

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

1.1	ON 1: Identification of the substance/mixture and of the company/undertaking Product identifier					
1.1		TD ALIDANAL		NE O DEACENT		
	Trading name:	TB AURAMI	NE O REA	IGENT		
	Chemical name:	-				
	Catalogue number:	TBAO-OT-X	**			
1.2	Relevant identified us	es of the subst	tance or m	nixture and uses advised against		
	Uses:		For use i	in TB-Stain Auramine O kit.		
	Uses advised against:		Only the	e identified uses are advised.		
	Reason why uses advised against: de		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 +385 1 2409997 +385 1 2404039			
	Telephone number:					
	Telefax.:					
	e-mail of competent p	person:	msds@b	oiognost.hr		
	National contact:		-			
1.4	Emergency telephone	number				
	National Protection a	nd Rescue Dire	ectorate:	112		
	Medical information: Other information:			+385 1 2348 342		

SECTIO	ION 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	ll text of Hazard- and EU Hazard-statements: se	e SECTION 16			



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.		

SECTION 3. Composition/information on ingredients					
CAS/ EC/ Index number	REACH Registration No	Weight % content (or range)	Identification name	Classification according to Regulation (EC) No 1272/2008 (CLP)	
64-17-5/ 200-578-6/ 603-002-00-5	01-2119457610- 43-0147	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:	-		
4.2	Most important symptoms and ef	fects, both acute and delayed		



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	CTION 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 o	compressed air breathing apparatus and fireproof clothing.			
5.4	Additional information	Additional information			
	Cool endangered receptacles with water spray. Collect contaminated fire fighting water separately. Do not contaminate the environment 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. 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	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	sh hands after work and before eating.
7.2	Conditions for safe storage, including any incomp	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 tightly clos	r 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. Expos	sure contr	ols/perso	nal pro	otection					
8.1 Control p	arameters								
Substance	è	CA	S No		ational e es/short	•	sure limit values	Biolog	gical limit values
				pp	m	r	mg/m³		
Ethanol		64	-17-5	100	0/-	1	1900/-		-
Phenol		108	3-95-2	5-2 2/4			8/16		f creatinine (0.14 creatinine), end of v excretion
Substance name:	_								
EC No:	-	CAS No	:	-					
DNEL									
				Indu	strial				
Route of exposure:	Acı effect		-	Acute t systemic		_	nronic ct local		Chronic effect systemic
Oral	-		-		-			-	
Inhalation	1900 mg (ethanol		-		-				g/m³ (ethanol) m³ (phenol)
Dermal	-		-		-			1	g/kg (ethanol) ng/kg (phenol)
Critical physical pa	rameters: s	solubility,	flamma	bility, corro	sivity:		-	1	
				Cons	umer				
Route of exposure:		cute ct local		Acute t systemic		_	nronic ct local		Chronic effect systemic
Oral	-		-		-			_	/kg (ethanol) /kg (phenol)



Page 7 of 18

Trading nam	e:	TB AURAMINE O REAGENT					
Product cod	code: TBAO-OT-X** Date of		of compilation:	21 Dec 2022	Version:	3	
Inhalation	950 mg, (ethanol	_		-	0.452	mg/m³ (ethanol) 2 mg/m³ (phenol)	
Dermal	-	-		-		ng/kg (ethanol) ng/kg (phenol)	
PNEC	-	1			,		
Environmenta	l protection targe	t		PNEC			
Fresh water				0.96 mg/l (ethand 0.0077 mg/l (phe			
Freshwater se	Freshwater sediments			3.6 mg/kg (ethanol) 0.09125 mg/kg (phenol)			
Marine water			0.79 mg/l (ethanol) 0.00077 mg/l (phenol)				
Marine sedim	ents			2.9 mg/kg (ethanol) 0.00915 mg/kg (phenol)			
Food chain				380-720 mg/kg k	g (ethanol)		
Microorganisi	ns in sewage trea	tment		580 mg/l (ethanol) 2.1 mg/l (phenol)			
Soil (agricultu	ral)			0.63 mg/kg (ethanol) 0.136 mg/kg (phenol)			
Air				no information available			
8.2 E	xposure controls						
	ppropriate engin	eering contro	ols				
	ubstance/mixture			•	in well ventilated ro ment. Do not eat, d	•	

workspace.

In accordance with Section 7.

influence during work process.

stations for rinsing eyes and showering.

entire face in case of higher levels of concentration in air.

Organization of work in order to reduce other worker's

Secure proper workspace ventilation in order to keep

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

concentration levels in air below permitted levels. Secure

prevent exposure during identified uses:

Structural measures to prevent

Personal protection equipment

Eye and face protection:

Skin protection

Organisational measures to prevent

Technical measures to prevent exposure:

exposure:

exposure:

8.2.2.

8.2.2.1.

8.2.2.2.



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

	Lover 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
	рН:	No information available	No information available
	Kinematic viscosity:	No information available	No information available
	Solubility:	No information available	No information available
	Partition coefficient n-octanol/water (log value):	No information available	No information available
	Vapour pressure:	No information available	No information available
	Density and/or relative density:	No information available	No information available
	Relative vapour density:	No information available	No information available
	Particle characteristics:	No information available	No information available
9.2	Other information		
	-		

SECTION	ECTION 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	ntion 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)



Page 10 of 18

available

information

available

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

Product code:	TBAO-OT-X**	D	ate of compilat	tion: 21 De	c 2022 V	ersion:
	Spe	cific effects		Target organ		Note
Oral:	No information	n available	No info	No information available		
Dermal:	No information	n available	No info	No information available		
Inhalation:	No information	n available	No info	ormation availab	ole -	
Aspirat	ion hazard:	1	No information a	vailable.		
Irritatio	n and corrosion					
IIIIdiiO	Exposure	time Speci	es Evaluation	Method		Note
Skin corrosion/irritati	- -	in vitro		OECD 431	causes burns	(phenol)
Serious eye damage/irritatio	n -	rabbit	-	OECD 405	corrosive (ph	enol)
Sensitiz	zation					
Skin sensitizatio	n: No in	formation ava	ilable.			
Respiratory sens	sitization: No in	formation ava	ilable.			
Sympto	oms related to the p	hysical, chemi	cal and toxicolog	gical characterist	ics	
Oral exposure:	No informa	tion available.				
Dermal exposur	e: No informa	tion available.				
Inhalation expos	sure: No informa	tion available.				
Eye exposure:	No informa	tion available.				
1						
Repeat	ed dose toxicity (su	i	onic, chronic)			
	Dose	Exposure time	Species	Method	Evaluation	Note
Subacute oral	No information available	No information available	No information available	No information available	No information available	-
Subacute dermal	No information available	No information available	No information available	No information available	No information available	-
Subacute	No information	No information	No information	No information	No information	-

available

information

available

available

inhalation



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 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 (carcinogenicity;	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.



