

LADEWIG TRICHROME KIT

VERSION 3

The kit contains:

Ferri reagent, Weigert B Hematoxylin, Weigert A Ladewig's 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	

SECTI	ON 1 IDENTIFICATION	OF THE SUBS	STANCE/MIX	KTURE AND OF THE COMPANY/UNDERTAKING	
1.1.	Product identifier				
	Trading name:	FERRI REAC	GENT, WEIGE	RT B	
	Chemical name:	-			
	Catalogue number:	FR-OT-X**			
1.2.	Relevant identified use	es of the subs	stance or mix	ture and uses advised against	
	Uses:		For use in	special staining kits.	
	Uses advised against:		Only the ic	dentified uses are advised.	
	Reason why uses advi	The product is intended for use only as an <i>in vitro</i> dia device, registered at the Agency for Medicinal Product Devices and there is no reason to use it for other pur			
1.3.	Details of the supplier	of the safety	data sheet		
	Supplier:	Ві	BioGnost Ltd.		
	Address:	N	Medjugorska 59, Zagreb +385 1 2409997 +385 1 2404039		
	Telephone number:	+			
	Fax no.:	+			
	e-mail of competent p	erson: <u>m</u>	msds@biognost.hr		
	National contact:	-			
1.4.	Emergency telephone	number			
	National Protection ar	nd Rescue Dir	ectorate:	112	
	Medical information:			+385 1 2348 342	
	Other information:			-	

SECTIO	TION 2 HAZARDS INFORMATION						
2.1.	Classification of the substance or mixture						
2.1.1.	Classification according to Re	gulation (EC) No 1	272/2008 (CLP)				
	Hazard class and cate	Hazard class and category code: Hazard statements*:					
	Not identified as hazardous substance.						
2.1.2.	Additional information						
	-						
*For fu	ll text of Hazard- and EU Hazar	d-statements: see S	Section 16				
2.2.	Classification according to EC	Directive Nr. 1272	2/2008 CLP)				
	Product identification:	FERRI REAGE	ENT, 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	:
	No known endocrine disrupting pr	roperties
	Results of PBT and vPvB assessn PBT or a vPvB.	nent : According to the results of its assessment, this substance is not a

SECTION 3 CO	SECTION 3 COMPOSITION/INFORMATION ON INGREDIENTS							
CAS/ EC/ Index no.	REACH Registration No	Weight % content (or range)	Identification name	Classification according to Regulation (EC) No 1272/2008 (CLP)				
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	ON 4 FIRST AID MEASURES	
4.1.	Description of first aid measures	
	General notes:	-
	Following inhalation:	Carry the afflicted person out of the contaminated area into a well-ventilated area or out for fresh air. If breathing becomes erratic or it stops, immediately apply artificial respiration (other than mouth-to-mouth) and contact a physician.
	Following skin contact:	Remove contaminated clothing. Immediately wash with plenty of water and soap. Seek medical assistance if the symptoms of irritation remain.
	Following eye contact:	Rinse out with plenty of water with the eyelid held wide open using clean fingers. If the symptoms remain, immediately call a physician.
	Following ingestion:	Do not induce vomiting. Make the afflicted person drink a glass of water. If spontaneous vomiting occurs, wash the mouth with water, then make the person drink 100-200 ml of water and seek medical attention.
	Self-protection of the first aider:	Treat symptomatically.
4.2.	Most important symptoms and ef	fects, both acute and delayed



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	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				
	-				

SECTI	SECTION 5 FIREFIGHTING MEASURES					
5.1.	Extinguishing media					
	Suitable extinguishing media: Small fire - water spray, dry powder, CO ₂ Large fire - water spray or alcohol-resistant foam					
	Unsuitable extinguishing media: 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 harriers					
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	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. Thoroughly wash hands after work and before eating					
7.2.	Conditions for safe storage, including any incom	patibilities				
	Technical measures and storage conditions:	Keep in tightly closed and upright set containers in a well ventilated storage rooms, and away from sources of heat, sunlight, and other incompatible substances.				
	Packaging materials:	Manufacturer's original packaging.				
	Redilirements for storage rooms and vessels.	Keep away from food and drink. Keep the containers tightly closed.				
	Advices for storage equipment:	The storage must be made of hard material; floors must be resistant to chemicals. There must be no drain that directly leads into sewage system. Secure proper ventilation.				



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	Further information on storage conditions:	Do not place the unused material in the storage room and do not use empty containers for storing other chemicals. Do not store with incompatible materials (see Section 9).
7.3.	Specific end use(s)	
	Recommendations:	-
	Industrial sector specific solutions:	-

8.1. Con	trol paramet	ers						
Substance		CAS I			upational exposure limit llues/short term values		Biological limit values	
				ppm	mg/m³		-	
Hydrogen ch	loride	7647-0)1-0	5/10	8/15		-	
Substance name:	-							
EC No: -		CAS No:	-					
DNEL			·					
				Industrial				
Route of		Acute		Acute	Chronic	C	Chronic	
exposure: eff		effect local	al effect syste		effect local		effect systemic	
Oral -			-		-		-	
Inhalation -			-		-		-	
Dermal	-		-		-		-	
Critical physic	cal paramete	rs: solubility, fla	ımmabili	ty, corrosivity:	-			
				Consumer				
Route of		Acute		Acute	Chronic		Chronic	
exposure:		effect local	effe	ect systemic	effect loc	cal	effect systemic	
Oral	-		-		-		-	
Inhalation	-		-		-		-	
Dermal	-		-		-		-	
PNEC								
Environment	al protection	target		PNEC	PNEC			
Fresh water					No information available			
Freshwater se	ediments				No information available			
Marine water				No info	ormation available	!		



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Marine se	diments			No information available		
Food chai	n			No information available		
Microorga	nisms in sewage treatment			No information available		
Soil (agric	ultural)			No information available		
Air				No information available		
0.0						
8.2.	Exposure controls					
8.2.1.	Engineering measures		1			
	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:			ation of work in order to reduce other worker's influence work process.		
	Technical measures to pre exposure:	event		oroper 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 g visor.	lasses that stick to face (preventing splashing) (EN 166) or		
8.2.2.2.	Skin protection					
	Hand protection:	standard EN : Glove Glove		es must be according to the EU Directive 2016/425/EEC and 4. naterial: nitrile rubber nickness: ≥0.50 mm nrough time: >480 min		
	Other skin protection:			tatic 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 fo	or organio	ace mask (EN 136) or half mask (EN 140) equipped with a vapors, type "A" (boiling point >65°C) acording to EN en 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 Sec	tion 6		
	Structural measures to pro 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

9.1.	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
	Lower and upper explosion limit:	No information available	No information available
	Flash point:	No information available	No information available
	Auto-ignition temperature:	No information available	No information available
	Decomposition temperature:	No information available	No information available
	рН:	No information available	No information available
	Kinematic viscosity:	No information available	No information available
	Solubility:	No information available	No information available
	Partition coefficient n-octanol/water (log value):	No information available	No information available
	Vapour pressure:	No information available	No information available
	Density and/or relative density:	No information available	No information available
	Relative vapour density:	No information available	No information available
	Particle characteristics:	No information available	No information available
9.2.	Other information		

