

CONGO RED HIGHMAN KIT

The kit contains:

Congo Red reagent Hematoxylin G2 Potassium hydroxide, solution



Page 1 of 17

Trading name:	ing name: CONGO RED REAGENT				
Product code:	CR-OT-X**	Date of compilation:	21 Dec 2022	Version:	5

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

SECTIO	N 2. Hazards identification		
2.1	Classification of the substance of	or mixture	
2.1.1	Classification according to Regu	ulation (EC) No 12	272/2008 (CLP)
	Hazard class and catego	ory code:	Hazard statements*:
	Flam. Liq. 3		H226
	Carc. 1B		H350
2.1.2.	Additional information		
	-		
*For ful	I text of Hazard- and EU Hazard-	statements: see S	SECTION 16
2.2	Label elements		
	Product identification: CONGO RED REAGENT		
	Identification number:	-	
	Authorization number:	-	



Page 2 of 17

Trading name:	CONGO RED REAGENT				
Product code:	CR-OT-X**	Date of compilation:	21 Dec 2022	Version:	5

	Hazard pictograms: Signal word: Hazard statements:	GHS02 GHS08 Danger H226 Flammable liquid and vapour. H350 May cause cancer.		
	Precautionary statements:	 P210 Keep away from heat/sparks/open flames/hot surfaces. Do not smoke. P233 Keep container tightly closed. P280 Wear protective gloves/protective clothing/eye/protection/face protection. P308+P313 If exposed or concerned: Get medical advice/attention. 		
	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.			
	(Direct Red 28 C.I.) Included in the Candidate List of Substances of Very High Concern (SVHC) according to Regulation (EC) No. 1907/2006 (REACH).			

SECTION 3. Co	SECTION 3. Composition/information on ingredients				
CAS/ EC/ Index number	REACH Registration No	Weight % content (or range)	Identification name	Classification according to Regulation (EC) No 1272/2008 (CLP)	
64-17-5/ 200-578-6/ 603-002-00-5	01- 2119457610- 43-xxxx	40 - 60 %	ethanol	Flam. Liq. 2; H225	
573-58-0/ 209-358-4/ 611-027-00-8	-	1 – 2 %	disodium 3,3'-[[1,1'-biphenyl]-4,4'- diylbis(azo)]bis(4- aminonaphthalene-1-sulphonate)	Carc. 1B; H350 Repr. 2; H361d	

SECTIO	N 4. First aid measures
4.1	Description of first aid measures



Page 3 of 17

Trading name:		CONGO RED RE	AGENT		
Product code:	CR-OT-X**	Date of compilation:	21 Dec 2022	Version:	5

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

SECTIC	SECTION 5. Firefighting measures				
5.1	Extinguishing media				
	Suitable extinguishing media:	Small fire - water spray, dry powder, CO ₂ Large fire - water spray or alcohol-resistant foam			
	Unsuitable extinguishing media:	No information available			
5.2	Special hazards arising from the su	ubstance or mixture			
	Hazardous combustion products:	No information available			
5.3	Advice for firefighters				
	Use a self-contained open-circuit compressed air breathing apparatus and fireproof clothing.				
5.4	Additional information				
	Do not contaminate the environme	ent with extinguishing media.			



Page 4 of 17

Trading name:		CONGO RED REA	GENT		
Product code:	CR-OT-X**	Date of compilation:	21 Dec 2022	Version:	5

6.1	Personal precautions, protective equipment and emergency procedures		
6.1.1.	For non-emergency personnel		
	Protective equipment:	Use personal protective equipment (see Section 8).	
	Accident prevention methods:	Evacuate members of all non-essential personnel and those members without protective equipment. Avoid breathing vapors and avoid contact with skin and eyes. Do not smoke.	
	Emergency procedures:	Mark the area using proper signs.	
6.1.2.	For emergency responders:		
	Use protective equipment; in c (see Section 8).	ase of inadequate ventilation use adequate airways protective equipment	
6.2	Environmental precautions:		
	Do not dispose of in sewage, drainage system and waterways. In case of large spillage contact National Protection and Rescue Directorate (NPRD) on 112.		
6.3	Methods and material for cont	ainment 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		

SECTIO	SECTION 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.			
	Measures to prevent aerosol and dust generation:	Secure proper ventilation.			
	Measures to protect the environment:	Prevent spilling into the sewage system and waterways.			
	Other measures:	-			
7.1.2.	Advice on general occupational hygiene:				
	Do not eat, drink or smoke in the workspace. Thoroughl	y wash hands after work and before eating.			



