local		eff	Chronic ect systemic
Oral		-		-			-		-	
Inhalat	tion	-		-			-		-	
Derma	al	-		-			-		-	
Critica	l physical pa	rameters: s	solubility, fla	mmabilit	ty, corr	osivity:	-			
					Cor	sumer			1	
Route expos			Acute ect local	effe	Acute		Chron effect lo		eff	Chronic ect systemic
Oral		-		-			-		-	
Inhalation		-			-		-			
Derma	al	-		-			-		-	
PNEC										
Environmental protection target					PNEC					
Fresh v	water					No information available				
Freshw	vater sedime	ents				No infor	mation availabl	е		_
Marine water				No information available						



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Marine se	diments			No information available			
Food chai	n			No information available			
Microorga	anisms in sewage treatment			No information available			
Soil (agric	ultural)			No information available			
Air				No information available			
8.2.	Exposure controls						
8.2.1.	Engineering measures						
	Substance/mixture related measures to prevent expoduring identified uses:			product in well ventilated rooms. Use personal protective ent. Do not eat, drink or smoke in the workspace.			
	Structural measures to pre exposure:	event	No info	rmation available			
	Organisational measures to prevent exposure:		_	zation of work in order to reduce other worker's influence work process.			
	Technical measures to pre exposure:	event		proper workspace ventilation in order to keep tration levels in air below permitted levels.			
8.2.2.	Personal protection equipment						
8.2.2.1.	Eye and face protection:		Safety o	glasses that stick to face (preventing splashing) (EN 166) or			
8.2.2.2.	Skin protection	Skin protection					
	Hand protection:		ard EN 37 Glove n Glove tl	es must be according to the EU Directive 2016/425/EEC and 4. naterial: nitrile rubber hickness: ≥0.50 mm hrough time: >480 min			
	Other skin protection:	Wear antistatic		atic clothing made of natural fibers (such as cotton) with long 13034), and shoes that cover the entire foot (EN 10335).			
8.2.2.3.	Respiratory protection:	filter f	or organi	ace mask (EN 136) or half mask (EN 140) equipped with a c vapors, type "A" (boiling point >65°C) acording to EN nen concentration levels exceed GVI.			
8.2.2.4.	Thermal hazards:	No inf	ormation	available			
8.2.3.	Environmental exposure of	ontrols					
	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.				



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Technical measures to prevent	See Section 6
exposure:	See Section 0

Information on basic physical and che	mical properties	
	Value	Method
Physical state:	liquid	No information available
Colour:	pale yellow	No information available
Odour/odour threshold:	neutral/no information available	No information available
Melting point / freezing point:	No information available	No information available
Boiling point or initial boiling point and boiling range:	No information available	No information available
Flammability:	No information available	No information available
Lover and upper explosion limit:	No information available	No information available
Flash point:	No information available	No information available
Auto-ignition temperature:	No information available	No information available
Decomposition temperature:	No information available	No information available
pH:	No information available	No information available
Kinematic viscosity:	No information available	No information available
Solubility:	No information available	No information available
Partition coefficient n-octanol/water (log value):	No information available	No information available
Vapour pressure:	No information available	No information available
Density and/or relative density:	No information available	No information available
Relative vapour density:	No information available	No information available
Particle characteristics:	No information available	No information available

SECTIO	SECTION 10 STABILITY AND REACTIVITY					
10.1.	Reactivity:	See subsections 10.3 through 10.5.				
10.2.	Chemical stability:	The product is chemically stable under standard ambient conditions of storing and using.				
10.3.	Possibility of hazardous reactions:	With strong oxidants, sodium-hydroxide, sulfuric acid, aluminum.				
10.4.	Conditions to avoid:	Sources of heat, sparks, and ignition.				
10.5.	Incompatible materials:	Aluminum.				



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Hazardous decomposition products: No information available. 10.6.

SECTION 11 TOXIC	COLOGICAL INFORMA	ATION				
11.1. Informatio	n on hazard classes as	defined in Regu	lation (EC) No 12	72/2008		
Acute toxi	city:					
Route of exposure:	Method	Species	Effective dose LD_{50}/LC_{50} or $ATE_{mixture}$	Exposure t	ime Results	
Oral exposure:	No information available	-	LD ₅₀	-	-	
Dermal exposure:	No information available	-	LD ₅₀	-	-	
Inhalation exposure:	No information available	-	LC ₅₀	-	-	
Specific ta	rget organ toxicity – si	ngle exposure (S	TOT SE):			
	Specifi	c effects	Targe	torgan	Note	
Oral exposure:	No information a	available	No informati	on available	-	
Dermal exposure:	No information a	available	No informati	No information available -		
Inhalation exposure	e: No information a	available	railable No information available		_	
Respirator	y irritation:	No inforr	nation available			
Irritation a	nd corrosion					
:	Exposure time	Species	Evaluation	Method	Note	
Skin irritation:	-	rabbit	-			
Eye irritation:	-	rabbit	-	-		
Sensitization	on					
Dermal exposure:	No information avail	able				
Inhalation exposure: No information available						
Compate	rolated to the shurt-	l chamical and t	ovicelegical share	octorictics		
Oral exposure:	Swallowing may constant sensation; higher land concentration may	ause irritation of evels of concent g, aspiration caus	mucosa, tingling ration may cause ses coughing, diff	sensation in th	ninal pain and vomitin	



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Dermal exposure	2:			•	orption effects are ensation of skin.	e not likely. Long	-term exposu
Inhalation expos	ure:		-	s of vapors in i che and nause	nadequately vent a.	ilated perimeter	may cause
Eye exposure: Direct eye co			ontact may cau	se slight to mo	oderate irritation,	lacrimation and	burning
Repeate	ed dos	se toxicity (sub	acute, subchro	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		information ilable	No information available	No information available	No information available	No information available	-
Chronic oral		information lable	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	targe	et organ tovicit	v – reneated e	xposure (STOT	RE)·		
Specific	tai ge		pecific effects		Target orga	an	Note
Subacute oral			ation available	N1 -	information avai		



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Subacu	te dermal	No informatio	n available	No information available	_			
Subacu	te inhalation	No informatio	n available	No information available	-			
Subchro	onic oral	No informatio	n available	No information available	-			
Subchro	onic dermal	No informatio	n available	No information available	-			
Subchro	onic inhalation	No informatio	n available	No information available	-			
Chronic	oral	No informatio	n available	No information available	-			
Chronic	dermal	No informatio	n available	No information available	-			
Chronic	inhalation	No informatio	n available	No information available	-			
				roductive toxicity)	prein aganis offacts			
	Carcinogenicity			s on test animals did not indicate ca				
	Mutagenicity i	n-vitro:	Current <i>in vitro</i> tests did not indicate mutagenic effects. No information available					
	Genotoxicity:	n vivo:			c offocts			
	Mutagenicity i		No informatio	o tests did not indicate mutageni	c effects.			
	Reproductive t			n reproductive organs was deter	mined in reproductiv			
	Summary of ev	valuation of the	CMR properties:	-				
11.2	Information or	n other hazards:						
11.2.1.	Endocrine disr	upting propertie	s:					
	The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher							
	higher.							
11.2.2.	Other informations:							

SECTION 12 ECOLOGICAL INFORMATION:								
12.1. Toxicity								
Acute toxicity	Dose	Exposure time	Species	Method	Evaluation	Note		



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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
Fish	LC ₅₀	96 hours	No information available	No information available	No information available	-
Crustacea:	EC ₅₀	48 hours	No information available	No information available	No information available	-
Algae/aquatic plants	IC ₅₀	72 hours	No information available	No information available	No information available	-
Other organisms	-	-	-	-	-	-

12.2. Persistence and degradability

Abiotic degradation

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

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

12.3. Bioaccumulative potential



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	i		nt: n-octar									
Valu		oncentrat		рН	°C		ethod		Evalua		Note	
-	No avai	inform lable	ation -		_	No info			No inform Ivailable	nation	-	
	Bioconce	ntration f	actor (BC	F)								
١	V alue		Species			Method	l		Evaluation	on		Note
No information No informa		mation	No infa	ormatic ole	on	No i avail	nformation	on	No info availabl	rmation le		
	Chronic 6	ecotoxicit	y									
Value Dose Ex				osure ime	Spe	ecies	M	ethod	Ev	aluation	Note	
Chroni	c toxicity o	n fish	LC ₅₀	No infor avail	mation able	No infori availa	mation able	No infor avail	rmation lable	No information available		-
	c toxicity o		EC ₅₀	No infor avail	mation able			No infor avail	rmation lable	No in availa	formation ble	-
12.4.	Mobility	in soil										
	1		d distribu	ition in 4	nvironn	nental c	ompar	tmanta				
		nation av				incintal C	.ompai	ciits	·			
	Surface t		anabic									
	Value		°C	С	oncentra	ation		Met	thod			Note
	No informati available	No ion info	ormation ailable	No	informa ailable		No in	format		_		
	Adsorption	on / deso	rption									
Transp	ort	A/D coef	ficient	lo	og Kow	Εν	/aporati	ion rat	e	Method	ł	Note