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

	COLOGICAL INFORMA				
	n on hazard classes as	defined in Regu	lation (EC) No 12	72/2008	
Acute toxic	city:				
Route of exposure:	Method	Species	Effective dose LD ₅₀ /LC ₅₀ or ATE _{mixture}	Exposure 1	ime Results
Oral exposure:	No information available	-	LD ₅₀	-	-
Dermal exposure:	No information available	-	LD ₅₀	-	-
Inhalation exposure:	No information available	-	LC ₅₀	_	-
Cassific to	ract organ tovicity	oalo ovnosuro (C	TOT CEV		
Specific tar	get organ toxicity – sir	effects		t organ	Note
Oral avposure:	No information a		No informati	t organ	Note -
Oral exposure: Dermal exposure:	I		No informati		
•				No information available -	
Inhalation exposure	: No information a	valiable	NO IIIIOIIIIau	OII avallable	
Respiratory	/ irritation:	No inforr	nation available		
; · ·					
Irritation a	nd corrosion				
:	Exposure time	Species	Evaluation	Method	Note
Skin irritation:	-	rabbit	-		
Eye irritation:	-	rabbit	-		
		•			
Sensitizatio	on				
Dermal exposure:	No information availa	ıble			
Inhalation exposure:	No information availa	ıble			
Symptoms	related to the physical	, chemical and t	oxicological chara	acteristics	
Oral exposure:	Swallowing may ca sensation; higher lo In case of vomiting concentration may	evels of concent g, aspiration caus	ration may cause ses coughing, diff	nausea, abdor	minal pain and vomiting



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Dermal exposure	:	Slight irritation. After short exposure, resorption effects are not likely. Long-term emay cause drying, cracking and tingling sensation of skin.							
Inhalation expos	ure:		Inhalation of large amounts of vapors in inadequately ventilated perimet coughing, sneezing, headache and nausea.						
Eye exposure:		Direct eye co sensation.	Direct eye contact may cause slight to moderate irritation, lacrimation and burning sensation.						
Repeate	ed dos	e toxicity (sub	acute, subchro	onic. chronic					
1 - F		Dose	Exposure time	Species	Method	Evaluation	Note		
Subacute oral	No avail	information able	No information available	No information	No information available	No information available	-		
Subacute dermal	No avail	information able	No information available	No information available	No information available	No information available	-		
Subacute inhalation	No avail	information able	No information available	No information available	No information available	No information available	-		
Subchronic oral	No avail	information able	No information available	No information	No information available	No information available	-		
Subchronic dermal	No avail	information able	No information available	No information	No information available	No information available	-		
Subchronic inhalation	No avail	information able	No information available	No information	No information available	No information available	-		
Chronic oral	No avail	information able	No information available	No information	No information available	No information available	-		
Chronic dermal	No avail	information able	No information available	No information	No information available	No information available	-		
Chronic inhalation	No avail	information able	No information available	No information	No information available	No information available	-		
c :c	4	Laurent 1 1 1			TOT DEV				
Specific	targe		y – repeated e pecific effects	xposure (ST	OTRE): Target or	gan	Note		
Subacute oral			ation available		No information av		NOLE		



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Subacute dermal	No information	n available	No information available	-		
Subacute inhalation	No information	n available	No information available	-		
Subchronic oral	No information	n available	No information available	-		
Subchronic dermal	No information	n available	No information available	-		
Subchronic inhalation	No information	n available	No information available	-		
Chronic oral	No information	n available	No information available	-		
Chronic dermal	No information	n available	No information available	-		
Chronic inhalation	No information	n available	No information available	-		
	i		i .	1		
CMR effects (carcinogenicity, m	utagenicity, reprodu	uctive toxicity)			
Carcinogenic	ity:	Current studies on	test animals did not indicate ca	rcinogenic effects.		
Mutagenicity	in-vitro:	Current <i>in vitro</i> t	ests did not indicate mutageni	c effects.		
Genotoxicity:		No information available				
Mutagenicity	in-vivo:	o-vivo: Current in vivo tests did not indicate mutagenic effects.				
Germ cell mu	tagenicity:	No information av	ailable			
Reproductive	toxicity:	No toxicity on roorgans.	eproductive organs was deter	mined in reproductive		
	evaluation of the C	CMR properties:	-			
	srupting properties	<u> </u>				
The substance components endocrine according to Commission 2017/2100 o	e/mixture does no considered to	t contain have roperties 57(f) or tion (EU) egulation				
11.2.2. Other information	ation:					

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	-

D: 1			
Biodeo	コヒコペ	lation	١.
DIOUE	ai au	ıatıoı	

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

12.3. Bioaccumulative potential



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	Parti	tion co	efficier	nt: n-octan	ol/wate	er (log K	low):							
Valu	e	Cond	centrat	ion	Н	°C	М	ethod		Evalua	ation		Note	
-		No availab	inform ole	ation -		-	No infavailab	ormatior ble	1	No inform available	nation	-		
	Bioc	oncentr	ration f	actor (BCF)									
V	alue			Species	-		Metho	d		Evaluation	on		Note	
No info availabl			No availab		nation			rmation No		No information available			No information available	
	Chrc	nic eco	toxicit	v										
	Val		-	Dose		osure ime	Sp	ecies	N	Method	Εν	/aluation	Note	5
Chronic	toxic	ity on fi	ish	LC ₅₀	No infor avail	mation able	No infor avail	mation able	1	ormation ailable		No information available		
Chronic crustace		-		EC ₅₀	No infor avail	mation able	No infor avail	mation able		o ormation ailable		No information available		
12.4.	Moh	oility in s	soil											
12,7,		-		d distribu	ion in e	nvironr	mental	compart	men	ıts.				
		nforma					Tieritai	compare						
		ace tens												
	١	/alue		°C	С	oncentr	ation		М	ethod			Note	
	No No information inf			ormation ailable		No information				rmation		-		
	L		<u></u>					<u> </u>						
	Adso	orption	/ deso	rption										
Transpo	ort		D coef nry's co	ficient onstant	lo	og Kow	E	vaporati	on ra	ate	Metho	d	Note	



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Soil-water		No information available	-				
Water-	ater-air No information available No information available No information available - No information available -						
Soil-air	No availab	information le	No information available	No information available	No information available	-	
12.5.	Results of P	BT and vPvB asse	ssment				
	according to	REACH Article 5	•	n Delegated regula	to have endocrine d tion (EU) 2017/2100	lisrupting properties or Commission	
12.6.	Endocrine d	isrupting propert	ies				
	according to	REACH Article 5	•	n Delegated regula	to have endocrine d tion (EU) 2017/2100	lisrupting properties or Commission	
12.7.	Other adverse effects						
14.7.	Other adver	se errects					
12.7.		tion available					
12.7.							
	No informa		TIONS				
	No informa	cion available	TIONS				
SECTIO	No informa	cion available	TIONS				
SECTIO	No information No inf	cion available					
SECTIO 13.1.	No information No inf	SAL CONSIDERA atment methods ackaging disposa	l:	rized by the Minist	ry of Environmental	and Nature	
SECTIO 13.1.	No information No inf	SAL CONSIDERA atment methods ackaging disposa r disposal to the l	l:	·	ry of Environmental	and Nature	
SECTIC 13.1.	No information No inf	SAL CONSIDERA atment methods ackaging disposa r disposal to the l	l: egal person autho	·	ry of Environmental	and Nature	
SECTIC 13.1.	No information No inf	SAL CONSIDERA atment methods ackaging disposa r disposal to the l des/waste designa ation available	l: egal person autho ations according to	·	ry of Environmental	and Nature	
SECTIC 13.1. 13.1.1.	No information No inf	SAL CONSIDERA atment methods ackaging disposa r disposal to the l a.	l: egal person autho ations according to	·	ry of Environmental	and Nature	
13.1.1. 13.1.2.	No information No inf	SAL CONSIDERA atment methods ackaging disposa r disposal to the l l. des/waste designa ration available atment – relevant	l: egal person autho ations according to information:	·	ry of Environmental	and Nature	
SECTIC 13.1. 13.1.1.	No information No inf	SAL CONSIDERA atment methods ackaging disposa r disposal to the l a. des/waste designa ation available atment – relevant ation available	l: egal person autho ations according to information:) Law:	ry of Environmental	and Nature	
13.1.1. 13.1.2.	No information No inf	SAL CONSIDERA atment methods ackaging disposa r disposal to the l a. des/waste designa ation available atment – relevant ation available	l: egal person autho ations according to information:) Law:	ry of Environmental	and Nature	



