

TB-STAIN AURAMINE O KIT

The kit contains:

TB Auramine O reagent

TB Decolorizer Fluorescent

TB Permanganate reagent



Page 1 of 18

Trading name:	TB AURAMINE O REAGENT				
Product code:	TBAO-OT-X**	Date of compilation:	21 Dec 2022	Version:	3

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

SECTIO	SECTION 2. Hazards 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. 3	H226			
	Acute Tox. 4	H302			
	Acute Tox. 4	H312			
	Acute Tox. 4	H332			
	Eye Irr. 2	H319			
	Muta. 2	H341			
	STOT RE 2 H373				
2.1.2.	Additional information				
	-				
*For fu	II text of Hazard- and EU Hazard-statements: se	ee SECTION 16			



SAFETY DATA SHEET

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

Page 2 of 18

Trading name:	TB AURAMINE O REAGENT				
Product code:	TBAO-OT-X**	Date of compilation:	21 Dec 2022	Version:	3

2.2	Label elements			
	Product identification:	TB AURAMINE O REAGENT		
	Identification number:	-		
	Authorization number:	-		
	Hazard pictograms:	GHS02 GHS08 GHS07		
	Signal word:	Danger		
	Hazard statements:	 H226 Flammable liquid and vapor. H302 Harmful if swallowed. H312 Harmful in contact with skin. H332 Harmful if inhaled. H319 Causes serious eye irritation. H341 Suspected of causing genetic defects. H373 May cause damage to organs through prolonged or repeated exposure. 		
	Precautionary statements:	P210 Keep away from heat/sparks/open flames/hot surfaces Do not smoke. P280 Wear protective gloves/protective clothing/eye/protection/face protection. P302+P352 IF ON SKIN: Wash with plenty of water and soap. P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing. P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P308+P313 IF exposed or concerned: Get medical advice/attention.		



Page 3 of 18

Trading name:	TB AURAMINE O REAGENT				
Product code:	TBAO-OT-X**	Date of compilation:	21 Dec 2022	Version:	3

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

CAS/	REACH	Weight %	-	Classification according to
EC/ Index number	Registration No	content (or range)	Identification name	Regulation (EC) No 1272/2008 (CLP)
64-17-5/ 200-578-6/ 603-002-00-5	01-2119457610- 43-0147	10 - 20 %	ethanol	Flam. Liq. 2; H225
108-95-2/ 203-632-7/ 604-001-00-2	01-2119471329- 32-xxxx	2 -3 %	phenol	Acute Tox. 3; H301 Acute Tox. 3; H311 Acute Tox. 3; H331 Skin Corr. 1B; H314 Muta. 2; H341 STOT SE 2; H373

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



Page 4 of 18

Trading name:	TB AURAMINE O REAGENT				
Product code:	TBAO-OT-X**	Date of compilation:	21 Dec 2022	Version:	3

	Following inhalation:	Depending on concentration and exposure time, it may lead to mucosa irritation, cough, and dyspnea.
	Following skin contact:	Depending on concentration and exposure time, it may lead to irritation, rash, skin drying and skin cracking.
	Following eye contact:	Depending on concentration and exposure time, it may lead to irritation, tearing, redness and pain.
	Following ingestion:	Depending on concentration and exposure time, it may lead to stinging and digestive mucus damage, abdominal pain, nausea, vomiting.
4.3	Indication of any immediate medi	cal attention and special treatment needed
	-	

SECTION	SECTION 5. Firefighting measures				
5.1	Extinguishing media				
	Suitable extinguishing media:	Water, foam, dry powder, CO ₂			
	Unsuitable extinguishing media:	No information available			
5.2	Special hazards arising from the su	ubstance or mixture			
	Hazardous combustion products:	Mixture with combustible ingredients. Forms explosive mixtures with air at elevated temperatures. Development of hazardous combustion gases or vapours possible in the event of fire. Vapours are heavier than air and may spread along floors.			
5.3	Advice for firefighters				
	Use a self-contained open-circuit	compressed air breathing apparatus and fireproof clothing.			
5.4	Additional information				
	Cool endangered receptacles with water spray. Collect contaminated fire fighting water separately. Do no contaminate the environment with extinguishing media.				

SECTIO	ON 6. Accidental release measur	res				
6.1	Personal precautions, protective	equipment and emergency procedures				
6.1.1.	For non-emergency personnel					
	Protective equipment:					
	Accident prevention methods:	Evacuate members of all non-essential personnel and those members without protective equipment. Avoid breathing vapors and avoid contact with skin and eyes. Do not smoke. Keep away from ignition sources.				
	Emergency procedures:	Mark the area using proper signs.				
6.1.2.	For emergency responders:					
	Use protective equipment; in case of inadequate ventilation use adequate airways protective equipment (see Section 8).					
6.2	Environmental precautions:					



Page 5 of 18

Trading name:	TB AURAMINE O REAGENT							
Product code:	TBAO-OT-X**	Date of compilation:	21 Dec 2022	Version:	3			

	Do not let product enter drai	Do not let product enter drains. Risk of explosion.				
6.3	Methods and material for cor	ntainment and cleaning up				
6.3.1.	Bunding, covering of drains; capping procedures: Cover drains. Collect, bind, and pump off spills.					
6.3.2.	Cleaning up:	Where possible, the substance can be absorbed by using absorbing material. Place the waste material in tightly closed impermeable containers. Store the substance in well ventilated storage rooms until disposal. Submit for disposal to the legal persons authorized by the Ministry of Environmental and Nature Protection. After disposal of the products, wash the area and and involved materials with water.				
6.3.3.	Other information:	Secure proper ventilation. Do not use incompatible materials (see Section 10).				
6.4	Reference to other sections					
	See Section 7 for information on safe handling.					
	See Section 8 for information on personal protection equipment.					
	See Section 13 for disposal in	formation.				

SECTIO	ON 7. Handling and storage				
7.1	Precautions for safe handling				
7.1.1.	Protection measures				
	Measures to prevent fire:	Use in well ventilated storage rooms. Keep away from open flames, hot surfaces and sources of ignition. Take precautionary measures against static discharge. 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:		Protect against electrostatic charges.		
7.1.2.	Advice on general occupational hygiene:				
	Do not eat, drink or smoke in the workspace. The	oroughly was	h hands after work and before eating.		
7.2	Conditions for safe storage, including any incom	patibilities			
	Technical measures and storage conditions:	well ventila	htly closed and upright set containers in a ated storage rooms at temperatures ranging 25 °C. Protect from heat and direct sunlight.		
	Packaging materials:	Manufactu	ırer's original packaging.		
	Requirements for storage rooms and vessels:	Keep away	from food and drink. Keep the containers sed.		



Page 6 of 18

Trading name:	TB AURAMINE O REAGENT							
Product code:	TBAO-OT-X**	Date of compilation:	21 Dec 2022	Version:	3			

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

SECTION 8. Expo	sure o	contro	ols/perso	nal pr	rotecti	on				
8.1 Control p	aram	eters								
Substance			CAS No			Occupational exposure limit values/short term values			Biological limit values	
						pp	m	mg/m³		-
Ethanol			64-	-17-5		100	0/-	1900/-		-
Phenol			108	-95-2		2/	4	8/16	mo	mg/g of creatinine (0.14 l/mol of creatinine), end of t, urinary excretion
Substance name: -										
EC No:			CAS No	CAS No: -						
DNEL										
						Indus	strial			
Route of		Acu	ite		Acute			Chronic		Chronic
exposure:	(effect	local	effe	ct syst	emic		effect local		effect systemic
Oral	-			-			-			-
Inhalation		00 mg hanol)		1			-			380 mg/m³ (ethanol) 8 mg/m³ (phenol)
Dermal	-			-			-			343 mg/kg (ethanol) 1.23. mg/kg (phenol)
Critical physical pa	rame	ters: s	olubility,	flamm	nability	, corros	sivity:	-		
						Consu	umer			
Route of exposure:			cute et local	effe	Acute ect syst			Chronic effect local		Chronic effect systemic
Oral	-			-			-			87 mg/kg (ethanol) 0.5 mg/kg (phenol)



Page 7 of 18

						Page 7 of 1	8	
Trading i	name:		TE	AURAMINE O	REAGENT			
Product	code:	TBAO-OT-X**	Date o	of compilation:	21 Dec 2022	Version:	3	
					· · · · · · · · · · · · · · · · · · ·			
Inhalation	1	950 mg/ m ³	-	-		mg/m³ (ethanol)		
		(ethanol)				2 mg/m³ (phenol) ng/kg (ethanol)		
Dermal		-	-	-		ng/kg (phenol)		
PNEC				<u>'</u>				
Environm	ental pro	tection target		PNEC				
Fresh wat	or			0.96 mg/l (ethano	ol)			
riesii wat	ei			0.0077 mg/l (phe	nol)			
Freshwate	er sedime	nts		3.6 mg/kg (ethan				
Trestiwate	or seamine			0.09125 mg/kg (p				
Marine water				0.79 mg/l (ethano				
				0.00077 mg/l (ph	•			
Marine se	diments			2.9 mg/kg (ethan 0.00915 mg/kg (g				
Food chai	in			380-720 mg/kg k				
				580 mg/l (ethanol)				
Microorga	anisms in	sewage treatment		2.1 mg/l (phenol)				
C = i1 (= ===i =				0.63 mg/kg (ethanol)				
Soil (agric	cultural)			0.136 mg/kg (ph	enol)			
Air				no information a	vailable			
8.2	Expos	ure controls						
8.2.1.		priate engineering o	controls					
	• •			Use the product	in well ventilated ro	ooms. Use persor	nal	
		ance/mixture related nt exposure during i		protective equipment. Do not eat drink or smoke in the				
	Struct expos	ural measures to pre ure:	event	In accordance with Section 7.				
	Organ expos	iisational measures t ure:	o prevent	Organization of work in order to reduce other worker's influence during work process.				
Technical measures to prevent exposure:			vent exposure:	Secure proper workspace ventilation in order to keep concentration levels in air below permitted levels. Secure stations for rinsing eyes and showering.				
8.2.2.	Persor	nal protection equip	ment					
			Safety	glasses that stick t	o face (EN 166) or	visor in case of lo		
8.2.2.1.	Eye ar	nd face protection:	levels o	of concentration in	air; protective gas ner levels of concer		the	