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						<u> </u>					
Soil-wa	ter No available	information	No information available	No information available	No information available	-					
Water-a	air No available	information	No information available	No information available	No information available	-					
Soil-air	No available	information	No information available	No information available	No information available	-					
12.5.	Results of PBT	and vPvB asses	ssment								
	according to R	EACH Article 5	•	n Delegated regula	to have endocrine d tion (EU) 2017/2100	isrupting properties or Commission					
12.6.	Endocrine disrupting properties										
	The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.										
12.7.	Other adverse	effects									
	No information	n available									
SECTIO	N 13 DISPOSAL	L CONSIDERA	ΓΙΟΝS								
13.1.	Waste treatm	nent methods									
	·										
13.1.1.	Product/Pack	kaging disposa	l:								
	Submit for di Protection.	isposal to the l	egal person autho	rized by the Minist	ry of Environmental	and Nature					
13.1.2.			tions according to	Law:							
	No informati	on available									
13.1.3.	Waste treatm	nent – relevant	information:								
	No informati	on available									
	:										
13.1.4.	Sewage dispo	osal – relevant	information:								
	Waste must r	not be dispose	d of into the sewa	ge system.							
13.1.5.	Other disposal recommendations:										



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	Do not dispose of the product's remains into the sewage system. Submit the remains to the collectors authorized by the ministry in charge. Do not dispose of the packaging into the sewage system. Submit the packaging to the collectors authorized by the ministry in charge. Do not dispose of in places where ignition may occur.				
13.1.6.	Relevant Community provisions:				
	-				
SECTIO	N 14 TRANSPORT INFORI	MATION			
	Transporting/shipment by	road (ADR)			
UN num	ber:	Not subject to transport regulations.			
UN prop	er shipping name:	_			
Transpo	rt hazard class(es):	_			
Packing	group:	_			
Environr	mentally hazardous:	-			
Special p	precautions for user:	-			
	Transporting/shipment by	rail (RID)			
UN num	ber:	Not subject to transport regulations.			
UN prop	er shipping name:	-			
Transpo	rt hazard class(es):	-			
Packing	group:	-			
Environr	mentally hazardous:	-			
Special p	precautions for user:	-			
	Inland waterway transport	(ADN)			
UN num	ber:	Not subject to transport regulations.			
UN prop	er shipping name:	-			
Transpo	rt hazard class(es):	_			
Packing	group:	-			
Environr	mentally hazardous:	-			
Special p	precautions for user:	-			
	Transporting/shipment by sea (IMDG)				
UN number:		Not subject to transport regulations.			
UN proper shipping name:		-			
Transport hazard class(es):		-			
Packing group:		-			
Environr	mentally hazardous:	-			
Special precautions for user:		-			



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

5.1. Safety, health and env	Safety, health and environmental regulations/legislation specific for the substance or mixture			
EU regulations				
Authorization and/or	restrictions of use			
Authorizations:	-			
Restrictions:	-			
Other EU regulations:	Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC; Directive 2004/42/CE of the European Parliament and of the Council of 21 April 2004 on the limitation of emissions of volatile organic compounds due to the use of organic solvents in certain paints and varnishes and vehicle refinishing products and amending Directive 1999/13/EC; Council Directive 98/24/EC of 7 April 1998 on the protection of the health and safety of workers from the risks related to chemical agents at work; Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006; REACH Restrictions on the manufacturing, placing on the market and use of certain dangerous substances, mixtures and articles (Annex XVII);			



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Trading name:	FERRI REAGENT, WEIGERT B		_		
Product code:	FR-OT-X**	Revision date:	21 Dec 2022	Version:	5

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

SECTIO	ON 16 Other information			
16.1.	Indication of changes:	-		
16.2.	Abbreviations and acronyms:	ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road) IMDG: International Maritime Code for Dangerous Goods IATA: International Air Transport Association GHS: Globally Harmonised System of Classification and Labelling of Chemicals EINECS: European Inventory of Existing Commercial Chemical Substances CAS: Chemical Abstracts Service (division of the American Chemical Society) DNEL: Derived No-Effect Level (UK REACH) LC50: Lethal concentration, 50 percent LD50: Lethal dose, 50 percent PBT: Persistent, Bioaccumulative and Toxic vPvB: very Persistent and very Bioaccumulative		
16.3.	Key literature references and source of data:			
16.4.	Classification and procedure used to derive the classification for mixture according to Regulation (EC) 1272/2008 (CLP)			
Classif	ication	Classification procedure		
_		-		
16.5.	Relevant H statements (numb	er and full text)		
	H: H314	Causes severe skin burns and eye damage.		
	H315	Causes skin irritation.		
	H319	Causes serious eye irritation.		
	H335	May cause respiratory irritation.		
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.		



SAFETY DATA SHEET

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

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Trading name:	FERRI REA		ENT, WEIGERT B			
Product code:	FR-OT-X**	Revision date:	21 Dec 2022	Version:	5	

ANNEX:
EXPOSURE SCENARIO RESULTING TO CHEMICAL SAFETY ASSESSMENT
-



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Trade name:	HEMATOXYLIN, WEIGERT A				
Product code: HEMA-OT-X**		Date of compilation:	21 Dec 2022	Version:	5

1.1.	Product identifier				
	Trade name:	HEMATOXYLIN	I, WEIGERT A	4	
	Chemical name:	-			
	Catalogue number:	HEMA-OT-X**			
1.2.	Relevant identified use	Relevant identified uses of the substance or mixture and uses advised against			
	Uses:		For use ir	n special staining kits.	
	Uses advised against:		Only the	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:	r: BioGn		ost Ltd.	
	Address:	Medj	ugorska 59, i	orska 59, Zagreb	
	Telephone number:	+385	1 2409997	1 2409997	
	Telefax:	+385	1 2404039	2404039	
	e-mail of competent po	erson: <u>msds</u>	<u>@biognost.h</u>	<u>nr</u>	
	National contact: -				
1.4.	Emergency telephone number				
	National Protection and Rescue Director		rate:	112	
	Medical information:			+385 1 2348 342	
	Other information:			-	

SECTIO	SECTION 2. Hazards identification				
2.1.	Classification of the substance or mixture				
2.1.1.	Classification according to Regulation (EC	C) No 1272/2008 (CLP)			
	Hazard class and category code:	Hazard statements*:			
	Flam. Liq. 2	H225			
	Skin. Sens. 1	H317			
	Muta. 2	H341			
	Canc. 2	H351			
2.1.2.	Additional information				
	-				
*For fu	r full text of Hazard- and EU Hazard-statements: see Section 16				
2.2.	Label elements				
	Product identification: HEMATO	OXYLIN, WEIGERT A			



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Trade name:	HEMATOXYLIN, WEIGERT			J	
Product code:	HEMA-OT-X**	Date of compilation:	21 Dec 2022	Version:	5

	Identification number:	-
	Authorisation number:	-
	Hazard pictograms:	GHS02 GHS07 GHS08
	Signal word:	Danger
	Hazard statements: Precautionary statement:	 H225 Highly flammable liquid and vapor. H317 May cause an allergic skin reaction. H341 Suspected of causing genetic defects. H351 Suspected of causing cancer. P210 Keep away from heat/sparks/open flames/hot surfaces. Do not smoke. P280 Wear protective gloves/protective clothing/eye/protection/face protection. P302+P352 IF ON SKIN: Wash with plenty of water. P333+P313 If skin irritation or rash occurs: Get medical advice/attention. P308 + P313 IF exposed or concerned: Get medical advice/attention.
	Supplemetal hazard information (EU)	-
2.3.	Other hazards	
	Endocrine Disrupting Propo	erties:
	No known endocrine disrupt	ing properties
	Results of PBT and vPvB as PBT or a vPvB.	ssessment : According to the results of its assessment, this substance is not a

SECTION 3. Compo	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)					
107-21-1/ 203-473-3/ 603-027-00-1	01-2119456816- 28-xxxx	1- 10 %	ethylene glycol	Acute Tox. 4, H302					
64-17-5/ 200-578-6/ 603-002-00-5	01-2119457610- 43-0147	60 – 80 %	ethanol	Flam. Liq. 2, H225					
121-79-9/ 204-498-2/ 607-198-00-3	-	1- 3 %	propyl gallate	Acute Tox. 4, H302 Skin Sens. 1 H317					



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123-31-9/ 204-617-8/ 604-005-00-4	1-3%	hydroquinone	Acute Tox. 4; H302 Skin Sens. 1; H317 Eye Dam. 1; H318 Muta. 2; H341 Canc. 2; H351 Aquatic Acute 1; H400
---	------	--------------	---

SECTI	ON 4. First aid measures			
4.1.	Description of first aid measures			
	General notes:	If the suggested first aid measures do not prove sufficient, seek medical attention.		
	Following inhalation:	Carry the afflicted person out of the contaminated area into a well-ventilated area or out for fresh air. In case of difficult breathing, provide the afflicted person with oxygen.		
	Following skin contact:	Remove contaminated clothing. 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).		
4.3.	Indication of any immediate medic	cal attention and special treatment needed		
	No information available			

SECTION 5. Firefighting measures

5.1. Extinguishing media



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	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 substance 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	ON 6. Accidental release	measures			
6.1.	Personal precautions, p	Personal precautions, protective equipment and emergency procedures			
6.1.1.	For non-emergency personnel				
	Protective equipment:		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 methods: Emergency procedures:		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.		
			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 respond	ders:			
	Self-contained open-cir dissipation (fireproof cle	•	sed air breathing apparatus, a set for protecting the body from heat		
6.2.	Environmental precauti	ons:			
	·	•	nt further spillage of chemicals. Prevent environmental pollution by the sewage system, surface water or groundwater.		
6.3.	Methods and material f	or containme	nt and cleaning up		
6.3.1.	Bunding, covering of drains; capping procedures:	Sand protective barrier or barriers made of similar materials			
6.3.2.	Cleaning up:	Sawdust, sand, mineral adsorbents			
6.3.3.	Other information:	Secure proper ventilation. Contact the responsible person; in case of larger spills and possible environmental pollution contact National Protection and Rescue (112).			