12.2

Persistence and degradability

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

Page 12 of 18

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

	1	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	/					
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	-	-	-	-	-	-



Page 13 of 18

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

	c deg	radation							
	Г	Degradation h	nalf-lives	N	1ethod	Evaluatio	n		Note
Marine water	No	information	available	No info	ormation ble	No information available	n -		
Fresh water	No	information	available	No info	ormation ble	No information	n -	•	
Air	No	information	available	No info	ormation ble	No information	n _	•	
Soil	No	information	available	No info	ormation ble	No information available	า -	•	
Biode	nrada	tion							
% Degradati		Time	'days)	l N	/lethod	Evaluation			Note
94% (ethanol)	<u> </u>		nformation			No information	<u> </u>		degradable
85% (phenol)		14 days		OECD	301C	No information available		readily biodegradable	
Octan	ol-wa	ter partition	coefficient	(log Voy					
			COEIIICIEIIC	(IOU NOW	·)				
Value		ncentration	рН	°C	Method	Evalu	ation	bioac	Note cumulation is
	Co -			°C		Evalu	ation		
-	-		pH -	°C	Method		ation		cumulation is
-	-	ncentration	pH - (BCF)	°C -	Method				cumulation is
- Bioco Value No information	ncent	ration factor Spec	pH - (BCF)	°C -	Method Method prmation	-	on		cumulation is xpected
- Bioco	ncent	ration factor Spec No ir	pH - (BCF)	°C -	Method Method prmation	Evaluation No information	on	not ex	cumulation is xpected
- Value No information available	ncenti	ration factor Spec No ir available	pH - (BCF)	°C -	Method Method prmation	Evaluation No information	on	not ex	cumulation is xpected
- Value No information available	ncenti	ration factor Spec No ir	pH - (BCF) ies offormation	°C - No info	Method Method prmation	Evaluation No information	on	not ex	cumulation is xpected
- Value No information available	ncenti	ration factor Spec No ir available	pH - (BCF) ies iformation	°C -	Method Method prmation	Evaluation No information	on	not ex	cumulation is xpected



Page 14 of 18

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

Chronio crustac		city on aphnia)	EC ₅₀	No information available	No inforn availa	nation ble	No informa availabl		No inforr availa	mation ble	-
12.4	Mol	oility in soi	il								
	Kno	wn or pre	dicted distributi	on in environm	nental c	ompartr	ments:				
	No	informatio	n available								
	Surf	ace tensio	n:								
	,	Value	°C	Concentra	ation		Metho	d			Note
		rmation lable	No information available	No informa available	ition	No info	ormation ble		-		
	Ads	orption / o	desorption								
Transp	ort	-	coefficient 's constant	log Kow		Evaporation rate Meth		Method	d	Note	
Soil-wa	iter	No available	information	No information available		o inform ailable	ormation No information available			tion	-
Water-	air	No available	information	No information available		o inform ailable	ation	No in availa	iforma ible	tion	-
Soil-air	•	No available	information	No information available		o inform ailable	ation	No in availa	forma able	tion	-
12.5	Resi	ults of PBT	and vPvB asses	ssment							
	Base	ed on avai	lable data, the p	product does n	ot cont	ain any l	PBT or vi	PvB su	bstanc	es.	
12.6.			rupting propert								
	Base	ed on avai	lable data, does	not contain er	ndocrin	e disrup	tors.				
12.7.	Other adverse effects										
	No :	further rel	evant informati	on available.							
				_							
SECTIO)N 13	. Disposal	consideration	S							



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 disposal:				
13.1.1.	Submit for disposal to the le	gal person authorized by the Ministry of Environmental and Nature			
	Protection.				
13.1.2.	Waste codes/waste designat	sions according to Law.			
13.1.2.		-			
	substances	ontains residual hazardous substances or is contaminated with hazardous			
13.1.3.	Waste treatment – relevant i	nformation:			
	No information available				
13.1.4.	Sewage disposal – relevant i	nformation:			
	Waste must not be disposed	of into the sewage system.			
13.1.5.	Other disposal recommenda	tions:			
	Do not dispose of the product's remains into the sewage system. Submit the remains to the collection authorized by the ministry in charge. Do not dispose of the packaging into the sewage system. Suther packaging to the collectors authorized by the ministry in charge.				
13.1.6.	Relevant Community provision	ions:			
	Disposal must be made acco	ording to official regulations.			
SECTION	I 14 TRANSPORT INFORMAT	TION			
	Transporting/shipment by roa	d (ADR)			
UN num	oer:	1170			
UN prop	er shipping name:	Ethanol solution			
Transpor	t hazard class(es):	3			
Packing	group:	III			
Environn	nentally hazardous:	-			
Special p	recautions for user:				
	Transporting/shipment by rail	(RID)			
UN number:		1170			
UN prop	er shipping name:	Ethanol solution			
Transpor	t hazard class(es):	3			
Packing	group:	III			
Environn	nentally hazardous:	-			
Special p	recautions 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

UN number:	1170
UN proper shipping name:	Ethanol solution
Transport hazard class(es):	3
Packing group:	Ш
Environmentally hazardous:	-
Special precautions for user:	-
Transporting/shipment by sea (IN	MDG)
UN number:	1170
UN proper shipping name:	Ethanol solution
Transport hazard class(es):	3
Packing group:	Ш
Environmentally hazardous:	-
Special precautions for user:	-
Transport in bulk according to Annex II of MARPOL 73/78 and the IBC code:	-
Transporting/shipment by air (IC	AO-TI/IATA-DGR)
UN number:	1170
UN proper shipping name:	Ethanol solution
Transport hazard class(es):	3
Packing group:	III
Environmentally hazardous:	-
Special precautions for user:	-

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



Page 17 of 18

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

	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	

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:	-



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.		
		H311	Toxic in contact with skin.		
		H312	Harmful in contact with skin.		
		H314	Causes severe skin burns and eye damage.		
		H319	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:	-		
			** "X" in the product code marks different volumes (different packagings of the product)		
16.7.	Fur	ther information:	We are not responsible for consequences in case of failure to comply with instructions for use or improper use of the product described in this material safety data sheet.		