Page 8 of 18

Trading name:	TB AURAMINE O REAGENT						
Product code:	TBAO-OT-X**	Date of compilation:	21 Dec 2022	Version:	3		

	Hand protection:	The protective gloves have to satisfy the specification of Regulation (EU) 2016/425 and the related standard EN 374. Full contact: Glove material: butyl rubber Glove thickness: 0.70 mm Break through time: > 480 min Splash contact: Gloves material: nitrile rubber Glove thickness: 0.40 mm Break through time: > 120 min
	Other skin protection:	During everyday work use cotton clothing (EN 340) and suitable footwear, such as rubber boots (EN 20345) or shoes that cover the entire foot. In case of spilling hazard, use clothing made of impermeable material suitable for protection from liquid chemicals (Viton, PVC, himex) and footwear made from the same material.
8.2.2.3.	Respiratory protection:	Protective full face mask (EN 136) or half mask (EN 140) equipped with a filter for organic vapors, type "A" (boiling point >65°C) according 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

SECT	ION 9. Physical and chemical prope	erties	
9.1	Information on basic physical and	chemical properties	
		Value	Method
	Physical state:	liquid	No information available
	Colour:	yellow	No information available
	Odour/odour threshold:	phenol 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



Page 9 of 18

Trading name:					
Product code:	TBAO-OT-X**	Date of compilation:	21 Dec 2022	Version:	3

	Lower and upper explosion limit:	No information available	No information available
	Flash point:	48°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:	See subsections 10.3 through 10.5.			
10.2	Chemical stability:	The product is chemically stable under standard ambient conditions of storing and using (room temperature).			
10.3	Possibility of hazardous reactions:	No information available			
10.4	Conditions to avoid:	Heating.			
10.5	Incompatible materials:	No further relevant information available.			
10.6	Hazardous decomposition products:	No dangerous decompostion products known.			

11.1 Informa	ition on hazard cla	asses as defin	ed in Regulation	(EC) No 1272/200	8
Acute to	oxicity:				
Route of exposure:	Method	Species	Dose LD ₅₀ /LC ₅₀ or ATE _{mix}	Exposure time	Results
Oral:	-	rat	LD ₅₀	_	10.470 mg/kg (ethanol)
Dermal:	-	rat	LD ₅₀	_	660 mg/kg (phenol)
Inhalation:	-	rat	LC ₅₀	4 h	124.7 mg/l (ethanol)



SAFETY DATA SHEET

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

Page 10 of 18

Trading name:		TB AURAMINE O	REAGENT		
Product code:	TBAO-OT-X**	Date of compilation:	21 Dec 2022	Version:	3

Product code:	TB	AO-OT-X**		Date of	compilati	on: 2	21 Dec 2	2022	Version:	3
		Spec	ific effects			Target c	organ		Note	
Oral:	No information available		available		No info	rmation a	available	_		
Dermal:	No	information	available		No info	rmation a	available	-		
Inhalation:	No	information	available		No info	rmation a	available	-		
Aspirat	ion haza	ard:		No info	mation av	ailable.				
, 		<u> </u>	***							
Irritatio	n and c	orrosion								
		Exposure ti	me Spe	cies E	valuation	Met	hod		Note	
Skin corrosion/irritat	ion:	-	in vit study	_		OECD 4	431	causes bu	rns (phenol)	
Serious eye damage/irritatio	on	-	rabbi	t -		OECD 4	405	corrosive ((phenol)	
Sensitiz	zation									
Skin sensitizatio	n:	No inf	ormation av	ailable.						
Respiratory sens	sitizatior	n: No inf	ormation av	ailable.						
		ited to the ph	•		toxicologi	cal chara	cteristics	5		
Oral exposure:		No informati								
Dermal exposur		No informati								
Inhalation expos		No informati								
Eye exposure:		No informati	on available							
Repeat	ed dose	toxicity (sub	acute, subcl	nronic, ch	nronic)					
; 7		Dose	Exposure time	Spec	ies	Method	ł	Evaluation	Note	
Subacute oral	No availa	information able	No informatio available	No n infor avail	mation able	No informa availabl	ition	No informatio available	n -	
Subacute dermal	No availa	information able	No informatio available	No n infor avail	mation	No informa availabl		No informatio available	n -	

available

available

information

No

available

available

information

No

No information

available

Subacute

inhalation

available

available

information

No

available

available

information

No



Page 11 of 18

Trading name:		TB AURAMINE O R	EAGENT		
Product code:	TBAO-OT-X**	Date of compilation:	21 Dec 2022	Version:	3

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 exposure (STOT RE):	;	
	Specific effects	Target organ	Note	
Subacute oral	No information available	No information available	-	
Subacute dermal	No information available	No information available	-	
Subacute inhalation	No information available	No information available	-	
Subchronic oral	No information available	No information available	-	
Subchronic dermal	No information available	No information available	-	
Subchronic inhalation	No information available	No information available	-	
Chronic oral	No information available	No information available	-	
Chronic dermal	No information available	No information available	-	
Chronic inhalation	No information available	No information available	-	

CMR effects (carcinogenici	y; mutagenicity; reproductive toxicity)
Carcinogenicity:	Based on available data, the classification criteria are not met.
Mutagenicity in vitro:	Based on available data, the classification criteria are not met.
Genotoxicity:	Based on available data, the classification criteria are not met.
Mutagenicity in vivo:	Based on available data, the classification criteria are not met.
Germ cell mutagenicity:	Based on available data, the classification criteria are not met.
Reproductive toxicity:	Based on available data, the classification criteria are not met.



Page 12 of 18

Trading name:	TB AURAMINE O REAGENT				
Product code:	TBAO-OT-X**	Date of compilation:	21 Dec 2022	Version:	3

	Summary of evaluation of the CMR properties:	Based on available data, the classification criteria are not met.
11.2	Information on other hazards:	
11.2.1.	Endocrine disrupting properties:	
	No known endocrine disrupting properties that affect human health.	
11.2.2.	Other informations:	
	-	

12.1 Toxicity	y					
Acute (short- term) toxicity	Dose	Exposure time	Species	Method	Evaluation	Note
Fish	LC ₅₀	96 hours	Leuciscus idus (Golden orfe; ethanol) Oncorhynchus mykiss (rainbow trout; phenol)	-	-	8.140 mg/l (ethanol) 5.0 mg/l (phenol)
Crustacea:	EC ₅₀	48 hours	Daphnia magna (Water flea)	-	-	7.800 mg/l (ethanol) 3.1 mg/l (phenol)
Algae/aquatic plants	IC ₅₀	7 days	green algae	-	-	5.000 mg/l (ethanol) 61.1 mg/l (phenol)
Other organisms	-	-	-	-	-	-
Chronic (long- term) toxicity	Dose	Exposure time	Species	Method	Evaluation	Note
Fish	LC ₅₀	96 hours	No information available	-	-	-
Crustacea:	EC ₅₀	48 hours	No information available	-	-	-
Algae/aquatic plants	IC ₅₀	72 hours	No information available	-	-	-
Other organisms	-	-	-	-	-	-

12.2 Persistence and degradability



Page 13 of 18

Trading name:	TB AURAMINE O REAGENT					
Product code:	TBAO-OT-X**	Date of compilation:	21 Dec 2022	Version:	3	

Abioti	c degr	adation							
	D	egradation ha	lf-lives	N	∕lethod	Evaluatio	on		Note
Marine water	No	information av	/ailable	No inf availat	ormation ble	No information		-	
Fresh water	No	information av	/ailable	No inf availat	ormation ole	No information		_	
Air	No	information av	/ailable	No inf availat	ormation ole	No information		_	
Soil	No	information av	vailable	No inf availat	ormation ble	No information		_	
Biode	aradat	ion							
% Degradati		Time (d	ays)	N	Лethod	Evaluatio	n		Note
94% (ethanol)			ormation	OECD	301E	No information	on re	adily bi	odegradable
85% (phenol) 14 days		OECD 301C		No information available		readily biodegradable			
Octan Value		er partition concentration	pefficient (log Kow	Method	Evalı	uation		Note
		· ·				Evalu	uation	hioa	Note
-	-		_	-	-	-			expected
Biocor	ncentra	ation factor (B	CF)						
Value		Specie	S		Method	Evaluat	ion		Note
No information No information available available		ormation	No information available		No information available		-		
Chron	ic eco	toxicity							
Value	e	Dose	3 : .	osure me	Species	Method	Evalua	ation	Note
Chronic toxicity on fish			No		No	No	No	ation	