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6.4.	Reference to other sections
	-

SECTIO	CTION 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:		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 incompa	tibilities				
	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:	•	vay from food and drink. Keep the ers 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:	-				
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/m³	-			
Ethano	I	64-17-5	1000/-	1900/-	-			
Ethylen	ne glycol	107-21-1	20/40	52/104	-			
Hydroc	quinone	123-31-9	-/0,5	-/-	-			



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Trade name:								
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;				i	i i			
Substance: -								
EC No: -	CAS No:	-						
DNEL		·						
		Ind	lustrial					
Doute of avecause.	Acute	Acut	e	Chronic	Chronic			
Route of exposure:	effect local	effect sys	temic	effect local	effect systemic			
Oral	-	-		-	-			
Inhalation	1900 mg/m ³ (ethanol)	-		35 mg/ kg	380 mg/m³ (ethanol)			
	(ethanol)			(ethylene glycol)	242 mg/kg (athanal)			
Dermal	_	_		_	343 mg/kg (ethanol) 106 mg/kg (ethylene			
Derman.					glycol)			
Critical physical parar	neters: solubility, fla	mmability, cor	rosivity:					
		Cor	nsumer					
Pouto of avenouses	Acute	Acut	e	Chronic	Chronic			
Route of exposure:	effect local	effect sys	temic	effect local	effect systemic			
Oral	Oral	-		-	-			
Inhalation	950 mg/m ³	_		7 mg/kg	114 mg/m³ (ethanol)			
middiation	(ethanol)			(ethylene glycol)	TTTTIIg/III (etilalioi)			
					206 mg/kg (ethanol)			
Dermal	-	-		-	53 mg/kg (ethylene glycol)			
PNEC					giycoi)			
Environmental protect	tion target		PNEC					
Livirorimental protect	turget			l (ethanol)				
Fresh water			0.96 mg/l (ethanol) 10 mg/l (ethylene glycol)					
			3.6 mg/kg (ethanol)					
Freshwater sediments	S		37 mg/kg (ethylene glycol)					
Marina watar			0.79 mg/l (ethanol)					
Marine water			1 mg/l (e	thylene glycol)				
Marine sediments			2.9 mg/k	g (ethanol)				
Marine Scaments			3.7 mg/k	g (ethylene glycol)				
Food chain				mg/kg kg (ethanol)				
Microorganisms in sewage treatment			580 mg/l (ethanol)					
<u> </u>			<u> </u>	y/l (ethylene glycol)				
Soil (agricultural)			_	kg (ethanol)				
			1.53 mg/kg (ethylene glycol)					



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Air			no information available			
8.2.	Exposure controls					
8.2.1.	Engineering measures					
	Substance/mixture related measure prevent exposure during identified		Use personal protective equipment. Do not eat, drink or smoke in the workspace.			
	Structural measures to prevent exposure:		No information available			
	Organisational measures to prever exposure:	nt	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:	levels	glasses that stick to face (EN166) 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					
	2016/4		tective gloves must be according to the EU Directive 6/425/EEC and standard EN 374.			
	Hand protection:		Glove material: nitrile rubber Glove thickness: ≥0.50 mm			
			Break through time: >480 min			
	Other skin protection: such a spilling suitab		g everyday work use cotton clothing and suitable footwear, s rubber boots or shoes that cover the entire foot. In case of g hazard, use clothing made of impermeable material le for protection from liquid chemicals (Viton, PVC, himex) ootwear 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 GVI.			
8.2.2.4.	Thermal hazards:	No inf	ormation available			
8.2.3.	Environmental exposure controls					
	Substance/mixture related measures to prevent exposure:	See	e Section 6			
	Structural measures to prevent exposure:	Use	e modern equipment.			
	Organisational measures to prevent exposure:		apt the work process to the required working conditions of workplace.			
	Technical measures to prevent exposure:	See	ee Section 6			



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ĺ	Information on basic physical an	d chemical properties		
		Value	Method	
	Physical state:	liquid	No information available	
	Colour:	brown	No information available	
	Odour/odour threshold:	ethanol like/no information available	No information available	
	Melting point / freezing point:	No information available	No information available	
	Boiling point or initial boiling point and boiling range:	No information available	No information available	
	Flammability:	No information available	No information available	
	Lover and upper explosion limit:	No information available	No information available	
	Flash point:	20°C	No information available	
	Auto-ignition temperature:	No information available	No information available	
	Decomposition temperature:	No information available	No information available	
	pH:	No information available	No information available	
	Kinematic viscosity:	No information available	No information available	
	Solubility:	No information available	No information available	
	Partition coefficient n-octanol/water (log value):	No information available	No information available	
	Vapour pressure:	No information available	No information available	
	Density and/or relative density:	No information available	No information available	
	Relative vapour density:	No information available	No information available	
	Particle characteristics:	No information available	No information available	

SECTIO	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.			



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10.5.	Incompatible materials:	Oxidants, acids, alkali metals.
10.6.	Hazardous decomposition products:	Non-degradable if used in the described manner.

	oxicological informa		dia D	- 1: (5.0	V NL 40	72 /200	NO.		
	nation on hazard class	ses as define	d in Regul	ation (EC	.) No 12	72/200)8		
Route of exposure:	Method	Species		re dose .C ₅₀ or	Expo tin			Result	S
Oral:	No information available	rat	LD ₅₀		_		7.712		(ethanol) ylene glycol) droquinone)
Dermal:	No information available	rabbit	LD ₅₀		-		>20.000 mg/kg (ethanol) >3.500mg/kg (ethylene glycol) 367.3 mg/kg (hydroquinone		
Inhalation:	No information available	rat	LC ₅₀		4 h (ethan	ol)	>8.000) mg/l (etha	nol)
Specif	fic target organ toxicit		posure (S	TOT SE):					
0.1		cific effects		Target organ					Note
Oral:	No information						-		
Dermal: Inhalation:	No information				ormatio			_	
IIIIIaiatiOII.	NO IIIIOIIIIatioii	available		INO IIIIC	Jillatio	ıı avalıc	abie		
Aspira	ation hazard:		No inform	nation av	ailable				
Irritati	ion and corrosion								
	Exposure	time	Species	Evalu	ıation	Me	thod	l	lote
Skin corrosion/irrita	tion:	-		-		-		No available	information
Serious eye damage/irritati	on -	-		-		-		No available	information
Sensit	ization:								
Skin sensitizati	on: No information	available							
Respiratory sensitization:	No information	available							



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Sympto	ms related to the p	nhysical chemic	ral and toxicolog	nical characterist	ics					
Oral exposure:	It may lead to	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).								
Dermal exposure										
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 concentration.										
Eye exposure:	Splatter may of lesions.	cause discomfo	rt, stinging sensa	ation, conjunctiv	al redness, corne	eal surface				
Repeate	ed dose toxicity (su	bacute, subchr	onic, chronic)							
	Dose	Exposure time	Species	Method	Evaluation	Note				
Subacute oral	No information available	No information available	No information available	No information available	No information available	-				
Subacute dermal	No information available	No information available	No information available	No information available	No information available	-				
Subacute inhalation	No information available	No information available	No information available	No information available	No information available	-				
Subchronic oral	No information available	No information available	No information available	No information available	No information available	_				
Subchronic dermal	No information available	No information available	No information available	No information available	No information available	-				
Subchronic inhalation	No information available	No information available	No information available	No information available	No information available	-				
Chronic oral	No information available	No information available	No information available	No information available	No information available	-				
Chronic dermal	No information available	No information available	No information available	No information available	No information available	_				



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Chronic inhalation			No information available	No information available	No information available	No information available	n -
S	Specific target o	organ toxic	ty – repeated ex	posure (STC	T RE):		
**	1 5		Specific effects	·	Target org	gan	Note
Subacute o	oral	No infor	mation available		No information av		-
Subacute dermal No information available				No information av	ailable	-	
Subacute inhalation No		No infor	mation available		No information av	railable	-
Subchroni	ic oral	No infor	mation available		No information av	ailable	_
Subchroni	ic dermal	No infor	mation available		No information av	ailable	_
Subchroni	ic inhalation	No infor	mation available		No information av	ailable	_
Chronic or	ral	No infor	mation available		No information av	ailable	_
Chronic de	ermal	No infor	mation available		No information av	ailable	-
Chronic in	halation	No infor	mation available		No information av	ailable	_
C N	Carcinogenicity: Mutagenicity <i>in</i>		ty; mutagenicity,	Suspecte No infor	ed of causing canc		
	Genotoxicity:				ed of causing gene	etic defects.	
	Mutagenicity in				mation available		
	Germ cell mutaç	-			mation available		
K	Reproductive to	exicity:		INO INTOR	mation available		
	Summary of properties:	evaluation	of the CM	R			
11.2. Ir	nformation on	other haza	rds:				
11.2.1. E	ndocrine disru	pting prop	erties:				
	No known end hat affect huma		rupting proper	ties			
11.2.2. C	Other information	ons:					
-							

SECTI	ON 12	. Ecoloc	ical inf	formation:
JEC I I	011 12	. LCOIOC	ncai iiii	OI III a tioii.