ANNEX: Exposure scenario resulting to chemical safety assessment	
-	



Page 1 of 17

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

SECTI	ON 1: Identification of t	he substance	e/mixture	and of the company/undertaking	
1.1	Product identifier			1 2	
	Trading name:	TB DECOLO	RIZER		
	Chemical name:	-	-		
	Catalogue number:	TBD-OT-X*	k		
1.2	Relevant identified use	s of the subst	tance or n	nixture and uses advised against	
	Uses:		For use	in TB-Stain Cold and TB-Stain Hot kit.	
	Uses advised against:		Only the	e identified uses are advised.	
	Reason why uses advis			duct is intended for use only as an <i>in vitro</i> diagnostic medical registered at the Agency for Medicinal Products and Medical and there is no reason to use it for other purposes.	
1.3	Details of the supplier	of the safety	data shee	t	
	Supplier:		BioGnost Ltd.		
	Address:		Medjugorska 59, Zagreb		
	Telephone number:		+385 1 2409997 +385 1 2404039		
	Telefax.:				
	e-mail of competent p	erson:	msds@biognost.hr		
	National contact:		_		
1.4	Emergency telephone	number			
	National Protection an	d Rescue Dire	ectorate:	112	
	Medical information: Other information:			+385 1 2348 342	
				-	

SECTIO	ON 2. Hazards identification					
2.1	Classification of the substar	Classification of the substance or mixture				
2.1.1	Classification according to F	Regulation (EC) No 12	272/2008 (CLP)			
	Hazard class and ca	tegory code:	Hazard statements*:			
	Flam. Liq. 2		H225			
2.1.2.	Additional information					
	-					
*For fu	ll text of Hazard- and EU Haza	ard-statements: see S	ECTION 16			
2.2	Label elements					
	Product identification:	TB DECOLORIZE	ER			
	Identification number:	-				
	Authorization number:	-				



Page 2 of 17

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

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

SECTION 3. Co	SECTION 3. Composition/information on ingredients					
CAS/ EC/ Index number	REACH Registration No	Weight % content (or range)	Identification name	Classification according to Regulation (EC) No 1272/2008 (CLP)		
64-17-5/ 200-578-6/ 603-002-00-5	01-2119457610-43- 0147	70 - 90 %	ethanol	Flam. Liq. 2; H225		
7647-01-0/ 231-595-7/ 017-002-00-2	-	2 -3 %	hydrochloric acid, 37%	Skin Corr. 1B; H314 STOT SE 3; H335		

SECTI	SECTION 4. First aid measures				
4.1	Description of first aid measures				
	General notes:	If the suggested first aid measures do not prove sufficient, seek medical attention.			
	Following inhalation:	Take the victim into fresh air, loosen his clothes and place him in a comfortable position. If breathing difficulty occurs, administer artificial respiration. In case of complaints call a physician.			



Page 3 of 17

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

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

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



Page 4 of 17

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

5.4	Additional information
	-

6.1	Personal precautions, protective	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.			
	Emergency procedures:	Mark the area using proper signs.			
6.1.2.	For emergency responders:				
	ventilation. Vapours may accur	and clothing and inhaling gases, vapours and aerosols. Ensure adequate mulate at floor level in low and confined spaces. Remove all heat, ignition chines. Ignition spark arrestor must not be operated in the danger area. Use the risk of slipping.			
6.2	Environmental precautions:				
	Dispose of the spillage and the resulting waste according to the applicable environmental regulations. Do not allow the product and the resulting waste to enter sewers/soil/surface or ground water. Notify the respective authorities in accordance with local law in the case of environmental pollution immediately.				
6.3	Methods and material for cont	ainment and cleaning up			
6.3.1.	Bunding, covering of drains; capping procedures:	Sand protective barrier or barriers made of similar materials.			
6.3.2.	Cleaning up:	Collect the spilled product with inert, non-combustible absorbent (e.g. sand, vermiculite, earth) then place into a suitable, closed, properly labelled chemical waste container for removal/disposal. During the collection, placement, disposal of the waste, wear appropriate individual protective equipment. Flush the remains with plenty of water. The product loses its flammability, if diluted with significant amount of water (approx. 10% solution).			
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 8 for information of See Section 13 for disposal inf				

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



Page 5 of 17

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

	Measures to prevent fire:	Use in well ventilated storage rooms. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use non-sparkling tools and equipment.		
	Measures to prevent aerosol and dust generatio	n: Ensure adequate ventilation.		
	Measures to protect the environment:	Prevent spilling into the sewage system and waterways.		
	Other measures:	Protect against electrostatic charges.		
7.1.2.	Advice on general occupational hygiene:			
	Do not eat, drink or smoke in the workspace. The	oroughly wash hands after work and before eating.		
7.2	Conditions for safe storage, including any incom	patibilities		
	Technical measures and storage conditions:	Store in a well-ventilated place, protected from sunlight, away from sources of heat and ignition, in its original, unopened and hermetically sealed packaging, away from oxidizing agents, food, feed and articles of consumption.		
	Packaging materials:	Manufacturer's original packaging.		
	Requirements for storage rooms and vessels:	Keep away from food and drink. Keep the containers tightly closed.		
	Advices for storage equipment:	The storage must be made of hard material; floors must be resistant to chemicals. There must be no drain that directly leads into sewage system. Secure proper ventilation.		
	Further information on storage conditions:	Do not place the unused material in the storage room and do not use empty containers for storing other chemicals. Do not store with incompatible materials (see Section 10).		
7.3	Specific end use(s)			
	Recommendations:	-		
	Industrial sector specific solutions:	-		

SECTION 8. Exposure controls/personal protection					
8.1 Control parameters					
Substance	CAS No		exposure limit t term values	Biological limit values	
		ppm	mg/m³	_	
Ethanol	64-17-5	1000/-	1900/-	-	
Hydrogen chloride	7647-01-0	5/10	8/15	-	
		•			