SAFETY DATA SHEET

amended by Regulation (EU) No. 2020/878

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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 provision	s:						
	-							
SECTION	SECTION 14 TRANSPORT INFORMATION							
٦	Transporting/shipment by road (ADR)						
UN numb	oer:	Not subject to transport regulations.						
UN prope	er shipping name:	-						
Transport	t hazard class(es):	-						
Packing g	ıroup:	-						
Environm	entally hazardous:	-						
Special p	recautions for user:	-						
٦	Transporting/shipment by rail (R	ID)						
UN numb	oer:	Not subject to transport regulations.						
UN prope	er shipping name:	-						
Transport	t hazard class(es):	-						
Packing g	ıroup:	-						
Environm	entally hazardous:	-						
Special p	recautions for user:	-						
I	nland waterway transport (ADN)							
UN numb	oer:	Not subject to transport regulations.						
UN prope	er shipping name:	-						
Transport	hazard class(es):	-						
Packing g	ıroup:	-						
Environm	entally hazardous:	-						
Special p	recautions for user:	-						
7	Transporting/shipment by sea (II	MDG)						
UN numb	oer:	Not subject to transport regulations.						
UN prope	er shipping name:	-						
Transport	t hazard class(es):	-						
Packing g	ıroup:	-						
Environm	entally hazardous:	-						
Special p	recautions for user:	-						



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

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.				

15.1.	Safety, health and environmental regulations/legislation specific for the substance or mixture				
	EU regulations				
	Authorization and/or rest	rictions of use			
	Authorizations:	-			
	Restrictions:	-			
	Other EU regulations:	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 10 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			
	Information according 19 guideline)	dangerous substances, mixtures and articles (Annex XVII); 99/13/EC about limitation of emissions of volatile organic compounds (VOC-			
	guideiiiie)	Chemicals Act, Regulation on classification, packaging and labeling of			
		dangerous substances, Ordinance on occupational exposure limit values and			
	National legislation:	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			



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None

16.1.	Indi	cation of changes:	-				
16.2.		previations 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.		literature references and rce of data:	-				
16.4.		ssification and procedure 2/2008 (CLP)	used to derive the classification for mixture according to Regulation (EC)				
Classif	ication	١	Classification procedure				
-			-				
16.5.	Rele	evant H statements (numb	per and full text)				
	H:	H314	Causes severe skin burns and eye damage.				
		H315	Causes skin irritation.				
			Causes serious eye irritation.				
			·				
		H335	May cause respiratory irritation.				
16.6.	Trai	H335 ning advice:	•				

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:	19 Dec 2023	Version:	6

SECTI 1.1.	ON 1. Identification of the Product identifier	substance/m	ixture and	of the company/undertaking		
1.1.		11514450\0/111				
		HEMATOXYLIN	, WEIGERT	Α		
	Chemical name:	-				
	Catalogue number:	HEMA-OT-X**				
1.2.	Relevant identified uses	of the substanc	e or mixtur	e and uses advised against		
	Uses:		For use i	n special staining kits.		
	Uses advised against:		Only the	identified uses are advised.		
	Reason why uses advised	d against:	The product is intended for use only as an <i>in vitro</i> diagnostic medical device, registered at the Agency for Medicinal Products and Medical Devices and there is no reason to use it for other purposes.			
1.3.	Details of the supplier of the safety data sheet					
	Supplier:	BioGr	BioGnost Ltd.			
	Address:	Medjı	Medjugorska 59, Zagreb			
	Telephone number:	+385	+385 1 2409997			
	Telefax:	+385	+385 1 2404039			
	e-mail of competent per	son: <u>msds</u> (msds@biognost.hr			
	National contact:	-	-			
1.4.	Emergency telephone number					
	National Protection and	Rescue Directo	rate:	112		
	Medical information:			+385 1 2348 342		
	Other information:			-		

SECTIO	N 2. Hazards identification		
2.1.	Classification of the substance or mixture		
2.1.1.	Classification according to Regulation (EC) No 1272/2008 (CLP)		
	Hazard class and category code: Hazard statements*:		
	Flam. Liq. 2 H225		
2.1.2.	Additional information		
	-		
*For ful	l text of Hazard- and EU Haza	rd-statements: see Se	ection 16
2.2.	Label elements		
	Product identification: HEMATOXYLIN, WEIGERT A		
	Identification number: -		
	Authorisation number: -		



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Trade name:		HEMATOXYLIN, WEIGERT A		_	
Product code:	HEMA-OT-X**	Date of compilation:	19 Dec 2023	Version:	6

	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.		
	Endocrine Disrupting Prop	erties:	
2.3.	Other hazards		
	Supplemetal hazard information (EU)	-	
	Precautionary statement:	 P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P233 Keep container tightly closed. P280 Wear protective gloves/protective clothing/eye/protection/face protection. 	
	Hazard statements:	H225 Highly flammable liquid and vapor.	
	Signal word:	Danger	
	Hazard pictograms:	GHS02	

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	

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



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Trade name:		HEMATOXYLIN, WEIGERT A		Ŭ	
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	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 effo	ects, 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	al attention and special treatment needed
	No information available	

SECTION	ECTION 5. Firefighting measures				
5.1.	Extinguishing media				
	Suitable extinguishing media:	Small fire - water spray, dry powder, alcohol-resistant foam, CO ₂ Large fire - water spray or alcohol-resistant foam			
	Unsuitable extinguishing media:	Water jet			
5.2.	Special hazards arising from the subs	stance 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	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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Trade name:	HEMATOXYLIN, WEIGERT A				
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	Bunding, covering of	Sand protective barrier or barriers made of similar materials		
6.3.	Methods and material f			
	•	rrier to prevent further spillage of chemicals. Prevent environmental pollution by cals to enter the sewage system, surface water or groundwater.		
6.2.	Environmental precauti	ons:		
	Self-contained open-cir dissipation (fireproof cl	rcuit compressed air breathing apparatus, a set for protecting the body from heat othing).		
6.1.2.	For emergency respond	ders:		
	Accident prevention methods: Emergency procedures:		Remove or neutralize all factors that may exacerbate the condition, use all allowed means of containing the situation and use recommended means of personal protection.	
			Secure a safety zone, remove all ignition sources, and in case of a accident inform the Emergency service (112) and the manufacturer or sender. Position a prohibition sign with symbols of flame and devices that cause sparks.	
	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.	

SECTIO	TION 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.				



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7.2.	Conditions for safe storage, including any incompatibilities					
	Technical measures and storage conditions:	Keep in a well-ventilated place. Keep away from heat and direct solar radiation.				
	Packaging materials:	Manufacturer's original packaging.				
	Requirements for storage rooms and vessels:	Keep away from food and drink. Keep the containers tightly closed.				
	Advices for storage equipment:	The storage must be made of hard material; floors must be resistant to chemicals. There must be no drain that directly leads into sewage system. Secure proper ventilation.				
	Further information on storage conditions:	-				
7.3.	Specific end use(s)					
	Recommendations:	-				
	Industrial sector specific solutions:	-				

SECTION	N 8. Exposur	e contro	ols/persona	I prote	ection				
8.1.	Control para	meters							
Substance		CAS No		·	Occupational exposure limit values/short term values		Biological limit values		
					ppm	mg/n	n³		
Ethanol			64-17	- 5	1000/-	1900	/-	-	
Ethylene	glycol		107-2	1-1	20/40	52/10)4		-
Substanc	ce: -								
EC No:	-		CAS No:	-					
DNEL				·					
					Industrial				
Davida al	c	A	Acute		Acute	(Chronic		Chronic
Koute of	f exposure:	effe	ect local effe		fect systemic	effect local			effect systemic
Oral		-		-		-			-
Inhalatio	n	1900 r (ethan	mg/m³ ol)	1		35 mg/ (ethyler	kg ne glycol)		380 mg/m³ (ethanol)
Dermal		-		1		-			343 mg/kg (ethanol) 106 mg/kg (ethylene glycol)
Critical p	hysical parar	neters: s	olubility, fla	mmabi	lity, corrosivity:				
					Consumer				