Page 14 of 18

Trading	Trading name: TB AURAMINE O REAGENT						ruge 14 or 10						
Produc	ct coc	de:	ТВАО	-OT-X**	Date of compilation: 21 Dec 2022			2022	Version:	3			
Chronic toxicity on crustacea (<i>Daphnia</i>)		information		information info		No inform availab	1	No information available	-				
12.4	Mol	oility in	soil										
	Kno	wn or p	oredicte	ed distributi	ion in	environm	ental c	ompart	ments:				
	No i	informa	ation av	ailable									
	Surf	ace ter	ision:										
	١	Value		°C		Concentra	tion		Meth	od		Note	
		rmation lable		ormation ailable		lo informat vailable	tion	No inf availab	ormatio ole	on	-		
	Ads	orption	/ deso	rption									
Transpo	ort	-	/D coef nry's co		log Kow		Εv	Evaporation rate		Method		Note	
Soil-wa	iter	No availa		formation	No information			n No information available		No in availa	formation ble	-	
Water-a	air	No availa		formation		informatio	tion No informa		nation	No in availa	formation ble	-	
Soil-air		No availa		formation		informatio			nation	No information available		-	
12.5				l vPvB asses									
	Base	ed on a	vailable	e data, the p	orodu	uct does no	ot cont	ain any	PBT or v	vPvB sul	ostances.		
12.6	FI		-l:		•								
12.6.			•	ng properti data, does		contain on	docrin	o disrur	tors				
	Dase	eu on a	Vallable	data, does	s not	Contain en	idociiii	e distup	iors.				
12.7.	Oth	er adve	rse effe	ects									
				it information	on av	vailable.							
	1												
SECTIO	N 13	. Dispo	sal cor	sideration	ıs								
13.1	W	aste tre	eatment	t methods									



Page 15 of 18

Trading name:	TB AURAMINE O REAGENT					
Product code:	TBAO-OT-X**	Date of compilation:	21 Dec 2022	Version:	3	

13.1.1.	Product/Packaging disposa	al:		
	Submit for disposal to the Protection.	legal person authorized by the Ministry of Environmental and Nature		
13.1.2.	Waste codes/waste design	ations according to Law:		
	15 01 10*: Packaging that of substances	contains residual hazardous substances or is contaminated with hazardous		
13.1.3.	Waste treatment – relevant	t information:		
	No information available			
13.1.4.	Sewage disposal – relevant	information:		
	Waste must not be dispose	ed of into the sewage system.		
13.1.5.	Other disposal recommend	dations:		
	Do not dispose of the product's remains into the sewage system. Submit the remains to the co authorized by the ministry in charge. Do not dispose of the packaging into the sewage system, the packaging to the collectors authorized by the ministry in charge.			
13.1.6.	Relevant Community provi	sions:		
	Disposal must be made acc	cording to official regulations.		
SECTIO	N 14 TRANSPORT INFORMA			
	Transporting/shipment by ro			
UN num		1170		
	per shipping name:	Ethanol solution		
	rt hazard class(es):	3		
Packing		III		
	mentally hazardous:	-		
Special _I	orecautions for user:	-		
	Transporting/shipment by ra			
UN num		1170		
	per shipping name:	Ethanol solution		
······································	rt hazard class(es):	3		
Packing	group:	III		
Environr	mentally hazardous:	-		
Special _I	orecautions for user:	-		



SAFETY DATA SHEET

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

Page 16 of 18

Trading name:	TB AURAMINE O REAGENT					
Product code:	TBAO-OT-X**	Date of compilation:	21 Dec 2022	Version:	3	

Inland waterway t	ransport (ADN)	
UN number:		1170
UN proper shipping name:		Ethanol solution
Transport hazard class(es):		3
Packing group:		III
Environmentally hazardous	5:	-
Special precautions for use	er:	-
Transporting/ship	ment by sea (IN	MDG)
UN number:		1170
UN proper shipping name:		Ethanol solution
Transport hazard class(es):		3
Packing group:		III
Environmentally hazardous	:	-
Special precautions for use	er:	-
Transport in bulk according of MARPOL 73/78 and the		-
Transporting/ship	ment by air (IC	AO-TI/IATA-DGR)
UN number:		1170
UN proper shipping name:		Ethanol solution
Transport hazard class(es):		3
Packing group:		III
Environmentally hazardous	5:	-
Special precautions for user:		-
Further information: volume is not s IATA: Special P		rovision 144 – An aqueous solution containing 24% or less alcohol by subject to classification. rovision A58 - An aqueous solution containing 24% or less alcohol by subject to classification.

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



Page 17 of 18

Trading name:	TB AURAMINE O REAGENT						
Product code:	TBAO-OT-X**	Date of compilation:	21 Dec 2022	Version:	3		

	None	
15.2	Chemical safety assessme	nt
	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
	Information according 199 guideline)	99/13/EC about limitation of emissions of volatile organic compounds (VOC-
	Other EU regulations:	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);
		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,

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



SAFETY DATA SHEET

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

Page 18 of 18

Trading name:	TB AURAMINE O REAGENT						
Product code:	TBAO-OT-X**	Date of compilation:	21 Dec 2022	Version:	3		

16.4.	Classification and procedure used to derive the classification for mixture according to Regulation (EC) 1272/2008 (CLP)				
Classifi	Classification		Classification procedure		
-			-		
16.5.	Rele	evant H statements (n	number and full text)		
		H225	Highly flammable liquid and vapor.		
		H226	Flammable liquid and vapor.		
		H301	Toxic if swallowed.		
	H:	H302	Harmful if swallowed.		
	H312 Ha		Toxic in contact with skin.		
			Harmful in contact with skin.		
			Causes severe skin burns and eye damage.		
			Causes serious eye irritation.		
		H331	Toxic if inhaled.		
		H332	Harmful if inhaled.		
		H341	Suspected of causing genetic defects.		
		H373	May cause damage to organs through prolonged or repeated exposure.		
16.6.	Trai	ining advice:	-		
16.7	pro		** "X" in the product code marks different volumes (different packagings of the product)		
16.7.	in		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: E	Exposure scenario resulting to chemical safety assessment
_	



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

amended by Regulation (EU) No. 2020/878

				Page 1 of 17		
Trading name:	TB DECOLORIZER FLUORESCENT					
Product code:	TBF-OT-X**	Revision date:	21 Dec 2022	Version:	5	

SECTI	ON 1: Identification of	the substance	e/mixture	e and of the company/undertaking			
1.1	Product identifier						
	Trading name:	TB DECOLO	RIZER FLU	JORESCENT			
	Chemical name:	-	-				
	Catalogue number:	TBF-OT-X**					
1.2	Relevant identified use	es of the subst	tance or n	nixture and uses advised against			
	Uses:		For use	in TB-Stain Fluorescent and TB-Stain Auramine O kits.			
	Uses advised against:		Only the	e identified uses are advised.			
	Reason why uses advi	sed against:	The product is intended for use only as an <i>in vitro</i> diagnostic magainst: device, registered at the Agency for Medicinal Products and Medicinal Products and there is no reason to use it for other purposes.				
1.3	Details of the supplier	of the safety	data shee	t			
	Supplier:		BioGnos	t Ltd.			
	Address:		Medjug	gorska 59, Zagreb			
	Telephone number:		+385 1 2409997				
	Telefax.:		+385 1 2404039				
	e-mail of competent p	erson:	msds@b	msds@biognost.hr			
	National contact:		-				
1.4	Emergency telephone	number					
	National Protection ar	nd Rescue Dire	ectorate:	112			
	Medical information:			+385 1 2348 342			
	Other information:			-			

SECTIO	SECTION 2. Hazards identification					
2.1	Classification of the substance or mixture					
2.1.1	Classification according to F	Regulation (EC) No	1272/2008 (CLP)			
	Hazard class and cat	egory code:	Hazard statements*:			
	Flam. Liq. 2 H225					
	Eye Irr. 2		H319			
	STOT SE 3		H336			
2.1.2.	Additional information					
	-					
*For fu	ll text of Hazard- and EU Haza	rd-statements: see	e SECTION 16			
2.2	Label elements					
	Product identification: TB DECOLORIZER FLUORESCENT					
	Identification number:	-				



SAFETY DATA SHEET

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

Page 2 of 17

Trading name:		TB DECOLORIZER FLUORESCENT						
Product code:	TBF-OT-X**	Revision date:	21 Dec 2022	Version:	5			

	Authorization number:	-
	Hazard pictograms:	GHS02 GHS07
	Signal word:	Danger
	Hazard statements:	H225 Highly flammable liquid and vapor.H319 Causes serious eye irritation.H336 May cause drowsiness or dizziness
	Precautionary statements:	P210 Keep away from heat/sparks/open flames/hot surfaces Do not smoke. P233 Keep container tightly closed. P280 Wear protective gloves/protective clothing/eye/protection/face protection. P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or 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	
	Endocrine Disrupting Prope	erties:
	No known endocrine disrupti	
	Results of PBT and vPvB as: PBT or a vPvB.	sessment : According to the results of its assessment, this substance is not a

SECTION 3. Co	SECTION 3. Composition/information on ingredients								
CAS/ EC/ Index number	REACH Registration No	Weight % content (or range)	Identification name	Classification according to Regulation (EC) No 1272/2008 (CLP)					
67-63-0/ 200-661-7/ 603-117-00-0	01-2119457558-25- XXXX	≥60%	propan-2-ol	Flam. Liq. 2; H225 Eye Irrit. 2; H319 STOT SE 3; H336					
7647-01-0/ 231-595-7/ 017-002-00-2	-	2 -3 %	hydrochloric acid, 37%	Skin Corr. 1B; H314 STOT SE 3; H335					

SECTION 4. First aid measures



Page 3 of 17

Trading name:		TB DECOLORIZER FLUORESCENT						
Product code:	TBF-OT-X**	Revision date:	21 Dec 2022	Version:	5			