12.1. Toxicity



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Trade name:		HEMATOXYLIN	I, WEIGERT A		
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Acute (short-term) toxicity	Dose	Exposure time	Species	Method	Evaluation	Note
Fish	LC ₅₀	96 hours	Fish	No information available	8.140 mg/l (ethanol) 72.860 mg/l (ethylene glycol) 0.638 mh/l (hydroquinone)	-
Crustacea:	EC ₅₀	48 hours	water flea	No information available	7.800 mg/l (ethanol) >100 mg/l (ethylene glycol) 0.134 mg/l (hydroquinone)	-
Algae/aquatic plants	IC ₅₀	72 hours	algae	No information available	5.000 mg/l (ethanol) 6.500-13.000 mg/l (ethylene glycol) 0.33 mg/l (hydroquinone)	-
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	_	_	_	_	-	_

Abiotic degradation Degradation half-lives Method Evaluation Note No information available No information available No information available

Maille water	INO IIIIOIIIIatioii available	INO IIIIOIIIIatioii available	INO IIIIOITIIatiOII available	_
Fresh water	No information available	No information available	No information available	-
Air	No information available	No information available	No information available	-
Soil	No information available	No information available	No information available	-



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	-										
	Biod	legrad	dation								
% Deg	gradati	on	Ti	me (days)		1	Method	Evaluation	1	Note	9
_			_		_			_		-	
12.3.				potential							
	-			ent: n-octa							
Valu	ıe	Со	ncentra	ition	рН	°C	Method	Evaluati	on	No	te
-		-		-		-	-	-		-	
		oncer	ntration	factor (Bo							
	/alue			Species			Method	Evaluation		Note	
No info availab		on	No in availa	formation	1	No information No information available available		1	No information available		
avallab	ile		avalla	ibie		avallal	Jie	avaliable		avallable	
	Chro	onic e	cotoxici	itv							
	!				Exp	osure	_				
	Val	lue		Dose		me	Species	Method		Evaluation	Note
					No		No	No	No	information	
Chronic	c toxic	ity on	fish	LC ₅₀	inform		information available	information		ilable	_
					availal	oie		available			
Chronic		-		EC ₅₀	No inform	nation	No information	No information	1	information	_
crustac	ea (Da	aphnia	a)		availal		available	available	ava	ilable	
12.4.	Mob	oility i	n soil								
	Knov	wn or	predict	ted distrib	ution in e	environr	nental compart	ments:			
	No i	nform	nation a	vailable							
	Surfa	ace te	nsion:								
	\	√alue		°C	С	oncentr	ation	Method		Note	



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Trade name:		HEMATOXYLII	N, WEIGERT A			
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	No information available	No information available	No information available	No information available	-	
	Adsorption / o	desorption				
Transpo	A/D	coefficient 's constant	log Kow	Evaporation rate	Method	Note
Soil-wat	ter No available	information	No information available	No information available	No information available	-
Water-a	ir No available	information	No information available	No information available	No information available	-
Soil-air	No available	information	No information available	No information available	No information available	-
	toxic (PBT), or	wan a paraistant	and war biassaum	1 (' (D D) (I		
12.6.	Endocrine disa	rupting properti	es not contain compon	ents considered to	have endocrine disru	pting properties
12.6.	Endocrine disarrance according to F	rupting properti e/mixture does i REACH Article 5	es not contain compon	ents considered to Delegated regulatio		pting properties
	Endocrine disarrance according to F	rupting properti e/mixture does i REACH Article 5 J) 2018/605 at I	es not contain compon 7(f) or Commission I	ents considered to Delegated regulatio	have endocrine disru	pting properties
	Endocrine disa The substance according to Regulation (EU) Other adverse	rupting properti e/mixture does i REACH Article 5 J) 2018/605 at I	es not contain compon 7(f) or Commission l evels of 0.1% or hig	ents considered to Delegated regulatio	have endocrine disru	pting properties
12.7.	Endocrine disa The substance according to F Regulation (El Other adverse No adverse ef	rupting propertion of the control of	es not contain compon 7(f) or Commission I evels of 0.1% or hig	ents considered to Delegated regulatio	have endocrine disru	pting properties
12.7. SECTIOI	Endocrine disa The substance according to F Regulation (EL Other adverse No adverse ef	rupting propertion of the control of	es not contain compon 7(f) or Commission I evels of 0.1% or hig	ents considered to Delegated regulatio	have endocrine disru	pting properties
12.7. SECTIOI 13.1.	Endocrine disa The substance according to F Regulation (El Other adverse No adverse ef N 13. Disposal Waste treata	rupting propertion e/mixture does in REACH Article 5 J) 2018/605 at I e effects fects are expect	es not contain compon 7(f) or Commission levels of 0.1% or high	ents considered to Delegated regulatio	have endocrine disru	pting properties
12.7. SECTIOI 13.1.	Endocrine disa The substance according to F Regulation (EL Other adverse No adverse ef N 13. Disposal Waste treata	rupting propertice/mixture does of REACH Article 50 J. 2018/605 at 10 effects are expected consideration ment methods	es not contain compon 7(f) or Commission levels of 0.1% or hig ed.	ents considered to Delegated regulation her.	have endocrine disru	pting properties Commission
12.6. 12.7. SECTION 13.1. 13.1.1.	Endocrine disa The substance according to F Regulation (EU) Other adverse No adverse ef N 13. Disposal Waste treata Product/Pac Submit for c Protection.	rupting propertice/mixture does in REACH Article 50 J) 2018/605 at I seeffects refects are expected consideration ment methods rekaging disposal disposal to the Internation of the Inte	es not contain compon 7(f) or Commission levels of 0.1% or hig ed.	zed by the Ministry	have endocrine disru	pting properties Commission



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Trade name:		HEMATOXYLIN	I, WEIGERT A	-	
Product code:	HEMA-OT-X**	Date of compilation:	21 Dec 2022	Version:	5

13.1.3.	Waste treatment – relevan	t information:			
	No information available				
13.1.4.	Sewage disposal – relevant	t information:			
	Waste must not be dispose	ed of into the sewage system.			
13.1.5.	Other disposal recommendations:				
	Do not dispose of the product's remains into the sewage system. Submit the remains to the collectors authorized by the ministry in charge. Do not dispose of the packaging into the sewage system. Submit the packaging to the collectors authorized by the ministry in charge. Do not dispose of in places where ignition may occur.				
13.1.6.	Relevant Community provi	sions:			
	-				
SECTION	N 14. Transport information				
	Transporting/shipment by ro	pad (ADR)			
UN num	ber:	1170			
UN prop	er shipping name:	Ethanol solution			
Transpor	t hazard class(es):	3			
Packing	group:	II .			
Environn	nental hazards:	No information available			
Special p	recautions for user:	-			
	Transporting/shipment by ra	il (RID)			
UN num	ber:	1170			
UN prop	er shipping name:	Ethanol solution			
Transpor	t hazard class(es):	3			
Packing	group:	II			
Environn	nental hazards:	No information available			
Special p	recautions for user:	-			
	Transporting/shipment by in	land waterways (ADN)			
UN num	ber:	1170			
UN prop	er shipping name:	Ethanol solution			
Transpor	t hazard class(es):	3			
Packing	group:	II			
Environn	nental hazards:	No information available			
Special p	recautions for user:	-			



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Trade name:	HEMATOXYLIN, WEIGERT A				
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Transporting/shipment by sea (IN	MDG)		
UN number:	1170		
UN proper shipping name:	Ethanol solution		
Transport hazard class(es):	3		
Packing group:	II		
Environmental hazards:	No information available		
Special precautions for user:	-		
Transport in bulk according to Annex II of MARPOL 73/78 and the IBC code:	-		
Transporting/shipment by air (ICAO-TI/IATA-DGR)			
UN number:	1170		
UN proper shipping name:	Ethanol solution		
Transport hazard class(es):	3		
Packing group:	II		
Environmental hazards:	No information available		
Special precautions for user:	-		
Further information: -			

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



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		18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency,	
		amending Directive 1999/45/EC and repealing Council Regulation (EC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC;	
	Other EU regulations:	Directive 2004/42/CE of the European Parliament and of the Council of 21 April 2004 on the limitation of emissions of volatile organic compounds due to the use of organic solvents in certain paints and varnishes and vehicle refinishing products and amending Directive 1999/13/EC;	
		Council Directive 98/24/EC of 7 April 1998 on the protection of the health and safety of workers from the risks related to chemical agents at work;	
		Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006;	
		REACH Restrictions on the manufacturing, placing on the market and use of certain dangerous substances, mixtures and articles (Annex XVII);	
	Information according 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		