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Product code:	HEMA-OT-X**	Date of co	mpilation:	Version: 6		
Route of exposu	re: Acute effect local	Acut effect sys	-	Chronic effect local	Chronic effect systemic	
Oral	-	-		-	-	
Inhalation	950 mg/m³ (ethanol)	-		7 mg/kg (ethylene glycol)	114 mg/m³ (ethanol)	
Dermal	-	-		-	206 mg/kg (ethanol) 53 mg/kg (ethylene glycol)	
PNEC						
Environmental pro	otection target		PNEC			
Fresh water			_	l (ethanol) ethylene glycol)		
Freshwater sedime	ents		3.6 mg/kg (ethanol) 37 mg/kg (ethylene glycol)			
Marine water			0.79 mg/l (ethanol) 1 mg/l (ethylene glycol)			
Marine sediments			2.9 mg/kg (ethanol) 3.7 mg/kg (ethylene glycol)			
Food chain			380-720	mg/kg (ethanol)		
Microorganisms in	n sewage treatment		580 mg/l (ethanol) 199.5 mg/l (ethylene glycol)			
Soil (agricultural)			0.63 mg/kg (ethanol) 1.53 mg/kg (ethylene glycol)			
Air				nation available		
•	sure controls					
Subs	neering measures tance/mixture related ment exposure during ide		Use personal protective equipment. Do not eat, drink or smoke in the workspace.			
	tural measures to preve		No information available			
Orga expo	nisational measures to p sure:	prevent	Organization of work in order to reduce other worker's influence during work process.			
Tech expo	nical measures to preve sure:	nt	See Sectio	n 7.2		
8.2.2. Perso	onal protection equipme	ent				



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8.2.2.1.	Eye and face protection:	Safety glasses that stick to face (EN166) or visor in case of lower levels of concentration in air; protective gas mask that covers the entire face in case of higher levels of concentration in air.				
8.2.2.2.	Skin protection					
		Protective gloves must be according to the EU Directive 2016/425/EEC and standard EN 374.				
	Hand protection:	Glove material: nitrile rubber				
		Glove thickness: ≥0.50 mm				
		Break through time: >480 min				
	Other skin protection:	During everyday work use cotton clothing and suitable footwear, such as rubber boots or shoes that cover the entire foot. In case of spilling hazard, use clothing made of impermeable material suitable for protection from liquid chemicals (Viton, PVC, himex) and footwear made from the same material.				
8.2.2.3.	Respiratory protection:	Protective full face mask (EN 136) or half mask (EN 140) equipped with a filter for organic vapors, type "A" (boiling point >65°C) acording to EN 14387) used when concentration levels exceed GVI.				
8.2.2.4.	Thermal hazards:	No information available				
8.2.3.	Environmental exposure controls					
	Substance/mixture related measures to prevent exposure:	See Section 6				
	Structural measures to prevent exposure:	Use modern equipment.				
	Organisational measures to prevent exposure:	Adapt the work process to the required working conditions of the workplace.				
Technical measures to prevent exposure:		See Section 6				

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



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	Lower 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
9.2.	Other information		
	-		

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

SECTIO	SECTION 11. Toxicological information							
11.1.	Informat	Information on hazard classes as defined in Regulation (EC) No 1272/2008						
	Acute toxicity:							
Route o		Method	Species	Effective dose LD ₅₀ /LC ₅₀ or ATE _{mixture}	Exposure time	Results		
Oral:		No information available	rat	LD ₅₀	-	7.060 mg/kg (ethanol) 7.712 mg/kg (ethylene glycol)		



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							,				
Product code:	HEMA-C	T-X**	Da	ate c	of compil	ation:	19	Dec 20	23	Version:	6
Dermal:	No inform availab		rabbit		LD ₅₀		-		>3.50	00 mg/kg (e 0mg/kg ene glycol)	thanol)
Inhalation:	No inform availab		rat		LC ₅₀		4 h (etha	nol)	>8.00	0 mg/l (ethanol)	
Specific t	arget organ	toxicity	/ – single	е ехр	osure (ST	OT SE):					
		Spec	ific effec	ts			Targe	t organ			Note
Oral:	No infor	mation	available	e		No info	ormatio	on availa	able	-	
Dermal:	No infor	mation	available	е		No info	ormatio	on availa	able	-	
Inhalation:	No infor	mation	available	е		No info	ormatio	on availa	able	-	
Aspiratio	n hazard:			١	No inform	ation av	ailable				
Irritation	and corrosio	on									
	Exp	osure	time		Species	Evalu	ation	Me	hod	l	Vote
Skin corrosion/irritation	n: -			-		-		-		No available	information
Serious eye damage/irritation	-			-		_		-		No available	information
Sensitiza	tion:										
Skin sensitization:	No infor	mation	available	e							
Respiratory sensitization:	No infor	mation	available	e							
	•										
Sympton	ns related to	the ph	ysical, cł	nemi	cal and to	xicologi	cal cha	racteris	ics		
Oral exposure:	It may le	ad to o	ccurrenc sness af	e of ter ex	strong se	nsation on the contract of the	of sting levels	jing, he	adache,	vertigo, into n. If denatur	exication and rants are
Dermal exposure:					. (50011 03		31.				
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 of concentration.											
Eye exposure:	Splatter i lesions.	may cau	use disco	omfo	rt, stingin	g sensat	ion, co	njunctiv	al redn	ess, corneal	surface



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

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



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Chronic	dermal	No information available	No information available	-			
Chronic	inhalation	No information available	No information available	-			
	CMR effects (d	carcinogenicity; mutagenicity; re	eproductive toxicity)				
	Carcinogenici	ty:	No information available				
	Mutagenicity	in-vitro:	No information available				
	Genotoxicity:		No information available				
	Mutagenicity	in-vivo:	No information available				
	Germ cell mut	tagenicity:	No information available				
	Reproductive	toxicity:	No information available				
	Summary of properties:	f evaluation of the CMR	-				
11.2.	Information o	n other hazards:					
11.2.1.	Endocrine dis	rupting properties:					
	No known e that affect hu	ndocrine disrupting propertie man health.	S				
11.2.2.	Other informa	ation:					
	_						

SECTION 12. Ecologi	cal informat	tion:				
12.1. Toxicity						
Acute (short-term) toxicity	Dose	Exposure time	Species	Method	Evaluation	Note
Fish	LC ₅₀	96 hours	Fish	No information available	8.140 mg/l (ethanol) 72.860 mg/l (ethylene glycol)	-
Crustacea:	EC ₅₀	48 hours	water flea	No information available	7.800 mg/l (ethanol) >100 mg/l (ethylene glycol)	-
Algae/aquatic plants	IC ₅₀	72 hours	algae	No information available	5.000 mg/l (ethanol) 6.500-13.000 mg/l (ethylene glycol)	-
Microorganisms	_	-	No information available	No information available	No information available	_



Value

Species

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Chronic (toxicity	long-term	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		ts IC ₅₀	72 hours	No information available	No information available	No information available	-
Microorg	janisms	-	-	-	-	-	-
12.2.	Persistenc	e and degrada	bility				
		gradation					
Degradation ha			half-lives	Meth	od	Evaluation	Note
Marine w	ater N	o information	available	No information	available	No information available	-
Fresh water No informa			available	No information	available	No information available	-
Air No information av		available	No information	available	No information available	-	
Soil	N	o information	available	No information	available	No information available	-
	Biodegrac	lation					
% Degra		Time (day	/s)	Method	Eval	uation No	ote
-		_	-		-	-	
		ulative potenti					
		oefficient: n-o					
Value	Со	ncentration	pH °	°C Metho	od Ev	valuation N	lote
-	-			-	-	-	