4.1	Description of first aid measures				
	General notes:	If the suggested first aid measures do not prove sufficient, seek medical attention.			
	Following inhalation:	Carry the afflicted person out of the contaminated area into a well-ventilated area or out for fresh air. In case of difficult breathing, provide the afflicted person with oxygen.			
	Following skin contact:	Remove contaminated clothing. Immediately wash with plenty of water for at least 20 minutes. Seek medical assistance if the symptoms of irritation remain.			
	Following eye contact:	Rinse out with plenty of water with the eyelid held wide open for at least 20 minutes. If the symptoms remain, immediately call in ophthalmologist.			
	Following ingestion:	Rinse the mouth thoroughly with 1-2 glasses of water. Immediately consult a physician and show the container or label. In case of swallowing large quantities, transport the afflicted person to the hospital.			
	Self-protection of the first aider:	-			
4.2	Most important symptoms and effects, both acute and delayed				
	Following inhalation:	Depending on concentration and exposure time, it may lead to mucosa irritation, cough, and dyspnea.			
	Following skin contact:	Depending on concentration and exposure time, it may lead to irritation, rash, skin drying and skin cracking.			
	Following eye contact:	Depending on concentration and exposure time, it may lead to irritation, tearing, redness and pain.			
	Following ingestion:	Depending on concentration and exposure time, it may lead to stinging and digestive mucus damage, abdominal pain, nausea, vomiting.			
4.3	Indication of any immediate medi	cal attention and special treatment needed			

SECTIO	SECTION 5. Firefighting measures					
5.1	Extinguishing media					
	Small fire - water spray, dry powder, CO ₂					
	Suitable extinguishing media:	Large fire - water spray or alcohol resistant foam				
	Unsuitable extinguishing media: Water with full jet					
5.2	Special hazards arising from the su	Special hazards arising from the substance or mixture				
	Hazardous combustion products:	Formation of toxic gases is possible during heating or in case of fire.				
5.3	Advice for firefighters					
	Use a self-contained open-circuit o	compressed air breathing apparatus and fireproof clothing.				



Page 4 of 17

Trading name:		TB DECOLORIZER FLUORESCENT						
Product code:	TBF-OT-X**	Revision date:	21 Dec 2022	Version:	5			

5.4	Additional information
	Cool endangered receptacles with water spray. Collect contaminated fire fighting water separately. Do not
	contaminate the environment with extinguishing media.

SECTIO	ON 6. Accidental release meas	ures			
6.1	Personal precautions, protective equipment and emergency procedures				
6.1.1.	For non-emergency personne				
	Protective equipment:	Use personal protective equipment (see Section 8).			
	Accident prevention methods:	Evacuate members of all non-essential personnel and those members without protective equipment. Avoid breathing vapors and avoid contact with skin and eyes. Do not smoke. Keep away from ignition sources.			
	Emergency procedures:	Mark the area using proper signs.			
6.1.2.	For emergency responders:				
	Use protective equipment; in a (see Section 8).	case of inadequate ventilation use adequate airways protective equipment			
6.2	Environmental precautions:				
	Do not dispose of in sewage, drainage system and waterways. In case of large spillage contact National Protection and Rescue Directorate (NPRD) on 112.				
6.3	Methods and material for con-	tainment and cleaning up			
6.3.1.	Bunding, covering of drains; capping procedures:	ing, covering of drains;			
6.3.2.	Cleaning up:	Where possible, the substance can be absorbed by using absorbing material. Place the waste material in tightly closed impermeable containers. Store the substance in well ventilated storage rooms until disposal. Submit for disposal to the legal persons authorized by the Ministry of Environmental and Nature Protection. After disposal of the products, wash the area and and involved materials with water.			
6.3.3.	Other information:	Secure proper ventilation. Do not use incompatible materials (see Section 10).			
6.4	Reference to other sections				
	See Section 7 for information	on safe handling.			
		on personal protection equipment.			
	See Section 13 for disposal inf	ormation.			

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



Page 5 of 17

Trading name:	TB DECOLORIZER FLUORESCENT				
Product code:	TBF-OT-X**	Revision date:	21 Dec 2022	Version:	5

	Measures to prevent fire:		Use in well ventilated storage rooms. Keep away from sources of ignition and heat. Do not use tools that cause sparks. Do not smoke.	
	Measures to prevent aerosol and dust generation	n:	Secure proper ventilation.	
	Measures to protect the environment:		Prevent spilling into the sewage system and waterways.	
	Other measures:		Protect against electrostatic charges.	
7.1.2.	Advice on general occupational hygiene:			
	Do not eat, drink or smoke in the workspace. Th	oroughly was	sh hands after work and before eating.	
7.2	Conditions for safe storage, including any incom	e storage, including any incompatibilities		
	Technical measures and storage conditions:	Keep in tightly closed and upright set containers well ventilated storage rooms at temperatures ra from 15 to 25 °C. Protect from heat and direct su		
	Packaging materials:	Manufactu	urer's original packaging.	
	Requirements for storage rooms and vessels:	Keep away	y from food and drink. Keep the containers sed.	
	Advices for storage equipment:	must be re	ge must be made of hard material; floors esistant to chemicals. There must be no drain tly leads into sewage system. Secure proper n.	
	Further information on storage conditions:	Do not place the unused material in the storage and do not use empty containers for storing oth chemicals. Do not store with incompatible mater (see Section 10).		
7.3	Specific end use(s)			
	Recommendations:	-		
	Industrial sector specific solutions:	_		

SECTIO	SECTION 8. Exposure controls/personal protection							
8.1	Control parameters							
Substance			CAS No		Occupational exposure limit values/short term values		Biological limit values	
			ppm	mg/m³	-			
Propan-	-2-ol		67-63-0		400/500	999/1250	-	
Hydrog	en chloride		7647-01-0		5/10	8/15	-	
Substar	nce name:	-						
EC No:		-	CAS No:	-				



Page 6 of 17

Trading name:		TB DECOLORIZER FLUORESCENT				
Product code:	TBF-OT-X**	Revision date:	21 Dec 2022	Version:	5	

Troduct	coue.	1DI -O1-X	IXEVISI	on date.		21 Dec 2022	version.
DNEL							
DINEL			In	dustrial			
Davita of		Acute	Acute	Chronic		ronic	Chronic
Route of exposure		effect local				ct local	
	•	effect local	effect systemi		ene	Ct local	effect systemic
Oral		-	-	-			26 mg/kg (propan-2-ol)
Inhalation	1	-	-	-			500 mg/m³ (propan-2-ol)
Dermal	al physical parameters: solubility, flammability, cor		-			888 mg/kg (propan-2-ol)	
Critical ph	ysical para	ameters: solubility,	flammability, co	rrosivity:		_	
			Co	nsumer			
Route of		Acute	Acute		Ch	ronic	Chronic
exposure	:	effect local	effect systemi	ic	effe	ct local	effect systemic
Oral		-	-	-			26 mg/kg (propan-2-ol)
Inhalation	l	-	-	-			89 mg/m³ (propan-2-ol)
Dermal		-	-	-			319 mg/kg (propan-2-ol)
PNEC							
Environmental protection target			PNEC				
Fresh water			140.9 mg/l (propan-2-ol)				
Freshwate	Freshwater sediments			552 mg/kg (propan-2-ol)			
Marine wa	ater			140.9 mg/l (propan-2-ol)			
Marine se	diments			552 mg/kg (propan-2-ol)			
Food chai	n			no information available			
Microorga	anisms in s	sewage treatment		no inforn	natior	n available	
Soil (agric	ultural)			28 mg/kg	g (pro	pan-2-ol)	
Air				no inforn	natior	n available	
8.2	Evnocu	re controls					
8.2.1.	-	priate engineering	controls				
J.L. 1.	Approp	mate engineering		lice the r	rodu	ct in well ventil	ated rooms. Use personal
	Substance/mixture related measures to		Use the product in well ventilated rooms. Use personal protective equipment. Do not eat, drink or smoke in the workspace.				
	Structu exposu	ral measures to pre	event	In accord	lance	with Section 7.	
	Organi: exposu	sational measures re:	to prevent			of work in ordering work proces	to reduce other worker's s.
	Technic	cal measures to pre	event exposure:	•	•	•	tilation in order to keep ow permitted levels. Secure

stations for rinsing eyes and showering.



Page 7 of 17

Trading name:		TB DECOLORIZER FLUORESCENT				
Product code:	TBF-OT-X**	Revision date:	21 Dec 2022	Version:	5	

8.2.2.	Personal protection equipment	
8.2.2.1.	Eye and face protection:	Safety glasses that stick to face (EN 166) or visor in case of lower levels of concentration in air; protective gas mask that covers the entire face in case of higher levels of concentration in air.
8.2.2.2.	Skin protection	
	Hand protection:	The protective gloves have to satisfy the specification of Regulation (EU) 2016/425 and the related standard EN 374. Glove material: nitrile rubber Glove thickness: 0.40 mm Time until perforation: > 480 min
	Other skin protection:	During everyday work use cotton clothing (EN 340) and suitable footwear, such as rubber boots (EN 20345) or shoes that cover the entire foot. In case of spilling hazard, use clothing made of impermeable material suitable for protection from liquid chemicals (Viton, PVC, himex) and footwear made from the same material.
8.2.2.3.	Respiratory protection:	Protective full face mask (EN 136) or half mask (EN 140) equipped with a filter for organic vapors, type "A" (boiling point >65°C) acording to EN 14387) used when concentration levels exceed GVI.
8.2.2.4.	Thermal hazards:	No information 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:	colourless	No information available				
	Odour/odour threshold:	biting/no information available	No information available				
	Melting point / freezing point:	No information available	No information available				
	Boiling point or initial boiling point and boiling range:	No information available	No information available				



Page 8 of 17

Trading name:		TB DECOLORIZER FLUORESCENT					
Product code:	TBF-OT-X**	Revision date:	21 Dec 2022	Version:	5		

	Flammability:	No information available	No information available
	Initial boiling point and boiling range:	No information available	No information available
	Lower and upper explosion limit:	No information available	No information available
	Flash point:	18 °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:	See subsections 10.3 through 10.5.						
10.2	Chemical stability:	The product is chemically stable under standard ambient conditions of storing and using (room temperature).						
10.3	Possibility of hazardous reactions:	No dangerous reactions known.						
10.4	Conditions to avoid:	Avoid heat, sparks, open flames and other ignition sources.						
10.5	Incompatible materials:	No further relevant information available.						
10.6	Hazardous decomposition products:	No dangerous decompostion products known.						