Page 6 of 17

Trading na	ame:					TB DECOLORIZER				
Product co	ode:	TBD-OT	-X**		Revision	on date	21 Dec 20	22	Version:	5
	i i				i .		i			
Substance i	name:	_								
EC No:		_	CAS No):	-					
DNEL										
					In	dustrial				
Route of		Acı	ıte		Acute		Chronic		Chronic	
exposure:		effect	local	effec	t systemi	с	effect local		effect systemic	
Oral		-		-		-		-		
Inhalation		1900 mg (ethanol)		-		-		380 mg	g/m³ (ethanol)	
Dermal		-		-		-		343 mg	g/kg (ethanol)	
Critical phy	sical para	ameters: s	solubility,	flamma	ability, co	rrosivity:	-			
					Co	nsumer				
Route of		Ad	cute		Acute		Chronic		Chronic	
exposure:		effec	t local	effec	t systemi	С	effect local	1	effect systemic	
Oral		-		-		-		87 mg/	kg bw/day (eth	anol)
Inhalation		950 m (ethan	_	-		-		114 mg	g/m³ (ethanol)	
Dermal		-		-		-		206 mg	g/kg (ethanol)	
PNEC										
Environmer	ntal prote	ection tar	get			PNEC				
Fresh water	•					0.96 m	g/l (ethanol)			
Freshwater	sedimen	ts				3.6 mg	/kg (ethanol)			
Marine wat	er					0.79 m	g/l (ethanol)			
Marine sed	iments					2.9 mg/kg (ethanol)				
Food chain						380-720 mg/kg (ethanol)				
Microorgan	nisms in s	sewage tr	eatment			580 mg/l (ethanol)				
Soil (agricu	ltural)					0.63 mg/kg (ethanol)				
Air						no information available				
8.2	Exposu	re contro	ls							
8.2.1.	Approp	riate eng	ineering	controls	S					
		ance/mixture related measures to nt exposure during identified uses:			In case of a hazardous material with no controlled concentration limit it is the employer's duty to keep concentration levels down to a minimum achievable by existing scientific and technological means, where the hazardous substance poses no harm to workers.			eep by		



Page 7 of 17

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

	Structural measures to prevent exposure:		In accordance with Section 7.	
	Organisational measures to preve exposure:	ent	Organization of work in order to reduce other worker's influence during work process.	
	Technical measures to prevent exposure:		In pursuance of work is proper foresight needed to avoid spilling onto clothes and floors and to avoid contact with eyes and skin. Use according to general application methods and with adequate ventilation. Use non-sparkling ventilation system. Provide appropriate personal protective equipment, safety	
			shower and eye-wash station.	
8.2.2.	Personal protection equipment			
8.2.2.1.	Eye and face protection:		propriate, chemical-proof protective glasses/face shield (EN 321-1:2022, EN 166).	
8.2.2.2.	Skin protection			
	Hand protection:	Use ap	opropriate, chemical-resistant protective gloves (EN 374).	
	Other skin protection:	Use ap	propriate protective clothing.	
8.2.2.3.	Respiratory protection:	concer in the contac	e of normal usage and ventilation, it is not necessary. If attration of ethyl alcohol exceeds occupational exposure limits air, use a self-contained breathing apparatus. For short and if the oxygen content of the air is greater than 18 %, use ective gas mask with filter A (EN 14837/A1).	
8.2.2.4.	Thermal hazards:	No the	rmal hazards known.	
8.2.3.	Environmental exposure controls			
	Substance/mixture related measures to prevent exposure:	See Se	ction 6	
	Structural measures to prevent exposure:	Use mo	odern equipment.	
	Organisational measures to prevent exposure:	Adapt workpl	the work process to the required working conditions of the ace.	
	Technical measures to prevent exposure:	See Se	ction 6	

SECT	SECTION 9. Physical and chemical properties							
9.1	Information on basic physical and chemical properties							
		Value	Method					
	Physical state:	liquid	No information available					
	Colour:	Colour: colourless No information available						



Page 8 of 17

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

Odour/odour threshold:	ethanol like/no information available	No information available
Melting point / freezing point:	No information available	No information available
Boiling point or initial boiling point and boiling range:	No information available	No information available
Flammability:	No information available	No information available
Lover and upper explosion limit:	No information available	No information available
Flash point:	17 °C	No information available
Auto-ignition temperature:	No information available	No information available
Decomposition temperature:	No information available	No information available
pH:	7.0 – 8.0 (20°C)	No information available
Kinematic viscosity:	No information available	No information available
Solubility:	No information available	No information available
Partition coefficient n-octanol/water (log value):	No information available	No information available
Vapour pressure:	No information available	No information available
Density and/or relative density:	No information available	No information available
Relative vapour density:	No information available	No information available
Particle characteristics:	No information available	No information available
Other information		

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

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



Page 9 of 17

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

Product code: TBD-OT-X**		*	Revision date:		21 D	21 Dec 2022		Version: 5	
Route of exposure:	Method	Species		Dose LD ₅₀ /I		Exposur	e time	Resul	ts
Oral:	-	rat (ethano	ol)	LD ₅₀		-		7.060 mg/k	
Dermal:	-	rabbit (etha	nol)	LD ₅₀		-		>20.000	mg/l
Inhalation:	-	rat (ethano	ol)	LC ₅₀		4 ł	1	>8.000 ו	mg/l
Specific tar	get organ to	xicity – single e	exposu	ıre (STOT SE):					
į '	<u> </u>	pecific effects			Target o	rgan		Note	
Oral:	No informa	tion available		No info	rmation a	vailable	-		
Dermal:	No informa	tion available		No info	rmation a	vailable	-		
Inhalation:	No informa	tion available		No info	rmation a	vailable	-		
				<u> </u>					
Aspiration	hazard:		No i	nformation av	vailable.				
Irritation ar	nd corrosion								
	Ехро	osure time		Species	Evaluation	on Meth	od	Note	
Skin corrosion/irritation:	-		-		-	-	-	-	
Serious eye damage/irritation	-		-		-	—	-	-	
Sensitizatio	on								
Skin sensitization:	No	information a	vailab	le.					
Respiratory sensitiza	ation: No	information a	vailab	le.					
- · · · · · · · · · · · · · · · · · · ·	i								
Symptoms	related to th	e physical, che	mical a	and toxicolog	ical chara	cteristics			
Oral exposure:	unconsci	on of great ousness and al may occur. Re	cohol _l	poisoning. In a	case of sw	allowing gr	eat qua		
Dermal exposure:	After pro	olonged or rep of skin.	peated	d exposure s	ymptoms	may includ	de: def	atting, drynes	s and
Inhalation exposure	•	Inhalation of great quantities may cause dizziness, euphoria and mild irritation of the mucous membranes.							
Eye exposure:	May caus	se irritation and	d redn	ess.					