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



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

ANNEX:

EXPOSURE SCENARIO RESULTING TO CHEMICAL SAFETY ASSESSMENT



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Trade name:	LADEWIG'S REAGENT					
Product code:	LDWR-OT-X**	Date of compilation:	14 November 2022	Version:	2	

1.1.	Product identifier					
	Trading name:	LADEWIG'S REAGENT				
	Chemical name:	_				
	Product code:	LDWR-C	OT-X**			
1.2.	Relevant identified uses of the substance or mi			nce or mixt	cure and uses advised against	
	Uses:			For use wi	th Ladewig Trichrome kit.	
	Uses advised against:			Only the id	dentified uses are advised.	
	Reason why uses advised against:		nst:	The product is intended for use only as an <i>in vitro</i> diagnostic medical device and there is no reason to use it for other purposes.		
1.3.	Details of the supplier of the safety data sheet					
	Supplier: Bio		BioGr	Gnost Ltd.		
	Address:		Medj	1edjugorska 59, Zagreb		
	Telephone number:		+385	+385 1 2409997		
	Telefax:		+385	385 1 2404039		
	e-mail of competent p	person:	<u>msds</u>	ds@biognost.hr		
	National contact:		-			
1.4.	Emergency telephone	number	S			
	National Protection ar	nd Rescu	e Direc	torate:	112	
	Medical information:				+385 1 2348 342	
	Other information:				-	

SECTIO	N 2. Hazards identification	ı				
2.1.	Classification of the substance or mixture					
2.1.1.	Classification according to Regulation (EC) No 1272/2008 (CLP)					
	Hazard class and category code: Hazard statement*:					
	Skin Irr. 2		H315			
	Eye Irr. 2		H319			
2.1.2.	Additional information					
	-					
*For the	e full text of H and EUH phras	ses see Section 16				
2.2.	Label elements					
	Product identification:	LADEWIG'S R	EAGENT			
	Identification number:	-				
	Authorisation number:	-				



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Trade name:	LADEWIG'S REAGENT						
Product code:	LDWR-OT-X**	Date of compilation:	14 November 2022	Version:	2		

	Hazard pictograms:	GHS07
	Signal word:	Warning
	Hazard statement:	H315 Causes skin irritation.H319 Causes serious eye irritation.
	Precautionary statement:	P280 Wear protective gloves/protective clothing/eye/protection/face protection. P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. 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	
		ting properties. tains no components considered to be either persistent, bioaccumulative iistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

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)				
3244-88-0/ 221-816-5/ -	-	1 - 2 %	3-(1-(4-amino-3-methyl-5-sulphonatophenyl)-1-(4-amino-3-sulphonatophenyl)methylene)cyclohexa-1,4-dienesulphonic acid	Skin Corr. 1B; H314 Eye Dam. 1; H318				
144-62-7/ 205-634-3/ 607-006-00-8	-	< 1 %	oxalic acid	Acute Tox. 4; H302 Acute Tox. 4; H312				

SECTIO	SECTION 4. First aid measures				
4.1.	Description of first aid measures				
	General notes:	Move out of dangerous area. Show this safety data sheet to the doctor and first responders.			
	Following inhalation:	If breathed in, move person into fresh air. If not breathing, give artificial respiration. Get medical advice.			



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	Following skin contact:	According to our findings, chemical, physical and toxicological properties of the substance have not been entirely tested.			
	Following inhalation:	According to our findings, chemical, physical and toxicological properties of the substance have not been entirely tested.			
4.2.	Most important symptoms and effects, both acute and delayed				
	Self-protection of the first aider	-			
	Following ingestion:	Never give anything by mouth to an unconscious person. Rinse mouth with water.			
	Following eye contact:	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation occurs and persists: Get medical advice.			
	Following skin contact:	Wash off with soap and plenty of water. If irritation occurs and persists: Get medical advice.			

SECTIO	ON 5. Firefighting measures				
5.1.	Extinguishing media				
	Suitable extinguishing media:	Use dry chemical, CO ₂ , water spray (FOG) or foam.			
	Unsuitable extinguishing media:	Avoid solid water stream as it may scatter and spread fire.			
5.2.	Special hazards arising from the su	bstance or mixture			
	Hazardous by products of fire:	Use water spray to cool fire exposed container surfaces and to protect personnel. Thermal decomposition can produce carbon monoxide (highly toxic) and carbon dioxide (an asphyxiant at sufficient concentrations).			
5.3.	Advice for firefighters				
	Use a self-contained open-circuit cocontainers exposed to fire with wat	ompressed air breathing apparatus and fireproof clothing. Cool closed ter spray or vapor.			
5.4.	Additional information				
	9	ring due to increase in pressure. Remove sources of heat and nvironment with extinguishing media.			

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



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	Protective equipment:	Use suitable personal protective equipment (see Section 8).		
	Accident prevention method	Evacuate members of all non-essential personnel and those members without protective equipment.		
	Emergency procedures:	Mark the area using proper signs.		
6.1.2.	For emergency responders:			
	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, drainage system and waterways. In case of large spillage contact National Protection and Rescue Directorate (NPRD) on 112.			
6.3.	Methods and materials for co	ontainment and cleaning up		
6.3.1.	Bunding, covering of drains; capping procedures:	Sand or clay barriers.		
6.3.2.	Cleaning up:	After removing the product, use water to wash the work space and used materials.		
6.3.3.	Other information:	No information available.		
6.4.	Reference to other sections			
	-			

SECTIO	N 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. Refer to the manufacturer's recommendations.	
	Measures to prevent aerosol and dust generatio	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	oroughly w	ash hands after work and before eating.	
7.2.	Conditions for safe storage, including any incom	patibilities		
	Technical measures and storage conditions:	well venti	ghtly closed and upright set containers in a lated storage rooms at temperatures rom 15 to 25°C.	
	Packaging materials:	Manufacturer's original packaging.		
	Requirements for storage rooms and vessels:	Keep awa	y from food and drink. Keep the containers osed.	



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	Advices for storage equipment:	The storage must be made of hard material; floors must be resistant to chemicals. There must be no drain that directly leads into sewage system. Secure proper ventilation.
	Further information on storage conditions:	Do not place the unused material in the storage room and do not use empty containers for storing other chemicals. Do not store with incompatible materials (see Section 9).
7.3.	Specific end use(s)	
	Recommendations:	-
	Industrial sector specific solutions:	-

SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION								
8.1. Cont	rol pa	rameter	rs .					
Substance		CAS No		Occupational exposure limit values/short term values		Bi	ological limit values	
				ppm	mg/m³			
-			-		-	-		-
Substance:	-							
EC No:	-		CAS No:	-				
DNEL								
					Industrial			
Route of expos	sure:		te effect local		ute effect ystemic	Chronic effo	ect	Chronic effect systemic
Oral		-		-		-	-	
Inhalation		-		-		-	-	
Dermal		-		-		-	-	
Critical physica	l para	meters:	solubility, fl	ammabil	ity, corrosivity:	-		
					Consumer			
Route of exposure: Acute effect local			Acute effect systemic		Chronic effo	ect	Chronic effect systemic	
Oral		-		-		-	-	
Inhalation -		-		-		-	-	
Dermal			-		-	-		
PNEC								
Environmental	prote	ction ta	rget		PNEC			



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Fresh wat	er		No information available		
Freshwate	er sediments		No information available		
Marine w	ater		No information available		
Marine se	ediments		No information available		
Food cha	in		No information available		
Microorg	anisms in sewage treatment		No information available		
Soil (agric	cultural)		No information available		
Air			No information available		
8.2.	Exposure controls				
8.2.1.	Appropriate engineering controls				
	measures to prevent exposure		ersonal protective equipment. Do not eat, drink or smoke workspace.		
	Structural measures to prevent exposure:	No in	No information available		
	Organisational measures to prevent exposure:		nization of work in order to reduce other worker's influence g work process.		
	Technical measures to prevent exposure:		e proper workspace ventilation in order to keep entration levels in air below permitted levels.		
8.2.2.	Personal protection equipment:				
8.2.2.1.	Eye and face protection:		glasses tested and approved under appropriate standards as EN 166(EU).		
8.2.2.2.	Skin protection:				
	Hand protection:	glove	le with chemical resistant gloves. The selected protective s have to satisfy the specifications of EU Directive 6/EEC and the standard EN 374 derived from it.		
	Other skin protection:	No sp	ecific protective equipment required.		
8.2.2.3.	Respiratory protection:	Use w	when overexposure potential. Improper use of respirators is erous.		
8.2.2.4.	Thermal hazards:	No in	formation available		
8.2.3.	Environmental exposure controls				
	Substance/mixture related measures to prevent exposure:	See Sec	tion 6		
	Structural measures to prevent exposure:	Use mo	dern equipment.		
	Organisational measures to prevent exposure:	Adapt t workpla	he work process to the required working conditions of the ace.		