SECTION 11. Toxi	SECTION 11. Toxicological information											
11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008												
Acute toxi	Acute toxicity:											
Route of exposure: Dose LD ₅₀ /LC ₅₀ or Exposure time Results ATE _{mix}												
Oral: - rat LD ₅₀ - 5.840 mg/kg (propa												
Dermal: - rabbit 12.800 mg/kg (propan-2-ol)												



Page 9 of 17

Trading name:		TB DECOLORIZER FLUORESCENT						
Product code:	TBF-OT-X**	Revision date:	21 Dec 2022	Version:	5			

Inhalation:		- r	rat	LC ₅₀	4 h		37.5 mg/l (propan-2-ol) 4.74 mg/l (hydrochloric acid		
Specific	c target	organ toxicit	y – single exp	oosure (STO	T SE):				
: •		Spec	ific effects	-	Target org	an	Note		
Oral:	No	o information	available	N	o information ava	ilable	-		
Dermal:	N	o information	available	N	o information ava	ilable	_		
Inhalation:	No	o information	available	N	o information ava	ilable	may cause drowsin or dizziness	ıess	
Aspirat	ion haz	ard:		No informa	tion available.				
Irritatio	n and o	corrosion							
		Exposur	e time	Species	Evaluation	Method	Note		
Skin corrosion/irritat	ion:	-		-	-	-	-		
Serious eye damage/irritatio	n	-		-	-	-	-		
Sensitiz	zation								
Skin sensitizatio	n:	No inf	ormation ava	ilable.					
Respiratory sens	sitizatio	n: No inf	ormation ava	ilable.					
Sympto	oms rela	ated to the ph	nysical, chemi	ical and toxi	cological characte	eristics			
Oral exposure:		No informati	on available.						
Dermal exposur	e:	No informati	on available.						
Inhalation expos	sure:	No informati	on available.						
Eye exposure:		No informati	on available.						
Repeat	ed dose	e toxicity (sub	acute, subchi	ronic, chron	ic)	-			
		Dose	Exposure time	Species	Method	Evalua	tion Note		
Subacute oral	No avail	information able	No information available	No informat available		No inform availab			
Subacute dermal	No avail	information able	No information available	No informat available		No on inform availak			



Subacute

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

No

information

No

information

Page 10 of 17

Trading name:		TB DECOLORIZER FLUORESCENT								
Product code:	TBF-OT-X**	Revision date:	21 Dec 2022	Version:	5					

information

No

No

information

No information

inhalation	availa	ble	available	available	available	available	OH	-
Subchronic oral	No availa	information able	No information available	No information available	No information available	No information available	on	-
Subchronic dermal	ochronic No information info		No information available	No information available	No information available	No information available	on	-
Subchronic inhalation	No availa	information able	No information available	No information available	No information available	No information available	on	-
Chronic oral	No availa	information able	No information available	No information available	No information available	No information available	on	-
Chronic dermal	No availa	information able	No information available	No information available	No information available	No information available	on	-
Chronic No information inhalation available		No information available	No information available	No information available	No information available	on	-	
Specific	target	organ toxicit	y – repeated e	xposure (STOT	RE):			
,			Specific effec	cts	Target o	rgan		Note
Subacute oral		No informa	tion available		No information	n available	-	
Subacute dermal		No informa	tion available		No information	n available	-	
Subacute inhalat	ion	No informa	tion available		No information	n available	-	
Subchronic oral		No informa	tion available		No information	n available	-	
Subchronic derm	nal	No informa	tion available		No information	n available	-	
Subchronic inhal	ation	No informa	tion available		No information	n available	-	
Chronic oral			tion available		No information		-	
Chronic dermal			tion available		No information		-	
Chronic inhalatio	n	No informa	tion available		No information	n available	-	
CMR eff	fects (ca	arcinogenicity	y; mutagenicity	y; reproductive	toxicity)			
Carcino	genicity	/ :		Based on avail	able data, the cla	ssification c	riteria	are not met.
Mutage	nicity <i>ii</i>	n vitro:		Based on available data, the classification criteria are not met.				
Genoto	xicity:			Based on available data, the classification criteria are not met.				
Mutage	nicity ii	n vivo:		Based on avail	able data, the cla	ssification c	riteria	are not met.



Page 11 of 17

Trading name:		TB DECOLORIZER FLUORESCENT							
Product code:	TBF-OT-X**	Revision date:	21 Dec 2022	Version:	5				

	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 CN properties:	MR Based on available data, the classification criteria are not met.
11.2	Information on other hazards:	
11.2.1.	Endocrine disrupting properties:	
	The substance/mixture does not contacomponents considered to have endocridisrupting properties according to REAG Article 57(f) or Commission Delegat regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% higher.	ne CH ed on
11.2.2.	Other informations:	
	-	

SECTION 12. Ecologic	cal informat	ion				
12.1 Toxicity						
Acute (short-term) toxicity	Dose	Exposure time	Species	Method	Evaluation	Note
Fish	LC ₅₀	96 hours	No information available	No information available	100-1,000 mg/l (2- propanol)	-
Crustacea:	EC ₅₀	48 hours	No information available	No information available	>1,000 mg/l (2-propanol)	-
Algae/aquatic plants	IC ₅₀	4 days	No information available	No information available	>1,000 mg/l (2-propanol)	-
Other organisms	-	-	-	-	-	-
Chronic (long-term) toxicity	Dose	Exposure time	Species	Method	Evaluation	Note
Fish	LC ₅₀	96 hours	No information available	No information available	No information available	-
Crustacea:	EC ₅₀	48 hours	No information available	No information available	No information available	-



Page 12 of 17

Trading name:					TB DECOLORIZER FLUORESCENT					
Product co	de: T	BF-OT-X**		Re	evision date:	21 Dec	2022		Version:	5
Algae/aquat	ic plants	IC ₅₀	72 hours	No information available		No No information informavailable availa		mation -		
Other organ	Other organisms			-	-	-	-		-	
		and degrada	bility							
Abi	otic degr		16.11							
	De	egradation h	alf-lives		Method	Evalua			Note	
Marine wate	r Noi	nformation	available		information ilable	No informa available	ation	-		
Fresh water	No i	nformation	available		information ilable	No informa available	ation	_		
Air	No i	nformation	available		information ilable	No informa available	ntion	-		
Soil	No i	No information available			information ilable	No information available		_		
	<u> </u>			<u> </u>						
Bio	degradati	ion								
% Degrad	ation	Time (days)	Method		Evaluation			Note	
No informat available	ion	No ir available	nformation	No information available		No information available		No in availa	formation ble	
12.3 Bio	accumula	tive potentia	al							
Oct	anol-wat	er partition (coefficient (log K	ow)					
Value	Conce	entration	рН	°C	Method	Εν	aluation		Note	
-	-		-	-	-	-		-		
Rio	concentra	ation factor (BCF)							
Value	CONCENTRE	Speci	<u> </u>	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Method	Fvalı	uation		Note	
No informat	ion N		formation	No i	information	No inforn				
available		vailable			lable	available		-		



12.6.

Endocrine disrupting properties

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

Page 13 of 17

Trading name:		TB DECOLORIZER FLUORESCENT								
Product code:	TBF-OT-X**	Revision date:	21 Dec 2022	Version:	5					

	Value	Dose	Exposure time	Spe	ecies	Meth	od	Ev	aluation		Note
Chronic toxicity on fish LC ₅₀			No information available	No inforr availa	mation Ible	No informa availabl			rmation lable	-	
Chronic toxicity on crustacea (<i>Daphnia</i>)			No information available	No inforr availa	mation ible	No informa availabl			rmation lable	-	
12.4	Mobility in so	il									
	Known or pre	dicted distributi	on in environm	nental c	ompart	ments:					
	No informatio	n available									
	Surface tension	n:									
	Value	°C	Concentra	ation		Method			Note		
	No No information available available		No informa available	nation No information available		-					
	Adsorption / o	desorption									
Transpo	ort	coefficient 's constant	log Kow	Εv	aporati	on rate		Meth	bc		Note
Soil-wa	Soil-water No information available		No information		n No information available		No information available		ation	-	
Water-air No available		information	No information		No information No in available availa			ation	-		
Soil-air No information available		No information			No ir availa		ation	_			



Trading name:

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

TB DECOLORIZER FLUORESCENT

Page 14 of 17

Product	code:	TBF-OT-X**	Revision date:	21 Dec 2022	Version:	5		
	according	g to REACH Article 57	ot contain components con (f) or Commission Delegate vels of 0.1% or higher.					
12.7	Other ad	verse effects						
	No furthe	er relevant information	n available.					
SECTION	l 13 Disi	posal considerations						
13.1		treatment methods						
10.1.1		. (5.)						
13.1.1.		t/Packaging disposal:						
	Submit Protect		gal person authorized by th	ne Ministry of Environm	ental and Nature			
13.1.2.	Waste	codes/waste designat	ions according to Law:					
	Packag	ing that contains resid	dual hazardous substances	or is contaminated with	hazardous substan	ces		
13.1.3.	Waste treatment – relevant information:							
	No info	ormation available						
	<u> </u>							
13.1.4.	Sewage disposal – relevant information:							
	Waste	must not be disposed	of into the sewage system					
13.1.5.	Other o	disposal recommenda	tions:					
	authori	ized by the ministry in	ct's remains into the sewag charge. Do not dispose of ors authorized by the minis	the packaging into the				
13.1.6.	Releva	nt Community provision	ons:					
	Dispos	al must be made acco	rding to official regulations	S				
SECTION	N 14 TRA	NSPORT INFORMAT	ION					
	Transpor	ting/shipment by road	d (ADR)					
UN num	······································		1219					
UN prop	er shippiı	ng name:	Isopropanol					
Transpor	t hazard	class(es):	3					
Packing	group:		II					
Environn	nentally h	nazardous:	-					