Method

Evaluation

Note



Haue I	name:				HE	MATOX	YLIN, V	VEIGE	RT A			
Produc		: HE	MA-OT-X**		Date of cor		-	9 Dec		Versic	n;	6
						1					· ·	
No infor			information ailable					inform ilable	nation	No ii avail	nforma able	tion
	Chron	ic ecoto	xicity									
	Valu		Dose		osure me	Specie	S	Meth	od	Evalua	tion	Note
Chronic toxicity on fish LC ₅₀						o forma [,] vailable	tion	No inform available	nation	-		
Chronic toxicity on crustacea (Daphnia)		EC ₅₀	No No information infor		No nformatio available	1	o forma vailable	ation No informa		nation	-	
12.4.	Knowi		l dicted distribut n available	ion in e	environmer	ntal comp	artment	·s:				
	Surfac	rface tension:										
	Va	Value °C Concentration Method							Not	e		
	No inform availal		No information available		informatic ailable		informa ilable	tion		_		
	Adsor	ption / d	lesorption									
Гranspo	ort		coefficient 's constant		log Kow	Evap	oration r	rate	Me	thod		Note
Soil-wat	er	No available	information	No avail	informatic able	on No availa	informat able		No in available	formation	n	
Water-air No information available		No avail	informatic able	on No availa	informat able		No in available	oformation	ו –			
Soil-air		No available	information	No avail	informatic able	on No availa	informat able		No in available	formation	1 _	
		(and vPvB asse									
12.5.	D .											



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	Trade name:		HEMATOXYLIN	I, WEIGERT A		
ľ	Product code:	HEMA-OT-X**	Date of compilation:	19 Dec 2023	Version:	6

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 adverse effects are expected.			
SECTIO	N 13. Disposal considerations			
13.1.	Waste treatment methods			
13.1.1.	Product/Packaging disposal:			
	Submit for disposal to the legal person authorized by the Ministry of Environmental and Nature Protection.			
13.1.2.	Waste codes/waste designations according to Law:			
	No information available			
13.1.3.	Waste treatment – relevant information:			
	No information available			
13.1.4.	Sewage disposal – relevant information:			
	Waste must not be disposed of into the sewage system.			
13.1.5.	Other disposal recommendations:			
	Do not dispose of the product's remains into the sewage system. Submit the remains to the collect authorized by the ministry in charge. Do not dispose of the packaging into the sewage system. Su the packaging to the collectors authorized by the ministry in charge. Do not dispose of in places we ignition may occur.			
13.1.6.	Relevant Community provisions:			
SECTIO	N 14. Transport information			
	Transporting/shipment by road (ADR)			
UN nur	mber: 1170			
UN pro	per shipping name: Ethanol solution			



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Trade name:		HEMATOXYLII	N, WEIGERT A			
Product code: H	EMA-OT-X**	Date of compilation:	19 Dec 2023	Version:	6	
Transport hazard class((es):	3				
Packing group:						
Environmental hazards:		No information available				
Special precautions for		-				
Transporting/s	shipment by rail (F	RID)				
UN number:		1170				
UN proper shipping na	me:	Ethanol solution				
Transport hazard class((es):	3				
Packing group:		II				
Environmental hazards	•	No information available				
Special precautions for	user:	-				
Transporting/s	shipment by inlan	d waterways (ADN)				
UN number:		1170				
UN proper shipping na	me:	Ethanol solution				
Transport hazard class((es):	3				
Packing group:		II				
Environmental hazards	•	No information available				
Special precautions for	user:	-				
Transporting/s	shipment by sea (I	MDG)				
UN number:		1170				
UN proper shipping na	me:	Ethanol solution				
Transport hazard class((es):	3				
Packing group:		II				
Environmental hazards	:	No information available				
Special precautions for	user:	-				
Transport in bulk acco of MARPOL 73/78 and	•	-				
Transporting/s	shipment by air (IC	CAO-TI/IATA-DGR)				
UN number:		1170				
UN proper shipping na	me:	Ethanol solution				
Transport hazard class((es):	3				
Packing group:		II				
Environmental hazards	:	No information available				
Special precautions for	user:	-				
Further information:	-					



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Trade name:	HEMATOXYLIN, WEIGERT A					
Product code:	HEMA-OT-X**	Date of compilation:	19 Dec 2023	Version:	6	

SECTION	ON 15. Regulatory informa	ation
15.1.	Safety, health and environ	nmental 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-
	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	

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 1272/2008 (CLP)	used to derive the classification for mixture according to Regulation (EC)
Classifi	cation	Classification procedure
-		-
16.5.	Relevant H statements (num	ber and full text)
	H: 225 302	Highly flammable liquid and vapor. Harmful if swallowed.
16.6.	Training advice:	-
16.7.	Further information:	** "X" in the product code marks different volumes (different packaging of the product) We are not responsible for consequences in case of failure to comply with instructions for use or improper use of the product described in this material safety data sheet.

Α	N	П	N	П	F	Y	7-
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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-O	T-X**			
1.2.	Relevant identified uses of the substance or mixture and uses advised against				re and uses advised against	
	Uses:	PS:			n Ladewig Trichrome kit.	
	Uses advised against:			Only the id	entified uses are advised.	
	Reason why uses advis	sed agair	The product is intended for use only as an <i>in vit</i> dagainst: medical device and there is no reason to use it purposes.			
1.3.	Details of the supplier	of the sa	afety d	ata sheet		
	Supplier:		BioGnost Ltd.			
	Address:		Medjı	ledjugorska 59, Zagreb		
	Telephone number:		+385	35 1 2409997		
	Telefax:		+385	85 1 2404039		
	e-mail of competent p	erson:	msds@biognost.hr			
	National contact:		-			
1.4.	Emergency telephone	numbers	5			
	National Protection an	nd Rescue	e Direc	ctorate:	112	
	Medical information:				+385 1 2348 342	
	Other information:				-	

SECTIO	N 2. Hazards identification					
2.1.	Classification of the substance or mixture					
2.1.1.	Classification according to Regulation (EC) No 1272/2008 (CLP)					
	Hazard class and category 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 phrase	es see Section 16.				
2.2.	Label elements					
	Product identification:	Product identification: LADEWIG'S REAGENT				
	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			
	No known endocrine disrupting properties. This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.			

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		

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:	Wash off with soap and plenty of water. If irritation occurs and persists: Get medical advice.			
	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 ingestion:	Never give anything by mouth to an unconscious person. Rinse mouth with water.			
	Self-protection of the first aider	-			
4.2.	Most important symptoms and effects, both acute and delayed				
	Following inhalation:	According to our findings, chemical, physical and toxicological properties of the substance have not been entirely tested.			
	Following skin contact:	According to our findings, chemical, physical and toxicological properties of the substance have not been entirely tested.			
	Following eye contact:	According to our findings, chemical, physical and toxicological properties of the substance have not been entirely tested.			
	Following ingestion:	According to our findings, chemical, physical and toxicological properties of the substance have not been entirely tested.			
4.3.	Indication of any immedia	ate medical attention and special treatment needed			
	Treat symptomatically.				

SECTIO	SECTION 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 carbo monoxide (highly toxic) and carbon dioxide (an asphyxiant at sufficient concentrations).						
5.3.	Advice for firefighters						
	Use a self-contained open-circuit co containers exposed to fire with wat	ompressed air breathing apparatus and fireproof clothing. Cool closed ser spray or vapor.					
5.4.	Additional information						
		ing due to increase in pressure. Remove sources of heat and nvironment with extinguishing media.					