Page 5 of 17

Trading name:					
Product code:	CR-OT-X**	Date of compilation:	21 Dec 2022	Version:	5

7.2	Conditions for safe storage, including any inco	mpatibilities
	Technical measures and storage conditions:	Keep in tightly closed and upright set containers in a well ventilated storage roomsat temperatures ranging from 15 to 25 °C.
	Packaging materials:	Manufacturer's original packaging. Avoid metal containers.
	Requirements for storage rooms and vessels:	Keep away from food and drink. Keep the containers tightly closed.
	Advices for storage equipment:	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 pa	8.1 Control parameters							
Substance		CAS No		Occupational exposure limit values/short term values		E	Biological limit values	
				ppm		mg/m³		
Ethanol 64-17-5 1000/- 1900/				-				
Substance name:	-							
EC No:	-	CAS No:	-					
DNEL								
				Industrial				
Route of	A	cute		Acute		Chronic		Chronic
exposure:	effe	ct local	effec	ct systemic		effect loca	I	effect systemic
Oral	-		-		-			-
Inhalation	1900 mg (ethanol)		-		-			380 mg/m ³ (ethanol)
Dermal	-		-		-			343 mg/kg (ethanol)
Critical physical parameters: solubility, flammability, corrosivity: -								
	Consumer							



Page 6 of 17

Trading name:		CONGO RED REA	GENT		
Product code:	CR-OT-X**	Date of compilation:	21 Dec 2022	Version:	5

Route of		Acute	Acute	е	Chronic	Chronic
exposure	:	effect local	effect sys	temic	effect local	effect systemic
Oral		-	-		-	87 mg/kg bw/day (ethanol)
Inhalatior	1	950 mg/m ³ (ethanol)	-		-	114 mg/m ³ (ethanol)
Dermal		-	-		-	206 mg/kg (ethanol)
PNEC						
Environm	ental prot	ection target		PNEC		
Fresh water			0.96 m	g/l (ethanol)		
Freshwater sediments			3.6 mg	/kg (ethanol)		
Marine w	ater			0.79 m	g/l (ethanol)	
Marine se	diments			2.9 mg	/kg (ethanol)	
Food chain			380-720 mg/kg (ethanol)			
Microorg	anisms in	sewage treatment		580 mg/l (ethanol)		
Soil (agrio	cultural)			0.63 mg/kg (ethanol)		
Air				No info	ormation available	
8.2	Exposi	ure controls				
8.2.1.	Appro	priate engineering c	ontrols	1		
	Substance/mixture related measures to prevent exposure during identified uses:		Use the product in well ventilated rooms. Use personal protective equipment. Do not eat, drink or smoke in the workspace.			
Structural measures to prevent exposure:			In accordance with Section 7.			
	Organisational measures to prevent exposure:			Organization of work in order to reduce other worker's influence during work process.		
	Techni	ical measures to prev	vent exposure:	concer	proper workspace ventil ntration levels in air below s for rinsing eyes and sh	v permitted levels. Secure
8.2.2.	Persor	nal protection equip	ment			

8.2.2.1.	Eye and face protection:	Safety glasses that stick to face (EN 166) or visor in case of lower levels of concentration in air; protective gas mask that covers the entire face in case of higher levels of concentration in air.
8.2.2.2.	Skin protection	
	Hand protection:	Protective nitrile gloves, 0.11 mm thick (EN 374).
	Other skin protection:	Wear antistatic clothing made of natural fibers (such as cotton) with long sleeves (EN 340) and shoes that cover the entire foot.