SAFETY DATA SHEET

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

Page 15 of 17

Trading name:	TB DECOLORIZER FLUORESCENT					
Product code:	TBF-OT-X**	Revision date:	21 Dec 2022	Version:	5	

Special precautions for user:	-
Transporting/shipment by rail (R	ID)
UN number:	1219
UN proper shipping name:	Isopropanol
Transport hazard class(es):	3
Packing group:	П
Environmentally hazardous:	-
Special precautions for user:	-
Inland waterway transport (ADN)	
UN number:	1219
UN proper shipping name:	Isopropanol
Transport hazard class(es):	3
Packing group:	II
Environmentally hazardous:	-
Special precautions for user:	-
Transporting/shipment by sea (II	MDG)
UN number:	1219
UN proper shipping name:	Isopropanol
Transport hazard class(es):	3
Packing group:	П
Environmentally hazardous:	-
Special precautions for user:	-
Transport in bulk according to Annex II of MARPOL 73/78 and the IBC code:	-
Transporting/shipment by air (IC	AO-TI/IATA-DGR)
UN number:	1219
UN proper shipping name:	Isopropanol
Transport hazard class(es):	3
Packing group:	II
Environmentally hazardous:	-
Special precautions for user:	-

SECTION 15. Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture



Page 16 of 17

Trading name:	TB DECOLORIZER FLUORESCENT				
Product code:	TBF-OT-X**	Revision date:	21 Dec 2022	Version:	5

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

SECTION 16. Other information			
16.1	Indication of changes:	-	



SAFETY DATA SHEET

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

Page 17 of 17

Trading name:	TB DECOLORIZER FLUORESCENT				
Product code:	TBF-OT-X**	Revision date:	21 Dec 2022	Version:	5

16.2	Abl	oreviations 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.	4. Classification and procedure 1272/2008 (CLP)		used to derive the classification for mixture according to Regulation (EC)				
Classif	icatio	า	Classification procedure				
_	-		-				
16.5.	Rel	evant H statements (numl	per and full text)				
	H:	H225	Highly flammable liquid and vapor.				
		H314	Causes severe skin burns and eye damage.				
		H319	Causes serious eye irritation				
		H331	Toxic if inhaled.				
		H336	May cause drowsiness or dizziness.				
16.6.	Training advice:		-				
			** "X" in the product code marks different volumes (different packagings of the product)				
16.7.	.7. Further information:		We are not responsible for consequences in case of failure to comply with instructions for use or improper use of the product described in this material safety data sheet.				

A	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

Page 1 of 17

Trading name:		TB PERMANGANATE REAGENT						
Product code:	TBP-OT-X**	Date of compilation:	21 Dec 2022	Version:	6			

SECT	ION 1: Identification of	the substanc	e/mixture	e and of the company/undertaking	
1.1	Product identifier				
	Trading name:	TB PERMAI	NGANATE	REAGENT	
	Chemical name:	-			
	Catalogue number:	TBP-OT-X*	*		
1.2	Relevant identified us	es of the subs	stance or n	nixture and uses advised against	
	Uses:			rstain for use in TB-Stain Fluorescent kit and TB-Stain ne O kits.	
	Uses advised against:		Only the	e identified uses are advised.	
	Reason why uses advised against:		The product is intended for use only as an <i>in vitro</i> diagnostic medical device, registered at the Agency for Medicinal Products and Medical Devices and there is no reason to use it for other purposes.		
1.3	Details of the supplier	Details of the supplier of the safety data sheet			
	Supplier:		BioGnost Ltd.		
	Address:		Medjugorska 59, Zagreb		
	Telephone number:		+385 1 2409997		
	Telefax.:		+385 1 2404039		
	e-mail of competent բ	person:	msds@biognost.hr		
	National contact:	National contact:		-	
1.4	Emergency telephone	number			
	National Protection ar	nd Rescue Dir	ectorate:	112	
	Medical information:			+385 1 2348 342	
	Other information:	Other information:		-	

SECTIO	SECTION 2. Hazards identification						
2.1	Classification of the substance of	or mixture					
2.1.1	Classification according to Regu	ulation (EC) No 12	72/2008 (CLP)				
	Hazard class and catego	Hazard class and category code: Hazard statements*:					
	Aquatic Chronic 3		H412				
2.1.2.	Additional information						
	-						
*For ful	ll text of Hazard- and EU Hazard-	statements: see Sl	ECTION 16				
2.2	Label elements						
	Product identification:	TB PERMANGAN	NATE REAGENT				
	Identification number:	Identification number: -					
	Authorization number:	-					



Page 2 of 17

Trading name:		TB PERMANGANATE REAGENT						
Product code:	TBP-OT-X**	Date of compilation:	21 Dec 2022	Version:	6			

	Hazard pictograms:	
	Signal word:	-
	Hazard statements:	H412 Harmful to aquatic life with long lasting effects.
	Precautionary statements:	P273 Avoid release to the environment P501 Dispose of contents/container in accordance with local regulations.
	Supplemetal hazard information (EU):	-
2.3	Other hazards	
	Endocrine Disrupting Prope	erties:
	No known endocrine disrupt	ing properties
	Results of PBT and vPvB as PBT or a vPvB.	sessment: According to the results of its assessment, this substance is not a

SECTION 3. Con	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)			
7722-64-7/ 231-760-3/ 025-002-00-9	-	<1%	potassium permanganate	Ox. Sol. 2; H272 Acute Tox. 4; H302 Aquatic Acute 1; H400 Aquatic Chronic 1; H410 Repr. 2; H361d			

SECT	ION 4. First aid measures	
4.1	Description of first aid measu	ures
	General notes:	If the suggested first aid measures do not prove sufficient, seek medical attention.
	Following inhalation:	Carry the afflicted person out of the contaminated area into a well-ventilated area or out for fresh air. In case of difficult breathing, provide the afflicted person with oxygen.
	Following skin contact:	Remove contaminated clothing. Immediately wash with plenty of water for at least 20 minutes. Seek medical assistance if the symptoms of irritation remain.
	Following eye contact:	Rinse out with plenty of water with the eyelid held wide open for at least 20 minutes. If the symptoms remain, immediately call in ophthalmologist.
	Following ingestion:	Rinse the oral cavity, drink 1-2 glasses of water. Immediately consult a physician and show the container or label. In case of swallowing large quantities, transport the afflicted person to the hospital.



Page 3 of 17

Trading name:		TB PERMANGANATE REAGENT					
Product code:	TBP-OT-X**	Date of compilation:	21 Dec 2022	Version:	6		

	Self-protection of the first aider:	-	
4.2	Most important symptoms and effects, both acute and delayed		
	Following inhalation:	Depending on concentration and exposure time, it may lead to mucosa irritation, cough, and dyspnea.	
	Following skin contact:	Depending on concentration and exposure time, it may lead to irritation, rash, skin drying and skin cracking.	
	Following eye contact:	Depending on concentration and exposure time, it may lead to irritation, tearing, redness and pain.	
	Following ingestion:	Depending on concentration and exposure time, it may lead to stinging and digestive mucus damage, abdominal pain, nausea, vomiting.	
4.3	Indication of any immediate medical attention and special treatment needed		
	-		

SECTION	SECTION 5. Firefighting measures					
5.1	Extinguishing media	Extinguishing media				
	Suitable extinguishing media:	Water spray, foam, dry powder, CO ₂				
	Unsuitable extinguishing media:	No information available				
5.2	Special hazards arising from the su	ubstance or mixture				
	Hazardous combustion products:	May product toxic fumes of carbon monoxide if burning.				
5.3	Advice for firefighters					
	Use a self-contained open-circuit o	compressed air breathing apparatus and fireproof clothing.				
5.4	Additional information	Additional information				
	Do not contaminate the environment	ent with extinguishing media.				

SECTIO	SECTION 6. Accidental release measures				
6.1	Personal precautions, protective	equipment and emergency procedures			
6.1.1.	For non-emergency personnel				
	Protective equipment:	Use personal protective equipment (see Section 8).			
	Accident prevention methods:	Evacuate members of all non-essential personnel and those members without protective equipment. Avoid breathing vapors and avoid contact with skin and eyes. Do not smoke.			
	Emergency procedures:	Mark the area using proper signs.			
6.1.2.	For emergency responders:				
	Use protective equipment; in case of inadequate ventilation use adequate airways protective equipment (see Section 8).				
6.2	Environmental precautions:				



Page 4 of 17

Trading name:	TB PERMANGANATE REAGENT					
Product code:	TBP-OT-X**	Date of compilation:	21 Dec 2022	Version:	6	

	Do not dispose of in sewage, drainage system and waterways. In case of large spillage contact National Protection and Rescue Directorate (NPRD) on 112.			
6.3	Methods and material for cor	ntainment and cleaning up		
6.3.1.	Bunding, covering of drains; capping procedures: Sand or clay barriers.			
6.3.2.	Cleaning up:	Where possible, the substance can be absorbed by using absorbing material. Place the waste material in tightly closed impermeable containers. Store the substance in well ventilated storage rooms until disposal. Submit for disposal to the legal persons authorized by the Ministry of Environmental and Nature Protection. After disposal of the products, wash the area and and involved materials with water.		
6.3.3.	Other information:	Do not use incompatible materials (see Section 10).		
6.4	Reference to other sections			
	See Section 7 for information on safe handling.			
	See Section 8 for information	on personal protection equipment.		
	See Section 13 for disposal in	formation.		