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Technical measures to prevent	See Section 6
exposure:	See Seedion 6

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

SECTIO	SECTION 10.: Stability and reactivity			
10.1.	Reactivity:	Not reactive under normal 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:	No information available.		



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Trade name:	LADEWIG'S REAGENT				
Product code:	LDWR-OT-X**	Date of compilation:	14 November 2022	Version:	2

10.4.	Conditions to avoid:	Contact with incompatible materials and temperature extremes.
10.5.	Incompatible materials:	Strong oxidizers.
10.6.	Hazardous decomposition products:	Does not decompose under normal conditions. During fire, thermal decomposition can produce carbon monoxide (highly toxic) and carbon dioxide (as asphyxiant as sufficient concentrations).

11.1.	Information on	toxicological effects						
	Acute toxicity:							
Route o		Method	Species	Effect Dos LD ₅₀ /LC ATE _m	se C ₅₀ or	Expos time		Results
Oral:		nformation vailable	-	No inform availa	ation	-		-
Dermal	•	nformation vailable	-	No inform availa	ation	-		-
Inhalati	on:	nformation vailable	_	inform	No information available		-	
	Specific target of	organ toxicity - sing	le exposure (STOT-SE):				
		Specific	effects		Target organ		Note	
Oral:	No in	formation available			-		-	
Dermal	: No in	formation available			-		-	
Inhalati	on: No in	formation available			-		-	
	Aspiration haza	rd:	-					
	Irritation and co	rrosion				ation	Method	Note
	Irritation and co	errosion Exposure time	e Spec	cies	Evalua	1011		
Skin co	Irritation and co			cies -	Evalua		-	mild skin irritation



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Trade name:		LADEWIG'S REAGENT					
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Sensi	tization								
Skin sensitizatio	on:	No infor	mation available.						
Respiratory sensitization:		No infor	nformation available.						
Symp	toms re	lated to p	hysical, chemical,	and toxicologic	cal properties				
Oral exposure:		No kı	nown specific sym	nptoms.					
Dermal exposui	re:	No kı	nown specific sym	nptoms. May cau	use skin irritation.				
Inhalation expo	sure:	No kı	nown specific sym	nptoms.					
Eye exposure:		No kı	nown specific sym	nptoms.					
Repea	ated dos	se toxicity	(subacute, subch	ronic, chronic)					
	D	ose (Exposure time	Species	Method	Evaluatio n	Note		
Subacute oral	No inforn availa		No information available	No information available	No information available	No informati on available	No information available		
Subacute dermal	No inforn availa		No information available	No information available	No information available	No informati on available	No information available		
Subacute inhalation	No inforn availa		No information available	No information available	No information available	No informati on available	No information available		
Subchronic oral	intormation		No information available	No information available	No information available	No informati on available	No information available		
Subchronic dermal	intormation		No information available	No information available	No information available	No informati on available	No information available		
Subchronic inhalation	No inform availa	nation ble	No information available	No information available	No information available	No informati on available	No information available		



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Chronic oral	No information available	No No information available available		No information available	No inforn on availa		No information available		
Chronic information available		No information available	No information available		No information available	No informati on available		No information available	
Chronic inhalation	No information available	No information available	information information		No information available	No inform on availa		No information	
Spe	cific target organ	toxicity - repeated	exposure (STOT	-RE):				
		Specific eff	ects		Target organ			Note	
Subacute oral		No information a	vailable	No	No information available			information ilable	
Subacute derr	mal	No information available		No	No information available		No information available		
Subacute inha	llation	No information available		No	information availal	ole	No information available		
Subchronic or	al	No information available		No	No information available		No information available		
Subchronic de	ermal	No information available		No	No information available		No information available		
Subchronic inl	halation	No information available		No	No information available		No information available		
Chronic oral		No information a	vailable	No	No information available			information ilable	
Chronic derma	al	No information a	vailable	No	No information available		No information available		
Chronic inhala	ation	No information a	vailable	No	information availal	ole		information ilable	
-									
CMI	R effects (carcino	genicity, mutagenio	- :		•	:t: ··			
Card	Carcinogenicity:				ailable data, the cl	assıtıcatı	on cr	iteria are not	
Mut	Mutagenicity in-vitro:			on av	vailable data, the cl	assificati	on cr	iteria are not	
Gen	otoxicity:		met. Based on available data, the classification criteria are not met.						



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Trade name:		LADEWIG'S REAGENT					
Product code:	LDWR-OT-X**	Date of compilation:	14 November 2022	Version: 2	2		

	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 properties:	No information available
11.2.	Information on other hazards:	
11.2.1.	Endocrine disrupting properties:	
	No known endocrine disrupting properties that affect human health.	
11.2.2.	Other informations:	
	-	

12.1. Toxicity						
Acute (short-term) toxicity	Dose	Exposure time	Species	Method	Evaluation	Note
Fish	LC ₅₀	96 hours	-	-	-	-
Crustacea:	EC ₅₀	48 hours	-	-	-	-
Algae/aquatic plants:	IC ₅₀	72 hours	-	-	-	-
Other organisms	-	-	-	-	-	-
Chronic (long-term) toxicity	Doza	Exposure time	Species	Method	Evaluation	Note
Fish	LC ₅₀	96 hours	-	-	-	-
Crustacea:	EC ₅₀	48 hours	-	-	-	-
Algae/aquatic plants:	IC ₅₀	72 hours	-	-	-	-
Other organisms	-	-	-	-	-	-
12.2. Persistence a	ınd degrad	ability				
Abiotic degra						

Method

No information available

No information available

Evaluation

No information

No information

available

available

Note

Degradation half-lives

No information available

No information available

Marine

Fresh water

water



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D I 4 I.						LADEWI	3 3 IXE	-AGEITI				
Product code: LDWR-		LDW	/R-OT-X	(** Da	ate of	compilation:	14 ľ	November 202	2	V	ersion:	2
Air	No	inform	nation av	ailable	No ir	nformation ava	ilable	No information	on		_	
Soil	No	inform	nation av	ailable	No ir	nformation available No informatio available		on -				
D:-	-l											
		adatio		2) (5)	2 8 8 8 8	Method		Evaluation			Note	
% Degradati			Time (days) No information			nformation	No ir	nformation	_		Note	
available					avail		availa					
12.3. Bio	accur	nulativ	ve poten	tial								
Oct	anol-	water	partition	coefficier	nt (log l	Kow)						
Value		ncentr		рН	°C	Method		Evaluation			Note	
No information available			nation	-	_	No information available		No information available				
	conc	entrati	on Facto	or (BCF)	-							
Value			Speci	es		Method		Evaluation			Note	
			Speci oformation	es	No ir	nformation		Evaluation information ailable		N	Note	
Value No informati		No in	Speci oformation	es		nformation		information	-	N	Note	
Value No informati		No in	Speci oformation	es		nformation		information	-	N	Note	
Value No informati available	on	No in availa	Specion Specio	es		nformation		information	-	1	Note	
Value No informati available	on	No in	Specion Specio	es		nformation		information			Note	
Value No informati available	on	No in availa	Specion Specio	es	availa	nformation		information	- Evalu	atio	Note	te
Value No informati available	on ronic	No in availa	Specion Specio	es on	availa e time	nformation able	No	information ailable	Evalu	atio		te



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Trade name:		LADEWIG'S REAGENT					
Product code:	LDWR-OT-X**	Date of compilation:	14 November 2022	Version:	2		

	Knowr	-							
		n or pr	edicted distrib	ution in environme	ental compartme	ents:			
	Surfac	e tens	ion:	-			Т		
	Valu	ıe	°C	Concentration Method			Note		
	No No information n available available		information	No information available	n No informa available	ation	-		
	Adsor	ption	/ desorption						
Transpor	rt	-	coefficient y's constant	log Kow	Evaporation rate	Metho	d	Note	
No information available			No information available	No information available	No information available		-		
Water-ai	No informative water-air available			No information available	No information available	No information available		-	
Soil-air		lo info vailabl	rmation e	No information available	No information available	No information available		-	
12.5.	Results	s of PE	BT and vPvB as	sessment					
				ntains no compone sistent and very bi		•			
	and to	IXIC (FI	or), or very per	sistent and very bi	oaccumulative (vrvb) at levels	01 0.1%	or nigher.	
12.6.	Endoc	rine di	isrupting prope	erties					
	The su	ıbstan rties a	ce/mixture doe	es not contain com ACH Article 57(f) o J) 2018/605 at leve	r Commission D	elegated regul			
	3								
12.7.	Other	advers	se effects						
	No inf	ormat	ion available						
SECTION	N 13. Di	isposa	al consideration	ons					
13.1.	Waste	treatr	ment methods						



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Trade name:	LADEWIG'S REAGENT				
Product code:	LDWR-OT-X**	Date of compilation:	14 November 2022	Version:	2