Page 7 of 17

Trading name:	CONGO RED REAGENT				
Product code:	CR-OT-X**	Date of compilation:	21 Dec 2022	Version:	5

8.2.2.3.	Respiratory protection:	Suitable mask (EN 136) or half mask (EN 140) equipped with a combined "A1 + Form" filter (EN 143) 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

Info	rmation on basic physical and	chemical properties	
		Value	Method
Phys	sical state:	liquid	No information available
Colo	our:	red	No information available
Odo	ur/odour threshold:	biting/no information available	No information available
Melt	ting point / freezing point:	No information available	No information available
	ng point or initial boiling It and boiling range:	No information available	No information available
Flam	nmability:	No information available	No information available
Love	er and upper explosion limit:	No information available	No information available
Flasl	h point:	24 °C	No information available
Auto	o-ignition temperature:	No information available	No information available
Dec	omposition temperature:	No information available	No information available
pH:		No information available	No information available
Kine	matic viscosity:	No information available	No information available
Solu	bility:	No information available	No information available
	ition coefficient n- nol/water (log value):	No information available	No information available
Vap	our pressure:	No information available	No information available
Den	sity and/or relative density:	No information available	No information available
Rela	tive vapour density:	No information available	No information available
Part	icle characteristics:	No information available	No information available



Page 8 of 17

Trading name:		CONGO RED REA	GENT		
Product code:	CR-OT-X**	Date of compilation:	21 Dec 2022	Version:	5

9.2 Other information

SECTIO	SECTION 10. Stability and reactivity				
10.1	Reactivity:	The product is stable under normal working and storage conditions.			
10.2	Chemical stability:	The product is chemically stable under standard ambient conditions of storing and using.			
10.3	Possibility of hazardous reactions:	No information available			
10.4	Conditions to avoid:	No information available			
10.5	Incompatible materials:	No information available			
10.6	Hazardous decomposition products:	No information available			

SECTION 11. Toxic	cological informatio	on						
11.1 Informatio	on on toxicological ef	fects						
Acute toxi	city:							
Route of exposure:	Method	Species	s Dos	e LD ₅₀ /LC ₅₀ or ATE _{mix}	Ехро	sure time	Results	
Oral:	No information available	rat	No ir availa	nformation able	-		15.200 mg/kg (Direct Red 28)	
Dermal:	No information available	-	No ir availa	nformation able	-		-	
Inhalation:	No information available	-	No ir availa	nformation able	-		-	
Specific ta	rget organ toxicity –	single exp	osure (ST	OT SE):				
	Specific	effects		Target organ			Note	
Oral:	No information ava	ailable		No information available -				
Dermal:	No information ava	ailable		No information	available	-		
Inhalation:	No information ava	ailable		No information available -				
Aspiration	hazard:	٦	No inform	ation available.				
Irritation a	nd corrosion							
	Exposure ti	me	Specie	es Evaluat	ion	Method	Note	



Page 9 of 17

Trading name:		CONGO RED REAGENT								
Product code:	CR-OT-X**	Date of com	pilation: 2	1 Dec 2022	Version:	5				
Skin corrosion/irritation:		mation No information available	No informatic available	n No informati available	on _					

corrosion/irritatio	on: av	allable		available	available	avaliable	
Serious eye damage/irritatior	n av	o in ailable	formation	No information available	No information available	No information available	-
Sensitiza	ation						
Skin sensitization	n:	No inf	ormation av	ailable			
Respiratory sensi	tization:	No inf	ormation av	ailable			
Sympto	ms relatec	l to the ph	nysical, chem	nical and toxicol	ogical character	istics	
Oral exposure:	and	d loss of c	onsciousnes		e to higher levels	y, headache, vertig s of concentration.	
Dermal exposure	: De	fatting, dr	y skin.				
Inhalation exposi	ure: Bro hea	nchocons	striction is po ertigo, intoxi	ossible. Possible	symptoms inclu	tinging sensation, Ide CNS symptom s after exposure to	s such as
Eye exposure:	•	atter may ions.	cause disco	mfort, stinging	sensation, conju	nctival redness, co	rneal surface
Repeate	ed dose to	xicity (sub	acute, subcł	nronic, chronic)			
	Do	ose	Exposure time	Species	Method	Evaluation	Note
Subacute oral No inf availabl		ormation	No informatio available	No n informatior available	No information available	No information available	-
Subacute No informa dermal available			No informatio available	No n informatior available	No information available	No information available	-
Subacute No informa inhalation available			No informatio available	No n information available	No information available	No information available	-
Subchronic oral	No info available	ormation e	No informatio available	No n information available	No information available	No information available	-
Subchronic dermal	No info available	ormation e	No informatio available	No n informatior available	No information available	No information available	-