SECTIO	ON 7. Handling and storage				
7.1	Precautions for safe handling				
7.1.1.	Protection measures				
	Measures to prevent fire:		Use in well ventilated storage rooms. Keep away from sources of ignition and heat.		
	Measures to prevent aerosol and dust generation	on:	Secure proper ventilation.		
	Measures to protect the environment:	Prevent spilling into the sewage system and waterways.			
	Other measures:		-		
7.1.2.	Advice on general occupational hygiene:				
	Do not eat, drink or smoke in the workspace. Thoroughly wash hands after work and before eating.				
7.2	Conditions for safe storage, including any incompatibilities				
	Technical measures and storage conditions:		htly closed and upright set containers in a ated storage rooms at temperatures ranging 25 °C.		
	Packaging materials:	Manufacturer's original packaging. Avoid metal containers.			
	Requirements for storage rooms and vessels:	Keep away from food and drink. Keep the containers tightly closed.			
	Advices for storage equipment:		e must be made of hard material; floors sistant to chemicals. There must be no drain ly leads into sewage system. Secure proper .		



Page 5 of 17

Trading name:		TB PERMANGANATE REAGENT			
Product code:	TBP-OT-X**	Date of compilation:	21 Dec 2022	Version:	6

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

SECTION 8. Exposure controls/personal protection								
8.1 Co	ontrol pa	rameters						
Su	ubstance		CA	S No	l l	•	exposure limit term values	Biological limit values
					ı	opm	mg/m³	
Potassium permanganate 7722-64-7				-	0.5	-		
Substance	name:	_						
EC No:		_	CAS No	: -				
DNEL				<u> </u>				
					Ind	lustrial		
Route of exposure:		Acu effect			cute systemic		Chronic effect local	Chronic effect systemic
Oral		-		-		-		-
Inhalation		-		-		-		0.218 mg/m³ (potassium permanganate)
Dermal		-		-		-		-
Critical phy	sical par	ameters: s	solubility,	flammab	ility, cor	rosivity:	-	
					Coi	nsumer		
Route of		Acı	ute	Ad	cute		Chronic	Chronic
exposure:		effect	local	effect s	systemic		effect local	effect systemic
Oral		-		-		-		-
Inhalation		-		-		-		-
Dermal		-		-		-		-
PNEC								
Environmental protection target PNEC								
Fresh wate	r					0.06 µg/l	(potassium per	manganate)
Freshwater	sedimer	nts				no inform	nation available	
Marine wat	ter					no information available		



Marine sediments

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

no information available

Page 6 of 17

Trading name:		TB PERMANGANATE REAGENT						
Product code:	TBP-OT-X**	Date of compilation:	21 Dec 2022	Version:	6			

Food chai	in		no information available		
Microorga	anisms in sewage treatment		1.64 mg/l (potassium permanganate)		
Soil (agric	cultural)		no information available		
Air			no information available		
			1		
8.2	Exposure controls				
8.2.1.	Appropriate engineering controls	S			
	Substance/mixture related measure prevent exposure during identified		Use the product in well ventilated rooms. Use personal protective equipment. Do not eat, drink or smoke in the workspace.		
	Structural measures to prevent exposure: Organisational measures to prevent exposure:		In accordance with Section 7.		
			Organization of work in order to reduce other worker's influence during work process.		
	Technical measures to prevent ex	rposure:	Secure proper workspace ventilation in order to keep concentration levels in air below permitted levels. Secure stations for rinsing eyes and showering.		
8.2.2.	Personal protection equipment				
8.2.2.1.	Eye and face protection:	levels o	glasses that stick to face (EN 166) or visor in case of lower of concentration in air; protective gas mask that covers the face in case of higher levels of concentration in air.		
8.2.2.1. 8.2.2.2. 8.2.2.3. 8.2.2.4.	Skin protection				
	Hand protection:	Protec	tive nitrile gloves, >0.11 mm thick (EN 374).		
	Other skin protection: Wear a		r antistatic clothing made of natural fibers (such as cotton) long sleeves (EN 340) and shoes that cover the entire foot.		
8.2.2.3.	Respiratory protection:		quired under normal conditions of use. Use suitable tory protective device when high concentrations are t.		
8.2.2.4.	Thermal hazards:	No info	ormation available		
8.2.3.	Environmental exposure controls				
	Substance/mixture related measures to prevent exposure:	See Se	ction 6		
	Structural measures to prevent exposure:	Use mo	odern equipment.		
	Organisational measures to	Adapt	the work process to the required working conditions of the		

workplace.

prevent exposure:



Page 7 of 17

Trading name:		TB PERMANGANATE REAGENT			
Product code:	TBP-OT-X**	Date of compilation:	21 Dec 2022	Version:	6

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:	dark purple	No information available	
	Odour/odour threshold:	odourless/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:	6.1 – 6.9	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 (room temperature).			
10.3	Possibility of hazardous reactions:	No dangerous reactions known.			
10.4	Conditions to avoid:	Avoid heat, sparks, open flames and other ignition sources.			



Page 8 of 17

Trading name:	TB PERMANGANATE REAGENT					
Product code:	TBP-OT-X**	Date of compilation:	21 Dec 2022	Version:	6	

10.5	Incompatible materials:	Reducing agents, sulfuric acid, flammables, metals and reactive organic materials.
10.6	Hazardous decomposition products:	Carbon oxides (CO, CO ₂). Oxygen, oxides of potassium and manganese.

SECTION 11. To	xicological info	rmation					
			d in Regu	lation (EC) No 127	2/2008		
Acute to	oxicity:						
Route of exposure:	Method	Species	Do	ose LD ₅₀ /LC ₅₀ or ATE _{mix}	Exposure t	Results	
Oral:	-	rat	LD ₅₀		-		750 mg/kg (potassium permanganate)
Dermal:	-	-	-		-		-
Inhalation:	-	-	-		-		-
Specific	target organ tox	icity – single ex	kposure (S	TOT SE):			
	S	pecific effects		Target o	organ		Note
Oral:	No informat	ion available	No information available			-	
Dermal:	No informat	ion available		No information a	available	-	
Inhalation:	No informat	ation available		No information a	available	_	
:							
Aspirati	on hazard:		No inform	mation available.			
Irritation	n and corrosion						
	Expo	sure time	Spec	ies Evaluati	on Method	l	Note
Skin corrosion/irritation	on:		-	-	-	_	
Serious eye damage/irritatioı	- n		-	-	-	_	
Sensitiz	ation						
Skin sensitizatior	n: -						
Respiratory sensi	itization: -						
						_	
Sympto	ms related to the	physical, chen	nical and t	oxicological chara	cteristics		
Oral exposure:	No inforn	nation available	2.				



Page 9 of 17

Trading name:		TB PERMANGANATE REAGENT						
Product code:	TBP-OT-X**	Date of compilation:	21 Dec 2022	Version:	6			

Dermal exposure	:	No informati	on available.							
Inhalation exposi	ure:	No informati	ation available.							
Eye exposure:		No informati	on available.							
Repeate	ed dose	toxicity (sub	acute, subchro	onic, chronic)	i	1	1			
		Dose	Exposure time	Species	Method	Evaluation	Note			
Subacute oral	No availa	information able	No information available	No information available	No information available	No information available	n -			
Subacute dermal	No information available		No information available	No information available	No information available	No information available	n -			
Subacute inhalation	No information available No information available		No information available	No information available	No information available	No information available	n -			
Subchronic oral			No information available	No information available	No information available	No information available	า -			
Subchronic dermal	No availa	information able	No information available	No information available	No information available	No information available	n -			
Subchronic inhalation	No availa	information able	No information available	No information available	No information available	No information available	n -			
Chronic oral	No availa	information able	No information available	No information available	No information available	No information available	n -			
Chronic dermal	No availa	information able	No information available	No information available	No information available	No information available	n -			
Chronic inhalation	No availa	information able	No information available	No information available	No information available	No information available	n -			
							,			
Specific	target	organ toxicit	y – repeated e	xposure (STOT	RE):					
			Specific effec	ts	Target o	rgan	Note			
Subacute oral		No informa	tion available		No information available -		-			
Subacute dermal		No informa	ition available		No information available -		-			
Subacute inhalat	ion	No informa	tion available		No information	n available	-			



Page 10 of 17

Trading name:		TB PERMANGANATE REAGENT							
Product code:	TBP-OT-X**	Date of compilation:	21 Dec 2022	Version:	6				

Subchro	nic oral	No information available		No information available	-				
Subchro	nic dermal	No information available		No information available	-				
Subchro	onic inhalation	No information available		No information available	-				
Chronic	oral	No information available		No information available	-				
Chronic	dermal	No information available		No information available	-				
Chronic	inhalation	No information available		No information available	-				
	·	arcinogenicity; mutagenicity; re	•	3,					
	Carcinogenicit			ation available.					
	Mutagenicity i	n vitro:	No inform	ation available.					
	Genotoxicity:		No information available.						
	Mutagenicity i	n vivo:	No informa	ation available.					
	Germ cell muta	agenicity:	No informa	ation available.					
	Reproductive t	oxicity:	No informa	ation available.					
	Summary of properties:	evaluation of the CMR	No information available.						
11.2	Information or	n other hazards:							
11.2.1.	Endocrine disr	upting properties:							
	components of disrupting pro Article 57(f) regulation (EU	e/mixture does not contain onsidered to have endocrine operties according to REACH or Commission Delegated 1) 2017/2100 or Commission 2018/605 at levels of 0.1% or							
11.2.2.	Other informations:								
	-								