13.1.1.	Product/Packaging disp	posal:	
	Submit for disposal to the Protection.	the legal person authorized by the Ministry of Environmental and Nature	
	:		
13.1.2.	Waste codes/waste des	ignations according to Law:	
	Disposal must be made	according to official regulations.	
13.1.3.	Waste treatment – rele	vant information:	
	No information availab	le	
13.1.4.	Sewage disposal – relev	vant information:	
		posed of into the sewage system.	
	•		
13.1.5.	Other disposal recomm	endations:	
	Do not dispose of the product's remains into the sewage system. Submit the remains to the col 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 p	ovisions:	
	-		
	,		
SECTION	l 14. Transport informat	ion	
	Transporting/shipment b	by road (ADR)	
UN numl	ber:	Not subject to transport regulations	
UN prop	er shipping name:	-	
Transpor	t hazard class(es):	-	
Packing (group:	-	
Environm	nental hazards:	-	
Special p	recautions for user:	-	
	Transporting/shipment b	y rail (RID)	
UN number:		Not subject to transport regulations	
UN proper shipping name:		-	
Transpor	t hazard class(es):	-	
Packing (group:	-	
Environm	nental hazards:	-	
Special p	recautions for user:	-	
	Transporting/chipmont h	by inland waterways (ADN)	



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Trade name:	LADEWIG'S REAGENT				
Product code:	LDWR-OT-X**	Date of compilation:	14 November 2022	Version:	2

UN number:	Not subject to transport regulations
UN proper shipping name:	-
Transport hazard class(es):	-
Packing group:	-
Environmental hazards:	-
Special precautions for user:	-
Transporting/shipment by sea	(IMDG)
UN number:	Not subject to transport regulations
UN proper shipping name:	-
Transport hazard class(es):	-
Packing group:	-
Environmental hazards:	-
Special precautions for user:	-
Transport in bulk according to Annex II of MARPOL73/78 and the IBC code:	-
Transporting/shipment by air	(ICAO-TI/IATA-DGR)
UN number:	Not subject to transport regulations
UN proper shipping name:	-
Transport hazard class(es):	-
Packing group:	-
Environmental hazards:	-
Special precautions for user:	-

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



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Trade name:	LADEWIG'S REAGENT				
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		waste with a waste catalog and list of hazardous waste, Ordinance on writing Material safety data sheet, Transport of Hazardous Substances Act
	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
	Information according guideline)	1999/13/EC about limitation of emissions of volatile organic compounds (VOC-
		REACH Restrictions on the manufacturing, placing on the market and use of certain dangerous substances, mixtures and articles (Annex XVII);
		Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006;
		Council Directive 98/24/EC of 7 April 1998 on the protection of the health and safety of workers from the risks related to chemical agents at work;
	Other EU regulations:	Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC; Directive 2004/42/CE of the European Parliament and of the Council of 21 April 2004 on the limitation of emissions of volatile organic compounds due to the use of organic solvents in certain paints and varnishes and vehicle refinishing products and amending Directive 1999/13/EC;
		Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission

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



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Trade name:		LADEWIG	'S REAGENT		
Product code:	LDWR-OT-X**	Date of compilation:	14 November 2022	Version:	2

16.4.	Classification and procedure used to derive the classification for mixture according to Regulation (EC) 1272/2008 (CLP)				
Classific	ation		Classification procedure		
-			-		
16.5.	Relev	vant H statements (nu	mber and full text)		
		302	Harmful if swallowed.		
		312	Harmful in contact with skin.		
	H:	314	Causes severe skin burns and eye damage.		
	1 1.	315	Causes skin irritation.		
		318	Causes serious eye damage.		
		319	Causes serious eye irritation.		
16.6.	Train	ing advice:	-		
	16.7. Further information:		"X" in the product code marks different volumes (different packaging of the product)		
16.7.			We are not responsible for consequences in case of failure to comply with instructions for use or improper use of the product described in this material safety data sheet.		





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Trading name:	PHOSPHOTUNGSTIC ACID, 1% SOLUTION				
Product code:	FVK1-OT-X**	Date of compilation:	21 Dec 2022	Version:	2

SECTION	ON 1 IDENTIFICATION (OF THE SUI	BSTANCE/MI	XTURE AND OF THE COMPANY/UNDERTAKING	
1.1.	Product identifier				
	Trading name:	PHOSPHO	OTUNGSTIC A	CID, 1% SOLUTION	
	Chemical name:	-			
	Catalogue number:	FVK1-OT-	-X**		
1.2.	Relevant identified uses of the substance or mixture and uses advised against			xture and uses advised against	
	Uses:		For use w	ith special staining kits.	
	Uses advised against:		Only the i	dentified uses are advised.	
Reason why uses advised against: medical device, registered at the		uct is intended for use only as an <i>in vitro</i> diagnostic levice, registered at the Agency for Medicinal Products and Devices and there is no reason to use it for other purposes			
1.3.	Details of the supplier	of the safet	ty data sheet		
	Supplier:		BioGnost Ltd.		
	Address:		Medjugorska 59, Zagreb +385 1 2409997 +385 1 2404039 msds@biognost.hr		
	Telephone number:				
	Fax no.:				
	e-mail of competent p	erson:			
	National contact:		-		
1.4.	Emergency telephone	number			
	National Protection an	d Rescue D	irectorate:	112	
	Medical information:			+385 1 2348 342	
	Other information:			-	

SECTIO	ON 2 HAZARDS INFORMATION	l		
2.1.	Classification of the substance or mixture			
2.1.1.	Classification (REGULATION (EC) No. 1272/2008 (CLP)			
	Hazard class and categ	Hazard class and category code: Hazard statements*:		
	Not identified as hazardous substance			
2.1.2.	Additional information			
	-			
*For fu	ıll text of Hazard- and EU Hazard	-statements: see	Section 16	
2.2.	Classification according to EC	Directive Nr. 1272	/2008 CLP)	
	Product identification:	PHOSPHOTU	JNGSTIC ACID, 1% SOLUTION	
	Identification number: -			
	Authorization no.:			
	Hazard pictograms: -			



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Trading name:	PHOSPHOTUNGSTIC ACID, 1% SOLUTION				
Product code:	FVK1-OT-X**	Date of compilation:	21 Dec 2022	Version:	2

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

SECTION 3 CC	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)	
12501-23-4/ 603-020-3/ -	-	≤ 1%	phosphotungstic acid hydrate	Skin Corr. 1B; H314 Eye Dam. 1; H318	

SECTI	TION 4 FIRST AID MEASURES				
4.1.	Description of first aid measu	res			
	General notes:	-			
	Following inhalation:	Carry the afflicted person out of the contaminated area into a well-ventilated area or out for fresh air. If breathing becomes erratic or it stops, immediately apply artificial respiration (other than mouth-to-mouth) and contact a physician.			
	Following skin contact:	Remove contaminated clothing. Immediately wash with plenty of water and soap. Seek medical assistance if the symptoms of irritation remain.			
	Following eye contact:	Rinse out with plenty of water with the eyelid held wide open using clean fingers. If the symptoms remain, immediately call a physician.			
	Following ingestion:	Do not induce vomiting. Make the afflicted person drink a glass of water. If spontaneous vomiting occurs, wash the mouth with water, then make the person drink 100-200 ml of water and seek medical attention.			
	Self-protection of the first aid	er: Treat symptomatically.			
4.2.	Most important symptoms an	d 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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Trading name:	PHOSPHOTUNGSTIC ACID, 1% SOLUTION			
Product code:	FVK1-OT-X**	Date of compilation:	21 Dec 2022	Version: 2

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



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Trading name:	PHOSPHOTUNGSTIC ACID, 1% SOLUTION				
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6.3.2.	Cleaning up:	Where possible, the substance can be absorbed by using inflammable material (sand, diatomaceous earth, vermiculite). Place the waste material in tightly closed impermeable containers. Store the substance in well ventilated storage rooms until disposal. Submit for disposal to the legal persons authorized by the Ministry of Environmental and Nature Protection. After disposal of the products, wash the area and and involved materials with water.
6.3.3.	Other information:	-
6.4.	Reference to other sections	
	-	

SECTIO	ON 7 HANDLING 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 generat	ion:	Secure proper ventilation.
	Measures to protect the environment: Other measures:		Prevent spilling into the sewage system and waterways.
7.1.2.	Advice on general occupational hygiene:		<u> </u>
1.1.6.	, , , ,	horo	ughly wash hands after work and before eating.
7.2.	Conditions for safe storage, including any incompatibilities		
	Technical measures and storage conditions:	Kee	ep in tightly closed and upright set containers in a well ntilated storage rooms, and away from sources of heat, nlight, and other incompatible substances.
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	Packaging materials:	Manufacturer's original packaging.	
	Requirements for storage rooms and vessels:	Keep away from food and drink. Keep the containe tightly closed.	
	Advices for storage equipment:	be dire	e storage must be made of hard material; floors must resistant to chemicals. There must be no drain that ectly leads into sewage system. Secure proper atilation.
	Further information on storage conditions:	Do not place the unused material in the storage ro and do not use empty containers for storing other chemicals. Do not store with incompatible material Section 9).	
7.3.	Specific end use(s)		
	Recommendations:	-	
	Industrial sector specific solutions:	-	



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Trading name:	PHOSPHOTUNGSTIC ACID, 1% SOLUTION				
Product code:	FVK1-OT-X**	Date of compilation:	21 Dec 2022	Version: 2	