Repeated dose toxicity (subacute, subchronic, chronic)



Page 10 of 17

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

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

Specific target organ toxicity – repeated 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	-					



Page 11 of 17

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

Chronic	inhalation No	information	n available		No information available -			
	CMR effects (carcino	ogenicity; m	utagenicity	y; re _l	productive toxicity)			
	Carcinogenicity:			Bas	ed on available data, the classification criteria are not met.			
	Mutagenicity in vitr	o:		Bas	ed on available data, the classification criteria are not met.			
	Genotoxicity:			Bas	ed on available data, the classification criteria are not met.			
	Mutagenicity in vivo) :		Bas	ed on available data, the classification criteria are not met.			
	Germ cell mutageni	city:		Based on available data, the classification criteria are not met.				
	Reproductive toxicity:			Based on available data, the classification criteria are not met.				
	Summary of eva properties:	luation of	the CM	ИR	Based on available data, the classification criteria are not met.			
11.2	Information on other	er hazards:						
11.2.1.	Endocrine disruptin	g properties	5:					
	Based on available endocrine disruptor		not conta	ain				
11.2.2.	Other informations:							
	-							

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



Page 12 of 17

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

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

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

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



Page 13 of 17

Trading name:		TB DECOL	ORIZER		
Product code:	TBD-OT-X**	Revision date:	21 Dec 2022	Version:	5

	Value		Species		N	1ethod		E۱	/aluatio	n	Note	
BCF: 0).66	No ava	•			No information available		No information available		-		
	Chronic	ecoto	xicity									
	Value		Dose		osure ime	Spe	ecies	Meth	nod	Eva	luation	Note
Chron	ic toxicity o	on fish	LC ₅₀	No infor availa	mation able	No inforn availa	nation ble	No inform availab		No infor availa	mation able	-
	ic toxicity o		EC ₅₀	No infor availa	mation able	No inforn availa	nation ble	No inform availab		No infor availa	mation able	-
12.4	Mobility											
	Known	or pred	dicted distribiliti	on in e	MILLAND							
				011 111 0	environini	ental c	ompart	ments:				
		rmatio	n available		environini	ental c	ompart	ments:				
	Surface	rmatio tensio	n available n:				ompart					N
	Surface Valu	rmatio tensio	n available n: °C		oncentra		ompart	Metho	od			Note
	Surface	rmatio tensio le tion	n available n:	C No		tion		Metho			-	Note
	Surface Valu No informa	rmatio tensio le tion	n available n: °C No information	C No	oncentrati	tion	No inf	Metho				Note
	Surface Valu No informa available	rmatio tensio le tion e	n available n: °C No information	C No	oncentrati	tion	No inf	Metho				Note
Transp	Surface Valu No informa available Adsorpt	tensio tensio tensio tensio tensio tion e	n available n: °C No information available	No ava	oncentrati	tion	No inf	Metho formation ple	n	Metho		Note
•	Surface Valu No informa available Adsorpt	tensio tensio tensio tensio tensio tion e	n available n: °C No information available desorption Coefficient ry's constant information	No ava	oncentration information information on the contract of the co	tion iion Ev	No inf availab	Metho formation ole on rate	ı	Metho	d	
Transp Soil-w Water	Surface Valu No informa available Adsorpt	tensio tensio tensio tensio A/E Hen	n available n:	No availa	oncentration information infor	Evon No	No inf availab vaporati	Methodological Method	No ir availa	Metho forma able	d	Note



Page 14 of 17

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

12.5	Results of PBT and vPvB assessmer	nt -
12.3		ct does not contain any PBT or vPvB substances.
	20000 011 010 010 0000, 010 010 000	
12.6	For description and a second section	
12.6.	Endocrine disrupting properties	
	Based on available data, does not o	contain endocrine disruptors.
12.7.	Other adverse effects	
	Do not let the product or its residu	es reach sewer system, waterways and soil.
SECTIO	N 13. Disposal considerations	
13.1	Waste treatment methods	
13.1.1.	Product/Packaging disposal:	
		person authorized by the Ministry of Environmental and Nature
	Protection.	
13.1.2.	Waste codes/waste designations	
	Packaging that contains residual	hazardous substances or is contaminated with hazardous substances
13.1.3.	Waste treatment – relevant infor	mation:
	No information available	
13.1.4.	Sewage disposal – relevant infor	mation:
	Waste must not be disposed of i	nto the sewage system.
13.1.5.	Other disposal recommendations	S:
	Do not dispose of the product's	remains into the sewage system. Submit the remains to the collectors
		arge. Do not dispose of the packaging into the sewage system. Submit authorized by the ministry in charge. Unused product residues may be
	burnt.	
13.1.6.	Relevant Community provisions:	
	Disposal must be made accordin	g to official regulations.
	; ·	-
SECTIO	N 14 TRANSPORT INFORMATION	
	Transporting/shipment by road (Al	
UN num		1170
		Ethanol solution
CIA PIO	рег эттрриту папте.	Editation Solution



SAFETY DATA SHEET

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

Page 15 of 17

Trading name:		TB DECOL	ORIZER		
Product code:	TBD-OT-X**	Revision date:	21 Dec 2022	Version:	5

Transport hazard class(es):	3
Packing group:	II
Environmentally hazardous:	-
Special precautions for user:	-
Transporting/shipment by rail (R	ID)
UN number:	1170
UN proper shipping name:	Ethanol solution
Transport hazard class(es):	3
Packing group:	II
Environmentally hazardous:	-
Special precautions for user:	-
Inland waterway transport (ADN)	
UN number:	1170
UN proper shipping name:	Ethanol solution
Transport hazard class(es):	3
Packing group:	II
Environmentally hazardous:	-
Special precautions for user:	-
Transporting/shipment by sea (IN	MDG)
UN number:	1170
UN proper shipping name:	Ethanol solution
Transport hazard class(es):	3
Packing group:	II
Environmentally hazardous:	-
Special precautions for user:	-
Transport in bulk according to Annex II of MARPOL 73/78 and the IBC code:	-
Transporting/shipment by air (IC	AO-TI/IATA-DGR)
UN number:	1170
UN proper shipping name:	Ethanol solution
Transport hazard class(es):	3
Packing group:	II
Environmentally hazardous:	-
Special precautions for user:	-
Further information: -	