SECTION 12. Ecologic	SECTION 12. Ecological information										
12.1 Toxicity											
Acute (short-term) toxicity	Dose	Exposure time	Species	Method	Evaluation	Note					
Fish	LC ₅₀	96 hours	Oncorhynchus mykiss (rainbow trout)	-	_	0.3 – 0.6 mg/l (potassium permanganate)					



Page 11 of 17

Trading name:		TB PERMANGANATE REAGENT					
Product code:	TBP-OT-X**	Date of compilation:	21 Dec 2022	Version:	6		

Troduct code.	· '	IDI OIA		Bute of comp	nation.	2100	C LOLL		version.	
Crustacea:		EC ₅₀	48 hours	Daphnia magna (Wate flea)	r -	-			0.084 mg/l (potassium permanganate)	
Algae/aquatic p	olants	IC ₅₀	4 days	-	-		-		-	
Other organisms		-	_	-	-		_		-	
Chronic (long-term) toxicity		Dose	Exposur time	e Species	Me	thod	Evalu	ation	Note	
Fish LC ₅₀		96 hours	No informatio available	n No inform availal		No inforn availa		-		
Crustacea:		EC ₅₀	48 hours	No informatio available	n No inform availal		No inforn availa		-	
Algae/aquatic plants		IC ₅₀	72 hours	No informatio	n No inform availal		No inforn availa		-	
Other organisms		-	-	-	-		-		-	
12.2 Persist	tence a	and degrada	bility							
Abioti	c degr	adation		,						
	De	egradation h	alf-lives	Method	E	valuatio	n		Note	
Marine water	No i	nformation a	available	No information available		No information available		_		
Fresh water	No i	nformation a	available	No information available		No information available		-		
Air	No i	nformation a	available	No information available	No inf availal	ormatio	n	-		
Soil No information available		No information available		No information available		-				
:										
Biode	gradati	ion								
% Degradati	on	Time (days)	Method	E	valuatio	n		Note	
No information	1	No ir	formation	No information	No inf	No information No		No in	No information	

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

Bioaccumulative potential
Octanol-water partition coefficient (log Kow)



Trading name:

SAFETY DATA SHEET

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

TB PERMANGANATE REAGENT

Page 12 of 17

Produ	ct co	de:	TBP-C)T-X**		Date	of co	mpilatio	on:	21 Dec	2022	\	/ersion:	6
Valu	ue	Cor	ncentrat	ion p	Н	°C	Me	ethod		Evalua	tion		Note	
-		-		-					-			-		
	Rio	roncent	tration f	actor (BCF)					i			; 		
\	Value	concern	ti atioii i	Species		N	1ethoc	 I	Ev	/aluatio	n		Note	
No information No		No availab	inform	ation	No info	rmatio			ormatio		-		-	
	Chr	onic ec	otoxicity	/		i				į.				
Value		Dose	Exposure time		Spe	Species Met		nod	Evalu	ation	Note			
Chronic toxicity on fish		LC ₅₀	No information available		No inforr availa	mation ible			No information available		-			
Chroni crustac		city on aphnia))	EC ₅₀	No infor avail	mation able	No inforr availa	nation able	No inform availab		No informa availab		-	
12.4	Мо	bility in	soil											
				d distributi	on in e	environme	ental c	ompart	ments:					
		•	ation av					•						
	Sur	face ter	nsion:											
		Value		°C	С	oncentrat	tion		Metho	od			Note	
		ormatio ilable		ormation iilable		informat ailable	ion	No infavailat	ormatio ole	n	-			
	Ads	orption	ı / deso	rption										
Transp	-	A	/D coef	ficient	lo	og Kow	Eν	/aporati	on rate	٨	Лethod		Note	
Soil-wa	ater	No availa		formation	No ii availa	nformatio able		o inform ailable	ation	No in	formation ble	on -	-	



Page 13 of 17

Trading	g name:		TR DE	PMANGANATE	PEAGENT	rage 13 of 1	-
,		TB PERMANGANATE REAGENT TBD OT V** Data of compilation: 21 Dec 2022 Version: 6					
Product code: TBP-OT-X** Date of compilation: 2		21 Dec 2022	Version:	6			
Water-a	air No avai	information lable	n No information available	No information available	No information available	-	
l Soil-air		No information available	-				
12.5.	Results o	f PBT and vPvB ass	sessment				
	according	e substance/mixture does not contain components considered to have endocrine disrupting propertie cording to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission egulation (EU) 2018/605 at levels of 0.1% or higher.					
12.6.	Endocrin	e disrupting prope	rties				
	according	g to REACH Article	•	n Delegated regul	to have endocrine of ation (EU) 2017/2100		
12.7.	Other ad	verse effects					
	No inforr	nation available					
SECTIO	N 13. Disp	oosal consideration	ons				
13.1	Waste treatment methods						
	=						
13.1.1.	Produc	t/Packaging dispo	sal:				
		Submit for disposal to the legal person authorized by the Ministry of Environmental and Nature Protection.					
13.1.2.	Waste o	codes/waste desig	nations according to	o Law:			
			5		ntaminated with haz	ardous substar	nces
13.1.3.	Waste treatment – relevant information:						
	No info	nformation available					
13.1.4.	Sewage	age disposal – relevant information:					
	Waste ı	Waste must not be disposed of into the sewage system.					
13.1.5.	Other o	disposal recommer	ndations:				
	Do not dispose of the product's remains into the sewage system. Submit the remains to the collector 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.						



SAFETY DATA SHEET

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

Page 14 of 17

Trading name:	TB PERMANGANATE REAGENT				
Product code:	TBP-OT-X**	Date of compilation:	21 Dec 2022	Version:	6

13.1.6. Relevant Community pro	visions:
-	
SECTION 14 TRANSPORT INFORM	IATION
Transporting/shipment by	road (ADR)
UN number:	3082
UN proper shipping name:	Environmentally hazardous substance, liquid, n.o.s. (potassium permanganate)
Transport hazard class(es):	9
Packing group:	III .
Environmentally hazardous:	
Special precautions for user:	-
Transporting/shipment by	rail (RID)
UN number:	3082
UN proper shipping name:	Environmentally hazardous substance, liquid, n.o.s. (potassium permanganate)
Transport hazard class(es):	9
Packing group:	III .
Environmentally hazardous:	-
Special precautions for user:	-
Inland waterway transport	(ADN)
UN number:	3082
UN proper shipping name:	Environmentally hazardous substance, liquid, n.o.s. (potassium permanganate)
Transport hazard class(es):	9
Packing group:	lii e
Environmentally hazardous:	-
Special precautions for user:	-
Transporting/shipment by	sea (IMDG)
UN number:	3082
UN proper shipping name:	Environmentally hazardous substance, liquid, n.o.s. (potassium permanganate)
Transport hazard class(es):	9
Packing group:	lii e
Environmentally hazardous:	_
Special precautions for user:	-



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

amended by Regulation (EU) No. 2020/878 Page 15 of 17

Trading name:	TB PERMANGANATE REAGENT				
Product code:	TBP-OT-X**	Date of compilation:	21 Dec 2022	Version:	6

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC code:	-
Transporting/shipment by air (IC	AO-TI/IATA-DGR)
UN number:	3082
UN proper shipping name:	Environmentally hazardous substance, liquid, n.o.s. (potassium permanganate)
Transport hazard class(es):	9
Packing group:	III
Environmentally hazardous:	-
Special precautions for user:	-
Further information: Packages sma	ller than or equal to 5 kg / L, not dangerous goods of Class 9.

1 Safety, health and enviro	Safety, health and environmental regulations/legislation specific for the substance or mixture		
EU regulations			
Authorization and/or res	strictions 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);		



Page 16 of 17

Trading name:	TB PERMANGANATE REAGENT				
Product code:	TBP-OT-X**	Date of compilation:	21 Dec 2022	Version:	6

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

SECTIO	ON 16. Other information			
16.1	Indication of changes:	-		
16.2	Abbreviations and acronyms	ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road) IMDG: International Maritime Code for Dangerous Goods IATA: International Air Transport Association GHS: Globally Harmonised System of Classification and Labelling of Chemicals EINECS: European Inventory of Existing Commercial Chemical Substances CAS: Chemical Abstracts Service (division of the American Chemical Society) DNEL: Derived No-Effect Level (UK REACH) LC50: Lethal concentration, 50 percent LD50: Lethal dose, 50 percent PBT: Persistent, Bioaccumulative and Toxic vPvB: very Persistent and very Bioaccumulative		
16.3.	Key literature references and source of data:	-		
16.4.	Classification and procedure used to derive the classification for mixture according to Regulation (EC) 1272/2008 (CLP)			
Classification		Classification procedure		
_		-		
16.5.	Relevant H statements (num	per and full text)		
	272	May intensify fire; oxidiser.		
	302	Harmful if swallowed.		
	H: 361d	Suspected of damaging the unborn child.		
	400	Very toxic to aquatic life.		
	410	Very toxic to aquatic life with long lasting effects.		
	412	Harmful to aquatic life with long lasting effects		
16.6.	Training advice:	-		
16.7.	Further information:	** "X" in the product code marks different volumes (different packagings of the product) We are not responsible for consequences in case of failure to comply with instructions for use or improper use of the product described in this material safety data sheet.		



SAFETY DATA SHEET

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

Page 17 of 17

Trading name:	TB PERMANGANATE REAGENT				
Product code:	TBP-OT-X**	Date of compilation:	21 Dec 2022	Version:	6

ANNEX: Exposure scenario resulting to chemical safety assessment
-