SECTION 8 EXPOSUR	RE CON	TROLS/PER	SONAL	PROT	ECTION			
8.1. Control parar	meters			ı				
Substance		CAS I	No			exposure limit term values	Biological limit values	
				ı	ppm	mg/m³		
-		-			-	-	No information available	
Substance - name:								
EC No: -		CAS No:	-					
DNEL								
				Ind	lustrial			
Route of	A	Acute		Acute	e	Chronic	Chronic	
exposure:	exposure: effect local		effe	ct sys	temic	effect loca	l effect systemic	
Oral	-		-			-	-	
Inhalation	-		-				-	
Dermal	-		-		- -			
Critical physical param	neters: s	olubility, fla	mmabilit	y, cor	rosivity:	-		
			ı	Coı	nsumer			
Route of		Acute		Acut			Chronic	
exposure:	effe	ect local	effe	ct sys	temic	effect loca	l effect systemic	
Oral	-		-			-	-	
Inhalation	-		-			-	-	
Dermal	-		-			-	-	
PNEC					T .			
Environmental protect	tion tar	get			PNEC			
Fresh water						mation availabl		
Freshwater sediments						mation availabl		
Marine water					mation availabl			
Marine sediments				No information available				
Food chain					mation availabl			
Microorganisms in sewage treatment				No information available				
Soil (agricultural)					No information available			
Air					No infor	mation availabl	e	
Air					No infor	mation availabl	e	



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Trading name:	PHOSPHOTUNGSTIC ACID, 1% SOLUTION				
Product code:	FVK1-OT-X**	Date of compilation:	21 Dec 2022	Version:	2

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

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES					
9.1.	9.1. Information on basic physical and chemical properties				
		Value	Method		



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Trading name:	PHOSPHOTUNGSTIC ACID, 1% SOLUTION				
Product code:	FVK1-OT-X**	Date of compilation:	21 Dec 2022	Version:	2

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

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

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



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Route of exposure:	Method	Species	Effective dose LD ₅₀ /LC ₅₀ or ATE _{mixture}	Exposure time	Results
Oral exposure:	No information available	-	LD ₅₀	-	-
Dermal exposure:	No information available	_	LD ₅₀	-	-
Inhalation exposure:	No information available	_	LC ₅₀	-	-

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:	No information available

Irritation and corrosion

	Exposure time	Species	Evaluation	Met hod	Note
Skin irritation:	-	-	-	-	-
Eye irritation:	-	_	-	-	-

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

Oral exposure: No information available						
nformation available						
nformation available						
nformation available						
1						



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Repeate	ed dose to	oxicity (sub	acute, subchro	onic, chroni	C)				
	D	ose	Exposure time	Species		Method	Evaluatio	1	Note
Subacute oral	No in	formation le	No information available	No information available	on	No information available	No information available	on	-
Subacute dermal	No intavailable	formation le	No information available	No information available	on	No information available	No information available	on	-
Subacute inhalation	No intavailable	formation le	No information available	No information available	on	No information available	No information available	on	-
Subchronic oral	No inta	formation le	No information available	No information available	on	No information available	No information available	on	-
Subchronic dermal	No intavailable	formation le	No information available	No information available	on	No information available	No information available		-
Subchronic inhalation	No intavailable	formation le	No information available	No information available	on	No information available	No information available		-
Chronic oral	No intavailable	formation le	No information available	No information available	on	No information available	No information available		_
Chronic dermal	No intavailable	formation le	No information available	No information available	on	No information available	No information	on	-
Chronic inhalation	No in	formation le	No information available	No information	on	No information available	No information available	on	-
						.=\			
Specific	target or		y – repeated e pecific effects	xposure (S	IOI k		an.		Note
Subacute oral			tion available		No i	Target orga nformation avai		_	inole
Subacute dermal			tion available					_	
Subacute inhalat			tion available		No information available No information available				
Subchronic oral			tion available		No information available			_	
Subchronic derm			tion available		No information available			-	
Subchronic inhal			tion available			nformation avai		-	
Chronic oral			tion available			nformation avai		-	



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Chronic	dermal	No informa	tion available	No information available	-		
Chronic	inhalation	No informa	tion available	No information available	-		
	1						
	CMR effects	(carcinogenicity	, mutagenicity, rep	roductive toxicity)			
	Carcinogenic	ity:	Based on avail	able data, the classification criteria a	are not met.		
	Mutagenicity	ı in-vitro:	Based on avail	able data, the classification criteria a	are not met.		
	Genotoxicity:	•	Based on avail	able data, the classification criteria a	are not met.		
	Mutagenicity	in-vivo:	Based on avail	able data, the classification criteria a	are not met.		
	Germ cell mutagenicity: Based on a			able data, the classification criteria a	are not met.		
	Reproductive toxicity: Based on available data, the classification criteria are not met.				are not met.		
11.2	Information of	on other hazard	ds:				
11.2	Information of	on other hazard	ls:				
11.2.1.	Endocrine disrupting properties:						
	contain cor have endocr according to Commission 2017/2100 c	ance/mixture mponents con rine disrupting o REACH Artic Delegated reg or Commission 05 at levels	properties cle 57(f) or ulation (EU) Regulation				
11.2.2.	Other inform	ations:					

12.1. Toxicity

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



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

12.2. Persistence and degradability

Abiotic degradation

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

Biodegradation

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

12.3. Bioaccumulative potential

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

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



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	Bioconce	ntration	factor (BCF)										
	lue		Species		N	/lethod		E	valuation			Note	
No infor		No availa	inform	ation	No info availabl		n		information	on	No info	ormation a	vailable
	Chronic e	ecotoxici	ity										
	Value		Dose		osure me	Spe	ecies	M	1ethod		Evaluat	ion	Note
Chronic t	toxicity o	n fish	LC ₅₀	No infori availa	mation able	No inforr availa	nation ble		rmation ilable		o inform ailable	ation -	
	toxicity o a (<i>Daphn</i>		EC ₅₀	No infori availa	mation able			1	rmation ilable	1	No information available		
	No infor	nation a	ted distributi vailable	on in e	environin	entarc	ompart	ment	.5.				
	Surface t										T		
	Value		°C	C	Concentration		Method			Note		!	
		formation ailable				No information available			-				
	Adsorpti	on / des	orption										
Transpor	†	A/D coe Henry's c	efficient constant	lo	g Kow		Evaporation rate			Me	ethod	Note	
Soil-wate	er No avai	i lable	nformation	No ir availa	nformatic able	n No	inform	nation	n available	<u> </u>	No info	ormation le	_
Water-ai	r No avai	i lable	nformation	No ir availa	nformatic able	n No	No information available)	No info	ormation le	-	
Soil-air	No avai	i lable	nformation	No ir availa	nformatic able	n No	inform	nation	ı available)	No info	rmation le	-



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12.5. Resu	Its of PBT and vPvB assessme	ent					
acco		contain components considere or Commission Delegated reg s of 0.1% or higher.					
12.6. Endo	crine disrupting properties						
The substance/mixture does not contain components considered to have endocrine disru according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Regulation (EU) 2018/605 at levels of 0.1% or higher.							
12.7. Othe	r adverse effects						
No ir	nformation available						
	DISPOSAL CONSIDERATION	NS					
13.1. Wa	ste treatment methods						
13.1.1. Pro	duct/Packaging disposal:						
Sul	0 0 1	person authorized by the Mir	nistry of Environmer	ntal and Nature			
13.1.2. Wa	ste codes/waste designation	ns according to Law:					
	information available	<u> </u>					
13.1.3. Wa	ste treatment – relevant info	ormation:					
No	information available						
13.1.4. Sev	vage disposal – relevant info	ermation:					
	ste must not be disposed of						
	The must not be disposed of	into the sewage system.					
13.1.5. Oth	ner disposal recommendation	ns:					
aut the	horized by the ministry in ch	s remains into the sewage syst arge. Do not dispose of the p authorized by the ministry in	ackaging into the s	ewage system. Submit			
13.1.6. Rel	evant Community provisions	;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;					



SAFETY DATA SHEET

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

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



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Special precautions for u	ser: -	
Further information:	-	

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

SECTION 16 Other information					
16.1.	Indication of changes:	-			



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16.2.	Abbreviations and acronyms:	ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road) IMDG: International Maritime Code for Dangerous Goods IATA: International Air Transport Association GHS: Globally Harmonised System of Classification and Labelling of Chemicals EINECS: European Inventory of Existing Commercial Chemical Substances CAS: Chemical Abstracts Service (division of the American Chemical Society) DNEL: Derived No-Effect Level (UK REACH) LC50: Lethal concentration, 50 percent LD50: Lethal dose, 50 percent PBT: Persistent, Bioaccumulative and Toxic vPvB: very Persistent and very Bioaccumulative			
16.3.	Key literature references and source of data:	-			
16.4.	Classification and procedure used to derive the classification for mixture according to Regulation (EC) 1272/2008 (CLP)				
Classification		Classification procedure			
-		-			
16.5.	Relevant H statements (number and full text)				
	H: 314	Causes severe skin burns and eye damage.			
	318	Causes serious eye damage.			
16.6.	Training advice:	-			
16.7.	** "X" in the product code marks different volumes (different packaging the product) We are not responsible for consequences in case of failure to comply wi 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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