Page 16 of 17

Trading name:		TB DEC	DLORIZER		
Product code:	TBD-OT-X**	Revision date:	21 Dec 2022	Version:	5

15.1	Safety, health and enviror	nmental regulations/legislation specific for the substance or mixture			
	EU regulations				
	Authorization and/or rest	rictions of use			
	Authorizations:	-			
	Restrictions:	-			
		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; COMMISSION REGULATION (EU) 2020/878 of 18 June 2020 amending Annex II to Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH).			
		REACH Restrictions on the manufacturing, placing on the market and use of certain dangerous substances, mixtures and articles (Annex XVII);			
	Information according 1999/13/EC about limitation of emissions of volatile organic compounds (VOC-guideline)				
	National legislation:	Chemicals Act, Regulation on classification, packaging and labeling of dangerous substances, Ordinance on occupational exposure limit values and on biological limit values, Regulation on categories, types and classification of waste with a waste catalog and list of hazardous waste, Ordinance on writing Material safety data sheet, Transport of Hazardous Substances Act			
15.2	Chemical safety assessme	ent			
	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 DECC	TB DECOLORIZER		
Product code:	TBD-OT-X**	Revision date:	21 Dec 2022	Version:	5

16.2	16.2 Abbreviations and acronyms:		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		
	IZ lit-		vPvB: very Persistent and very Bioaccumulative		
16.3.	- 1	erature references and of data:	-		
16.4.	Classification and procedure used to derive the classification for mixture according to Regulation (EC) 1272/2008 (CLP)				
Classification			Classification procedure		
-	-		-		
16.5.	Relevant H statements (number and full text)		per and full text)		
	H:	225	Highly flammable liquid and vapour.		
		314	Causes severe skin burns and eye damage.		
		335	May cause respiratory irritation.		
16.6.	Trainin	g advice:	-		
16.7.	. Further information:		** "X" in the product code marks different volumes (different packagings of the product) We are not responsible for consequences in case of failure to comply with instructions for use or improper use of the product described in this material safety data sheet.		

ANNEX: Exposure scenario resulting to chemical safety assessment	
-	



Page 1 of 17

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

SECT	ION 1: Identification of	the substance	e/mixture	e and of the company/undertaking	
1.1	Product identifier				
	Trading name:	TB PERMAN	IGANATE	REAGENT	
	Chemical name:	-			
	Catalogue number:	TBP-OT-X**			
1.2	Relevant identified use	es of the subst	tance or n	nixture and uses advised against	
	Uses:			stain 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 advis	sed against:	duct is intended for use only as an <i>in vitro</i> diagnostic device, registered at the Agency for Medicinal Products and Devices and there is no reason to use it for other purposes.		
1.3	Details of the supplier	of the safety	data shee	t	
	Supplier:		BioGnost Ltd.		
	Address:		Medjugorska 59, Zagreb		
	Telephone number:		+385 1 2409997		
	Telefax.:		+385 1 2404039		
	e-mail of competent p	erson:	msds@biognost.hr		
	National contact:		_		
1.4	Emergency telephone	number			
	National Protection 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 Regu	ulation (EC) No 12	272/2008 (CLP)			
	Hazard class and category code: Hazard statements*:					
	Aquatic Chronic 3		H412			
2.1.2.	Additional information					
	-					
*For ful	I text of Hazard- and EU Hazard-	statements: see S	ECTION 16			
2.2	Label elements					
	Product identification:	TB PERMANGAN	NATE REAGENT			
	Identification number:	-				
	Authorization number:	-				



PBT or a vPvB.

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

Page 2 of 17

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

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

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		
	-		

SECTIO	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 substance 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	e 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 incor	npatibilities		
	Technical measures and storage conditions:		ghtly closed and upright set containers in a atted storage rooms at temperatures ranging 25 °C.	
	Packaging materials:	Manufactu containers	ırer's original packaging. Avoid metal	
	Requirements for storage rooms and vessels:	Keep away from food and drink. Keep the containe tightly closed.		
	Advices for storage equipment: The storage must be that di		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.	



Page 5 of 17

Trading name:		TB PERMANGANAT	E 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. Expo	sure contr	ols/perso	nal pro	otectio	n				
8.1 Control p	arameters								
Substanc	e	CA	S No			ational e es/short	•	sure limit values	Biological limit values
					pp	om	n	ng/m³	-
Potassium permar	nganate	772	2-64-7			-		0.5	-
Substance name:	-								
EC No:	-	CAS No	:	-					
DNEL									
					Indu	strial			
Route of	Acı		,	Acute				ronic	Chronic
exposure:	effect	local	effec	t syster	mic		effe	ct local	effect systemic
Oral	-		-			-			-
Inhalation	-		-			-			0.218 mg/m³ (potassium permanganate)
Dermal	-		-			-			-
Critical physical pa	arameters: s	solubility,	flamma	ability, d	corro	sivity:		-	
				(Cons	umer			
Route of	Aci			Acute				ronic	Chronic
exposure:	effect	local		t syste	mic		effe	ct local	effect systemic
Oral	-		-			-			-
Inhalation	-		-			-			-
Dermal	-		-			-			-
PNEC									
Environmental protection target					PNEC				
Fresh water					0.06 µg/l (potassium permanganate)				
Freshwater sediments				-	no information available				
Marine water					n	o inform	natior	n available	



Page 6 of 17

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

Marine sediments	no information available
Food chain	no information available
Microorganisms in sewage treatment	1.64 mg/l (potassium permanganate)
Soil (agricultural)	no information available
Air	no information available

8.2	Exposure controls				
8.2.1.	Appropriate engineering controls				
	Substance/mixture related meas prevent exposure during identifi		Use the product in well ventilated rooms. Use personal protective equipment. Do not eat, drink or smoke in the workspace.		
	Structural measures to prevent exposure:		In accordance with Section 7.		
	Organisational measures to prevexposure:	/ent	Organization of work in order to reduce other worker's influence during work process.		
	Technical measures to prevent exposure:		Secure proper workspace ventilation in order to keep e: 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	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:	Protect	tive nitrile gloves, >0.11 mm thick (EN 374).		
	Other skin protection:		ntistatic clothing made of natural fibers (such as cotton) ng 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 Section 6			
	Structural measures to prevent exposure:	Use mo	odern equipment.		
	Organisational measures to prevent exposure:	Adapt the work process to the required working conditions of the workplace.			