S	SECTION 6. Accidental release measures				
6	5.1.	Personal precautions, protective equipment and emergency procedures			
6	5.1.1.	For non-emergency personnel			



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	Protective equipment:	Use suitable personal protective equipment (see Section 8).			
	Accident prevention methods	Evacuate members of all non-essential personnel and those members without protective equipment.			
	Emergency procedures:	Mark the area using proper signs.			
6.1.2.	For emergency responders:				
	Use protective equipment; in equipment (see Section 8).	case of inadequate ventilation use adequate airways protective			
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	SECTION 7. Handling and storage							
7.1.	Precautions for safe handling							
7.1.1.	Protection measures							
	Measures to prevent fire:	Measures to prevent fire:						
	Measures to prevent aerosol and dust generation	on:	Secure proper ventilation.					
	Measures to protect the environment:	Measures to protect the environment:						
	Other measures:		-					
7.1.2.	Advice on general occupational hygiene:							
	Do not eat, drink or smoke in the workspace. Th	oroughly w	ash hands after work and before eating.					
7.2.	Conditions for safe storage, including any incon	npatibilities						
	Technical measures and storage conditions:	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.					



Environmental protection target

Advices for storage equipment:

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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

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							proper ventilation.			
	Furth	er info	ormatio	n on storage	e conditi	ons:	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.	Speci	fic en	d use(s)							
	Reco	mmer	ndations	:			-			
	Indus	trial s	sector sp	ecific solutio	ons:		-			
SECTIO	ON 8. EX	POSU	URE CO	NTROLS / P	ERSON	AL PRO	TECTION	١		
8.1.	Cont	rol pa	rameter	'S						
	Substance			CAS N	١o			exposure limit term values	Bio	ological limit values
					pp	ppm mg/m ³				
-	-		-			-	-		-	
Substa	nce:	-		T						
EC No:		-		CAS No:	-					
DNEL										
			1			Indu	strial			
Route	of expos	ure:		te effect local		ute effe		Chronic effe local	ct	Chronic effect systemic
Oral			-		-			-	-	
Inhalat	ion		-		-			-	-	
Derma	1		-		-			<u>-</u>	-	
Critical	physica	l para	meters:	solubility, fla	ammabil	ity, corre	osivity:	-		
						Cons	umer			
Route of exposure: Acute effect local			ute effe	te effect Chronic effect stemic local		ct	Chronic effect systemic			
Oral			-		-			-	-	
Inhalat	ion		-		-			-	-	
Derma	1		-		-			-	-	
PNEC										

PNEC



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Fresh water			No information available		
Freshwate	er sediments		No information available		
Marine wa	ater		No information available		
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.	Appropriate engineering controls				
	Substance/mixture related measures to prevent exposure during identified uses:		ersonal protective equipment. Do not eat, drink or smoke workspace.		
	Structural measures to prevent exposure:	No in	formation 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:		y 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 dange	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 Section 0

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				
	Lower and upper explosion limit:	No information available	No information available				
	Flash point:	No information available	No information available				
	Auto-ignition temperature:	No information available	No information available				
	Decomposition temperature:	No information available	No information available				
	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						

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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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.	Informatio	ion on toxicological effects						
	Acute toxic	ity:						
Route of exposure:		Method	Species	Dos LD ₅₀ /LC	Effective Dose LD ₅₀ /LC ₅₀ or ATE _{mixture}		ure	Results
Oral:		No information available	-	No informa availa	ation	-		-
Dermal:		No information available	-	No informa availa	ation	-		-
Inhalation:		No information available	on _		No information - available			_
	Specific ta	rget organ toxicity - s	ingle exposure ((STOT-SE):				
		•	ific effects		Target	organ		Note
Oral:	1	No information availa	ble		-		-	
Dermal:	I	No information availa	ble		-		-	
Inhalatio	on: l	No information availa	ble		-		_	
	Aspiration	hazard:	-					
	Irritation a	nd corrosion						
		Exposure t	ime Spe	cies	Evaluat	ion	Method	Note
Skin corrosion/irritation:		ion: No inforn	nation rabbit	-			-	mild skin irritation
	Serious irritation to eyes: No information available							



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Sensi	Sensitization						
Skin sensitizatio	n:	No infor	mation available.				
Respiratory No infor sensitization:			mation available.				
Symp	toms rela	ited to r	ohysical, chemical,	and toxicologic	al properties		
Oral exposure:	101115 1010	-	nown specific sym		ar properties		
Dermal exposur	e:		nown specific sym	-	use skin irritation.		
Inhalation expo	sure:		nown specific sym				
Eye exposure:		No k	nown specific sym	nptoms.			
							_
Repea	ated dose	toxicity	(subacute, subch	ronic, chronic)			1
	Do	se	Exposure time	Species	Method	Evaluatio n	Note
Subacute oral	No informa availab		No information available	No information available	No information available	No informati on available	No information available
Subacute dermal	No informa availab		No information available	No information available	No information available	No informati on available	No information available
Subacute inhalation	No informa availab		No information available	No information available	No information available	No informati on available	No information available
Subchronic oral	No informa availab		No information available	No information available	No information available	No informati on available	No information available
Subchronic dermal	No informa availab		No information available	No information available	No information available	No informati on available	No information available
Subchronic inhalation	No informa availab		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 information available	No informati available	on	No information available	No inform on availal		No information available
Chronic dermal	No information available	No information available	No informati available	on	No information available	No inform on availal		No information available
Chronic inhalation	No information available	No information available	No informati available	nformation No information		No inform on availal		No information available
	-: £: - t - u - u - u - u - u - u - u - u - u -		d /	CTOT	· DE).			
Spec	liic target organ	toxicity - repeated Specific ef		3101	Target organ			Note
Subacute oral		No information a		No	No information available		No information available	
Subacute dern	nal	No information available		No	No information available		No information available	
Subacute inha	Subacute inhalation No		No information available		No information available		No information available	
Subchronic ora	al	No information available		No	No information available			information ilable
Subchronic de	rmal	No information available		No	No information available			information ilable
Subchronic inh	nalation	No information a	vailable	ilable No information availab		ole		information ilable
Chronic oral		No information a	available	able No information available		ole		information ilable
Chronic derma	al	No information a	nation available		No information available			information ilable
Chronic inhalation No information a		available	No	information availab	ole		information ilable	
CMR effects (carcinogenicity, mutagenicit				ty, reproductive toxicity) Based on available data, the classification criteria are not				teria are not
Carc	inogenicity:		met.					
Mut	agenicity <i>in-vitro</i>	:	met.	Based on available data, the classification criteria are not met.				
Genotoxicity:			Based met.	Based on available data, the classification criteria are not met.				teria are not



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	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 information:	
	-	

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
toxicity						
Fish	LC ₅₀	96 hours	-	-	-	-
•	LC ₅₀	96 hours 48 hours	-	-	-	-
Fish						

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	-		



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	: :					LADEWI	G'S R	EAGENT			
Product cod	de:	LDWR-	OT-	·X**	Date of	compilation	: 14	November 20)22	Version:	2
Air		nformatio				nformation ava		No informati available No informati		-	
Soil	140 11	normatio	II av	ranabic	NOII	mormation ave	illabic	available			
р.		1									
% Degradat	odegrad		na (d	lays)	8 8 8 8 8 8	Method		Evaluation		Note	
No informati available	on I	No inforr available				nformation	No ir	nformation	-	Note	
		ulative po									
ii	1	vater part								NI .	
Value No information available		nformation able		pH -	°C -	Method No informati available		Evaluation No information available		Note	
Value	on I	ntration F S No inforr available	peci	es	No ir availa	Method Iformation		Evaluation information ailable		Note	
Value No informati	on I	S No inforr	peci	es		nformation		information	-	Note	
Value No informati available	on I	S No inforr	peci	es		nformation		information			
Value No informati available	on I	S No inforr available ecotoxicity	peci	es on		nformation		information	- Evaluation		2
Value No informati available Ch	on I	No inforr available ecotoxicity	peci natio	es on	availa	nformation able	ava	information ailable	Evaluatio		