Page 7 of 17

Trading name:		TB PERMANGANAT	E 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

Physical state: liquid No information available Colour: dark purple No information available Odour/odour threshold: odourless/no information available Melting point / freezing point: No information available Boiling point or initial boiling point and boiling range: No information available Flammability: No information available No information available Lover and upper explosion limit: No information available No information available Flash point: No information available No information available 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 noctanol/water (log value): No information available No information available No information available Density and/or relative density: No information available Relative vapour density: No information available No information available Particle characteristics: No information available No information available	Information on basic physical and	chemical properties		
Colour: dark purple odourless/no information available odourless/no information available no information available odourless/no information available no information availa		Value	Method	
Odour/odour threshold: Melting point / freezing point: No information available	Physical state:	liquid	No information available	
Melting point / freezing point: Melting point / freezing point: No information available	Colour:	dark purple	No information available	
Boiling point or initial boiling point and boiling range: Flammability: No information available Flash point: No information available	Odour/odour threshold:	-	No information available	
point and boiling range: Flammability: No information available Lover and upper explosion limit: No information available Flash point: No information available No information available Flash point: No information available	Melting point / freezing point:	No information available	No information available	
Lover and upper explosion limit: No information available Flash point: No information available	3.	No information available	No information available	
Flash point: No information available	Flammability:	No information available	No information available	
Auto-ignition temperature: Decomposition temperature: No information available	Lover and upper explosion limit:	No information available	No information available	
Decomposition temperature: Decomposition temperature: Decomposition temperature: No information available	Flash point:	No information available	No information available	
pH: 6.1 – 6.9 No information available Kinematic viscosity: No information available Solubility: No information available Partition coefficient n- octanol/water (log value): Vapour pressure: No information available Density and/or relative density: No information available Relative vapour density: No information available	Auto-ignition temperature:	No information available	No information available	
Kinematic viscosity: No information available No information available No information available No information available Partition coefficient n- octanol/water (log value): Vapour pressure: No information available	Decomposition temperature:	No information available	No information available	
Solubility: No information available Partition coefficient n- octanol/water (log value): Vapour pressure: No information available	pH:	6.1 – 6.9	No information available	
Partition coefficient n- octanol/water (log value): Vapour pressure: Density and/or relative density: No information available	Kinematic viscosity:	No information available	No information available	
octanol/water (log value): Vapour pressure: No information available	Solubility:	No information available	No information available	
Density and/or relative density: No information available Relative vapour density: No information available No information available		No information available	No information available	
Relative vapour density: 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	
Particle characteristics: No information available No information available	Relative vapour density:	No information available	No information available	
	Particle characteristics:	No information available	No information available	

SECTIO	SECTION 10. Stability and reactivity				
10.1	Reactivity:	See subsections 10.3 through 10.5.			
10.2	Chemical stability:	The product is chemically stable under standard ambient conditions of storing and using (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	0.5	Incompatible materials:	Reducing agents, sulfuric acid, flammables, metals and reactive organic materials.
10	0.6	Hazardous decomposition products:	Carbon oxides (CO, CO ₂). Oxygen, oxides of potassium and manganese.

11.1 Informatio	n on hazard c	lasses as defin	ed in Regu	lation (EC) No 12	72/2008			
Acute toxic	city:							
Route of exposure:	Method	Species	Do	ose LD ₅₀ /LC ₅₀ or ATE _{mix}	Exposure	time	Results	
Oral:	-	rat		LD ₅₀	-		750 mg/kg (potassium permanganate	
Dermal:	-	-	-		-		-	
Inhalation:	-	-	-		-		-	
Specific ta		cicity – single e	exposure (S				•• •	
		pecific effects		Target			Note	
Oral:		ion available		No information available			-	
Dermal:		ion available		No information available -				
Inhalation:	No informat	ion available		No information available -				
Aspiration	hazard:		No infor	mation available.				
Irritation a	nd corrosion							
initation a		sure time	Spec	ies Evaluat	on Metho	d	Note	
Skin corrosion/irritation:	_		-	-	-	-		
Serious eye damage/irritation	n -		-	-	-	-		
Sensitization	on							
Skin sensitization:	-							
Respiratory sensitiz	ation: -							



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 expos	ure:	No informati	tion available.							
Eye exposure:		No informati	on available.							
Repeate	ed dose	e toxicity (sub	acute, subchro	onic, chronic)						
		Dose	Exposure time	Species	Method	Evaluation	Note			
Subacute oral	No avail	information able	No information available	No information available	No information available	No information available	-			
Subacute dermal	No avail	information able	No information available	No information available	No information available	No information available	-			
Subacute inhalation	No information available		No information available	No information available	No information available	No information available	-			
Subchronic oral	No information available		No information available	No information available	No information available	No information available	-			
Subchronic dermal	No avail	information able	No information available	No information available	No information available	No information available	-			
Subchronic inhalation	No avail	information able	No information available	No information available	No information available	No information available	-			
Chronic oral	No avail	information able	No information available	No information available	No information available	No information available	-			
Chronic dermal	No availa	information able	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 toxicit	<u> </u>	xposure (STOT	RE):					
			Specific effec	ts	Target o		Note			
Subacute oral			tion available		No information					
Subacute dermal			tion available		No information					
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		

Subchronic oral	No information available		No information available	_			
Subchronic derm	al No information available		No information available	-			
Subchronic inhala	ntion No information available		No information available	-			
Chronic oral	No information available		No information available	-			
Chronic dermal	No information available		No information available	-			
Chronic inhalation	n No information available		No information available	-			
CMR effe	ects (carcinogenicity; mutagenicity;	reproductive	toxicity)				
Carcinoc		-	ation available.				
	nicity <i>in vitro</i> :		ation available.				
Genotox	-	No inform	ation available.				
Mutager	nicity <i>in vivo</i> :	No inform	No information available.				
Germ ce	Il mutagenicity:	No inform	ation available.				
Reprodu	ctive toxicity:	No inform	ation available.				
Summar properti	•	No information available.					
11.2 Informat	ion on other hazards:						
11.2.1. Endocrin	e disrupting properties:						
compon disruptir Article regulatio	estance/mixture does not containents considered to have endocrining properties according to REACI 57(f) or Commission Delegate on (EU) 2017/2100 or Commission (EU) 2018/605 at levels of 0.1% contains and contains and contains and contains and contains are contained by the contains and contains are contained by the containe	e H d n					
11.2.2. Other in	formations:						