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

12.4.	Mobility	in soil				
	Known	or predicted distri	bution in environme	ental compartme	ents:	
	e (
	Surface Value	1	Concentratio	n Ma	ethod	Note
	No	No	No information			Note
	informa n availal		available	available	-	-
	Adsorp	ion / desorption				
Transpo	ort F	A/D coefficient lenry's constant	log Kow	Evaporation rate	Method	Note
Soil-wa		information ilable	No information available	No information available	No information available	n -
Water-a		information ilable	No information available	No information available	No information available	n -
Soil-air	_	information ilable	No information available	No information available	No information available	n -
12.5.	Results	of PBT and vPvB a	assessment			
			ontains no compone ersistent and very bi		•	istent, bioaccumulative 0.1% or higher.
12.6.	Endocrii	ne disrupting pro	oerties			
	The sub	stance/mixture do es according to R	oes not contain com	or Commission D	elegated regulat	ocrine disrupting ion (EU) 2017/2100 or
12.7	Oil					
12.7.		dverse effects rmation available				
SECTIO	N 13. Dis	posal considerat	ions			
		eatment method				



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

13.1.1.		
	Product/Packaging dispo	osal:
	Submit for disposal to the Protection.	e legal person authorized by the Ministry of Environmental and Nature
13.1.2.	Waste codes/waste desig	gnations according to Law:
	Disposal must be made a	according to official regulations.
13.1.3.	Waste treatment – releva	ant information:
	No information available	
13.1.4.	Sewage disposal – releva	nt information:
	Waste must not be dispo	osed of into the sewage system.
13.1.5.	Other disposal recommen	ndations:
		oduct's remains into the sewage system. Submit the remains to the collectors ry in charge. Do not dispose of the packaging into the sewage system.
	-	the collectors authorized by the ministry in charge.
13.1.6.	-	· · · · · · · · · · · · · · · · · · ·
13.1.6.	Submit the packaging to	· · · · · · · · · · · · · · · · · · ·
13.1.6.	Submit the packaging to	· · · · · · · · · · · · · · · · · · ·
	Submit the packaging to	visions:
	Submit the packaging to Relevant Community pro	on
	Submit the packaging to Relevant Community pro - 114. Transport informatio Transporting/shipment by	on
SECTION UN numb	Submit the packaging to Relevant Community pro - 114. Transport informatio Transporting/shipment by	ovisions: on road (ADR)
SECTION UN numb UN prope	Submit the packaging to Relevant Community pro - I 14. Transport informatio Transporting/shipment by per:	on road (ADR) Not subject to transport regulations
SECTION UN numb UN prope	Submit the packaging to Relevant Community pro - I 14. Transport informatio Transporting/shipment by per: er shipping name: t hazard class(es):	on road (ADR) Not subject to transport regulations
UN numb UN prope Transport Packing g	Submit the packaging to Relevant Community pro - I 14. Transport informatio Transporting/shipment by per: er shipping name: t hazard class(es):	on road (ADR) Not subject to transport regulations
UN numb UN prope Transport Packing g Environm	Submit the packaging to Relevant Community pro - I 14. Transport informatio Transporting/shipment by per: er shipping name: t hazard class(es): group:	on road (ADR) Not subject to transport regulations
UN numb UN prope Transport Packing g Environm	Submit the packaging to Relevant Community pro - I 14. Transport informatio Transporting/shipment by per: er shipping name: t hazard class(es): group: nental hazards:	on road (ADR) Not subject to transport regulations
UN numb UN prope Transport Packing g Environm	Submit the packaging to Relevant Community pro - I 14. Transport informatio Transporting/shipment by Der: Der shipping name: Det hazard class(es): Deroup: Dental hazards: Dental hazards: Dental recautions for user: Transporting/shipment by	on road (ADR) Not subject to transport regulations
UN numb UN prope Transport Packing g Environm Special pr	Submit the packaging to Relevant Community pro - I 14. Transport informatio Transporting/shipment by Der: Der shipping name: Det hazard class(es): Deroup: Dental hazards: Dental hazards: Dental recautions for user: Transporting/shipment by	on road (ADR) Not subject to transport regulations (rail (RID)
UN numb UN prope Transport Packing g Environm Special pr UN numb UN prope	Submit the packaging to Relevant Community pro - I 14. Transport informatio Transporting/shipment by Der: Der shipping name: Det hazard class(es): Der shipping name: Transporting/shipment by Der: Der shipping name: Der s	on road (ADR) Not subject to transport regulations rail (RID) Not subject to transport regulations
UN numb UN prope Transport Packing g Environm Special pr UN numb UN prope	Submit the packaging to Relevant Community pro - I 14. Transport informatio Transporting/shipment by per: er shipping name: t hazard class(es): group: nental hazards: recautions for user: Transporting/shipment by per: er shipping name: t hazard class(es):	on road (ADR) Not subject to transport regulations Not subject to transport regulations
UN numb UN prope Transport Packing g Environm Special pr UN numb UN prope Transport Packing g	Submit the packaging to Relevant Community pro - I 14. Transport informatio Transporting/shipment by per: er shipping name: t hazard class(es): group: nental hazards: recautions for user: Transporting/shipment by per: er shipping name: t hazard class(es):	visions: vision



Trade name:

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

LADEWIG'S REAGENT

amended by Regulation (EU) No. 2020/878

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Product code:	LDWR-OT-X**	Date of compilation:	14 November 2022	Version:	2		
UN number:		Not subject to transport	regulations				
UN proper shippir	ıα name.	-					
Transport hazard		_					
Packing group:		_					
Environmental haz	zards:	-					
Special precaution		-					
•	rting/shipment by sea	(IMDG)					
UN number:	rang, sinpinent by sea	Not subject to transport	regulations				
UN proper shippir	od name.	-	regulations				
Transport hazard		_					
Packing group:		_					
Environmental haz	zards:	_					
Special precaution		-					
	according to Annex II	-					
Transpo	rting/shipment by air	(ICAO-TI/IATA-DGR)					
UN number:		Not subject to transport	regulations				
UN proper shippir	ng name:	-					
Transport hazard o	class(es):	-					
Packing group:		-					
Environmental haz	zards:	-					
Special precaution	ns for user:	-					
<u> </u>		:					
Further informatio	on: -						

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



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

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

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:	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	ant 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.		
	11.	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 product)			
		er 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



SAFETY DATA SHEET

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

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

SECTI	ON 1 IDENTIFICATION	OF THE SU	BSTANCE/MI	XTURE AND OF THE COMPANY/UNDERTAKING	
1.1.	Product identifier				
	Trading name:	PHOSPH	OTUNGSTIC A	CID, 1% SOLUTION	
	Chemical name:	-			
	Catalogue number:	FVK1-OT	-X**		
1.2.	Relevant identified use	es of the su	bstance or mix	xture and uses advised against	
	Uses:		For use wi	th special staining kits.	
	Uses advised against:		Only the i	dentified uses are advised.	
	Reason why uses advi	sed 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 safe	ty data sheet		
	Supplier:		BioGnost Ltd.		
	Address:		Medjugorska 59, Zagreb +385 1 2409997 +385 1 2404039		
	Telephone number:				
	Fax no.:				
	e-mail of competent p	erson:	msds@biognost.hr		
	National contact:		-		
1.4.	Emergency telephone	Emergency telephone number			
	National Protection ar	nd Rescue D	Directorate:	112	
	Medical information:			+385 1 2348 342	
	Other information:			-	