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		

Crustacea:		EC ₅₀	48 hours	Daphnia magna (Water flea)	-	-		0.084 mg/l (potassium permanganate)
Algae/aquatic _l	olants	IC ₅₀	4 days	-	-	-		-
Other organism	าร	-	-	-	-	-		-
Chronic (long-t toxicity	erm)	Dose	Exposur time	Species	Method	Evalu	ıation	Note
Fish	Fish LC ₅₀ 96		96 hours	No information available	No information available	No inforn availa	nation ble	-
Crustacea:		EC ₅₀	48 hours	No information available	No information available	No inforn availa	nation ble	-
Algae/aquatic _l	olants	IC ₅₀	72 hours	No information available	No information available	No inforn availa	nation ble	-
Other organisn	าร	-	-	-	-	-		-
Abioti		adation egradation h	alf-lives	Method	Evaluatio	on		Note
Abioti			alf-lives	Method	Evaluatio	on		Note
Marine water	No i	nformation a	vailable	No information available	ailable available		-	
Fresh water	No i	nformation a	vailable	No information available	No information available		-	
Air	No i	nformation a	vailable	No information available	No information	on	-	
Soil	No i	nformation a	vailable	No information available	No information	on	-	
Biode	gradati	on						
% Degradati		Time (d	days)	Method	Evaluatio	on		Note
No information No information available		formation	No information available	No informatio	No information available		No information available	
12.3 Bioacc	cumula	tive potentia	I					

Octanol-water partition coefficient (log Kow)



Page 12 of 17

Trading nam	g name: TB PERMANGANATE REAGENT									
Product code	e: TBP-	OT-X**		Date	e of compilati	on: 21 De	21 Dec 2022		Version:	
Value	Concentra	ition	рН	°C	Method	Evalu	ation		Note	
-	-	-		-	_	-		-		
Riocc	oncentration	factor (BC	F)							
Value	nice i tration	Species	· <i>)</i>	N	Method	Evaluati	on		Note	
No information available available		infor	mation	No info	ormation lle	No informati available	on	on -		
Chro	nic ecotoxici	tv								
Valu		Dose		osure	Species	Method	Evalua	ation	Note	;
Chronic toxicity on fish		LC ₅₀	No infor availa	mation able	No information available	No information available	No informa availabl		-	
	ty on	EC ₅₀	No information available		No information	No information	No information available		-	

12.4	Widdinty III SC)II			
	Known or pre	edicted distributi	on in environmental	compartments:	
	No information	on available			
	Surface tension	on:			
	Value	°C	Concentration	Method	Note
	No information available	No information available	No information available	No information available	-
	Adsorption /	desorption			

Evaporation rate

No information

available

Method

No information

available

Note

log Kow

No information

available

A/D coefficient

Henry's constant

information

No

available

Transport

Soil-water



Page 13 of 17

Trading name:			ТВ РЕ	RMANGANATE	REAGENT		
Produc	t code:	TBP-OT-X**	Date of	compilation:	21 Dec 2022	Version:	6
							·
Water-a	air No ava	information ilable	No information available	No information available	No information available	-	
Soil-air	air No information available No information available No information available No information available -						
	-						
12.5.	Results of PBT and vPvB assessment						
	accordin	stance/mixture does g to REACH Article 5 on (EU) 2018/605 at	7(f) or Commission	n Delegated regula			
12.6.	Endocrin	e disrupting propert	ies				
	accordin	stance/mixture does g to REACH Article 5 on (EU) 2018/605 at	7(f) or Commission	n Delegated regula			
12.7.	Other ac	lverse effects					
	No infor	mation available					
SECTIO	N 13. Dis	posal consideration	ıs				
13.1	Waste	treatment methods					
13.1.1.	Product/Packaging disposal:						
	Submit for disposal to the legal person authorized by the Ministry of Environmental and Nature Protection.						
13.1.2.	Waste	codes/waste designa	ations according to	Law:			
	Packag	jing that contains res	sidual hazardous sı	ubstances or is con	taminated with haza	ardous substan	ces
13.1.3.	Waste	Waste treatment – relevant information:					
	No info	ormation available					
13.1.4.	Sewag	e disposal – relevant	information:				
	Waste	must not be dispose	ed of into the sewa	ge system.			
13.1.5.	Other	disposal recommend	lations:				
	author	dispose of the prodized by the ministry ckaging to the collec	in charge. Do not o	dispose of the pack	aging into the sewa		



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			
Product code:	TBP-OT-X**	Date of compilation:	21 Dec 2022	Version:	6

13.1.6. Relevant Community pro	ovisions:
-	
SECTION 14 TRANSPORT INFORM	
Transporting/shipment by	
UN number:	3082
UN proper shipping name:	Environmentally hazardous substance, liquid, n.o.s. (potassium permanganate)
Transport hazard class(es):	9
Packing group:	lli .
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:	III
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:	III
Environmentally hazardous:	-
Special precautions for user:	_



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 smal	ler than or equal to 5 kg / L, not dangerous goods of Class 9.

5.1 Safety,	Safety, health and environmental regulations/legislation specific for the substance or mixture			
EU reg	ulations			
Autho	Authorization and/or restrictions of use			
Autho	rizations:	-		
Restric	tions:	-		
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 PERMANGANAT	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		

SECTION	ON 16	. Other information			
16.1	Indi	ication of changes:	-		
16.2	Abb	previations and acronyms:	ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road) IMDG: International Maritime Code for Dangerous Goods IATA: International Air Transport Association GHS: Globally Harmonised System of Classification and Labelling of Chemicals EINECS: European Inventory of Existing Commercial Chemical Substances CAS: Chemical Abstracts Service (division of the American Chemical Society) DNEL: Derived No-Effect Level (UK REACH) LC50: Lethal concentration, 50 percent LD50: Lethal dose, 50 percent PBT: Persistent, Bioaccumulative and Toxic vPvB: very Persistent and very Bioaccumulative		
16.3. Key literature references and source of data:			-		
16.4.		ssification and procedure (2/2008 (CLP)	used to derive the classification for mixture according to Regulation (EC)		
Classif	ication	1	Classification procedure		
16.5.	Rele	evant H statements (numb	er 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.	Trai	ning 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		REAGENT	_	
Product code:	TBP-OT-X**	Date of compilation:	21 Dec 2022	Version:	6

ANNEX: Exposure scenario resulting to chemical safet	y assessment
-	