SECTIO	TION 2 HAZARDS INFORMATION				
2.1.	Classification of the substance or mixture				
2.1.1.	Classification (REGULATION (EC)	No. 1272/2008	(CLP)		
	Hazard class and category	/ code:	Hazard statements*:		
	Not identified as hazardous substance				
2.1.2.	Additional information				
	-				
*For fu	ll text of Hazard- and EU Hazard-st	atements: see S	Section 16		
2.2.	Classification according to EC Dir	ective Nr. 1272	/2008 CLP)		
	Product identification:	PHOSPHOTU	INGSTIC 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 Proper	rties:
	No known endocrine disruptir	ng properties
	Results of PBT and vPvB asserted PBT or a vPvB.	essment : According to the results of its assessment, this substance is not a

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		

SECTIO	ECTION 4 FIRST AID MEASURES					
4.1.	Description of first aid measure	es				
	General notes:	-				
	Following inhalation:	Carry the afflicted person out of the contaminated area into a well-ventilated area or out for fresh air. If breathing becomes erratic or it stops, immediately apply artificial respiration (other than mouth-to-mouth) and contact a physician.				
	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 aide	r: Treat symptomatically.				
4.2.	Most important symptoms and	l effects, both acute and delayed				
	FOILOWING INNAISTION.	According to our findings, chemical, physical and toxicological properties of he substance have not been entirely tested.				
	FOIIOWING SKIN CONTACT.	According to our findings, chemical, physical and toxicological properties of he 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	ON 6 ACCIDENTAL RELEASE M	EASURES			
6.1.	Personal precautions, protect	ive equipment and emergency procedures			
6.1.1.	For non-emergency personne	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, Protection and Rescue Directo	drainage system and waterways. In case of large spillage contact National orate (NPRD) on 112.			
6.3.	Methods and material for con	ntainment and cleaning up			
6.3.1.	Bunding, covering of drains; capping procedures:	Sand or clay barriers.			



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Trading name:	PH	IOSPHOTUNGSTIC ACI	D, 1% SOLUTION		
Product code:	FVK1-OT-X**	Date of compilation:	21 Dec 2022	Version:	2

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



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Trading name:	PI	HOSPHOTUNGSTIC ACI	D, 1% SOLUTION	
Product code:	FVK1-OT-X**	Date of compilation:	21 Dec 2022	Version: 2

SECTION 8 EXPOS	URE CON	TROLS/PER	SONAL	PROTE	CTION			
8.1. Control p	arameters							
Substance					cupational exposure limit values/short term values		Biological limit va	lues
				р	pm	mg/m³		
-		-			-	-	No information available	e
Substance name:								
EC No: -		CAS No:	-					
DNEL		1	,					
				Ind	ustrial			
Route of	,	Acute		Acute	•	Chronic	Chronic	
exposure:	eff	ect local	effe	ect syst	emic	effect loca	l effect syster	nic
Oral	-		-			-	-	
Inhalation	-		-			-	-	
Dermal	-		-			-	-	
Critical physical pa	rameters:	solubility, fla	mmabili	ty, corr	osivity:	-		
				Con	sumer			
Route of exposure:		Acute ect local	Acut effect sys			Chronic effect loca	Chronic I effect syster	mic
Oral	-		-			-	-	
Inhalation	-		-			-	-	
Dermal	-		-			-	-	
PNEC								
Environmental pro	tection tar	get			PNEC			
Fresh water					No information available			
Freshwater sedime	nts				No information available			
Marine water				No information available				
Marine sediments				No information available				
Food chain				No information available				
Microorganisms in sewage treatment			No information available					
Soil (agricultural)					No inform	mation availabl	e	
			_		No information available			



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

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



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

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

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



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

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:	-	-	-	_	-

Sensitizati	on	

Dermal exposure:	No information available	
Inhalation	No information availab	
exposure:	140 IIIIOIIIIatioii available	

Symptoms re	elated to the physical, chemical and toxicological characteristics
Oral exposure:	No information available
Dermal exposure:	No information available
Inhalation exposure:	No information available
Eye exposure:	No information available



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

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



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i i ouu	it code.	VKTOTA	Date	e or compliation.	Z I Dec Zozz	version. Z
hronic	dermal	No informat	ion available	No inform	nation available	-
Chronic inhalation No informat			ion available	No inforn	nation available	-
	CMR effects	(carcinogenicity,	mutagenicity,	reproductive toxicit	y)	
	Carcinogenio	city:	Based on a	vailable data, the cl	assification criteria	are not met.
	Mutagenicity	ı in-vitro:	Based on a	vailable data, the cl	assification criteria	are not met.
	Genotoxicity	•	Based on a	vailable data, the cl	assification criteria	are not met.
	Mutagenicity	ı in-vivo:	Based on a	vailable data, the cl	assification criteria	are not met.
	Germ cell mu	utagenicity:	Based on a	vailable data, the cl	assification criteria	are not met.
	Reproductive	e toxicity:	Based on a	vailable data, the cl	assification criteria	are not met.
11.2	Information	on other hazards	5:			
11.2.1.		srupting propert				
	components endocrine according to Commission 2017/2100 (ce/mixture does of considered disrupting of REACH Articles Delegated regular Commission of at levels of	to have properties e 57(f) or llation (EU) Regulation			
11.2.2.	Other inform	nation:	:			
	_					

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



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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	deo	radation
71010110	ucu	, addition

	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	-

Biod		

% Degradation	Time (days)	Method	Evaluation	Note
No information available No information 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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			n factor (BCF)			الـــــــــــــــــــــــــــــــــــ		F1 ±!		K I	
Value No information No		Species inform	Method nation No information		Evaluation No information		Note No information availab				
availabl	e	avai	lable		availabl	e		available			i avallable
	Chronic	o cotovi	ait.								
	Chronic Value	ecotoxi	Dose		osure ime	Spe	ecies	Method		Evaluation	Note
Chronic	toxicity o	n fish	LC ₅₀				No information available		information ailable	-	
	toxicity o		EC ₅₀	No infor availa	mation able	No inforr availa	mation able	No information available		information ailable	-
12.4.	Mobility										
		•	cted distributi	on in e	environme	ental d	compart	ments:			
			available								
	Surface t		°C			.•		N 4 - 4		N.	- 4 -
	No informat available	ion i	No nformation available	No	oncentrat informat iilable		No info	Method ormation ble		-	ote
	Adsorpti	on / de	sorption								
Transport A/D coefficient Henry's constant		lo	log Kow Ev		Evap	vaporation rate		Method No			
Soil-wa	ter No	ilable	information	No ir availa	nformatio able	n N	o inform	formation available		No information - available	
		information	No ir availa	nformatio able	n No	o inform	ormation available		No information - available		
	Soil-air No ir available				information			nformation available		No information -	



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12.5.	Results of PBT and vPvB assessment
	The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.
10.6	
12.6.	Endocrine disrupting properties
	The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.
12.7.	Other adverse effects
. =	No information available
SECTIO	N 13 DISPOSAL CONSIDERATIONS
13.1.	Waste treatment methods
13.1.1.	Product/Packaging disposal:
	Submit for disposal to the legal person authorized by the Ministry of Environmental and Nature Protection.
13.1.2.	Waste codes/waste designations according to Law:
	No information available
13.1.3.	Waste treatment – relevant information:
13.1.3.	No information available
13.1.4.	Sewage disposal – relevant information:
	Waste must not be disposed of into the sewage system.
12.1.5	
13.1.5.	Other disposal recommendations:
	Do not dispose of the product's remains into the sewage system. Submit the remains to the collectors authorized by the ministry in charge. Do not dispose of the packaging into the sewage system. Submit the packaging to the collectors authorized by the ministry in charge. Do not dispose of in places where ignition may occur.
13.1.6.	Relevant Community provisions:
	-



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



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Special precautions for us	ser:	-
Further information:	-	

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

SECTIO	N 16 Other information	
16.1.	Indication of changes:	-



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

ANNEX:

Exposure scenario resulting to Chemical safety assessment

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