Page 10 of 17

Trading name:		CONGO RED REAGENT								
Product code:	CR-OT-X**	Date of compilation:	21 Dec 2022	Version:	5					

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) Presumed to have carcinogenic potential for humans. Carcinogenicity: Mutagenicity in vitro: No information available No information available Genotoxicity: Mutagenicity in vivo: No information available Germ cell mutagenicity: No information available Reproductive toxicity: Suspected of damaging the unborn child. Summary of evaluation of the CMR No information available properties: 11.2 Information on other hazards: 11.2.1. Endocrine disrupting properties:



Page 11 of 17

Trading name:	CONGO RED REAGENT							
Product code:	CR-OT-X**	Date of compilation:	21 Dec 2022	Version:	5			
	stance/mixture does ents considered to ha							

	disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.	
11.2.2.	Other informations:	
	-	

12.1 Toxicity						
Acute (short-term) toxicity	Dose	Exposure time	Species	Method	Evaluation	Note
Fish	LC ₅₀	96 hours	No information available	No information available	No information available	-
Crustacea:	EC ₅₀	48 hours	No information available	No information available	No information available	-
Algae/aquatic plants	quatic plants IC_{50} 4 days No information available			No information available	No information available	-
Other organisms	_	-	-	-	-	-
Chronic (long-term) toxicity	Dose	Exposure time	Species	Method	Evaluation	Note
Fish	LC ₅₀	96 hours	No information available	No information available	No information available	-
Crustacea:	EC ₅₀	48 hours	No information available	No information available	No information available	-
Algae/aquatic plants	IC ₅₀	72 hours	No information available	No information available	No information available	-
Other organisms	-	-	-	-	-	-
12.2 Persistence a	nd degrad	dability				
Abiotic degra	dation			i	1	
De	gradation	half-lives	Method	Evaluatio	on	Note



a 12 af 17

Marine water No information available No information available No information available No information available - Fresh water No information available No information available No information available - - Air No information available No information available No information available - - Soil No information available No information available No information available - Biodegradation No information available - - % Degradation Time (days) Method Evaluation No information No information No information No information No information		ge 12 of 17	Pag											
Marine water No information available No information available No information available No information available - Fresh water No information available No information available No information available - - Air No information available No information available No information available - - Soil No information available No information available No information available - Biodegradation No information available - - % Degradation Time (days) Method Evaluation No information No information No information No information No information				Γ	REAGENT	RED R	CONGO RI					me:	g na	Tradir
Marine water No information available available available available available available - Fresh water No information available No information available No information available No information available - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -	5	/ersion:	2 V	ec 2022	: 21 De	ation:	e of compilat	Date		T-X**	CR-O	de:	ct co	Produ
Marine water No information available available available available available available - Fresh water No information available No information available No information available No information available - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -														
Fresh water No information available available available available available available available - Air No information available No information available No information available No information available - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -<			-	on					able	nation availa	No inforn	r N	wate	Marine
Air No information available available available available available available available available - Soil No information available No information available No information available No information available - Soil No information available No information available No information available - Biodegradation Soil Time (days) Method Evaluation No information No information No information No information No information No information			-	on	ormation available		No inforn	N	vater	Fresh v				
Soil No information available available available available available Biodegradation % Degradation Time (days) Method No information No information No information No information			-	on					able	nation availa	No inform	N		Air
% Degradation Time (days) Method Evaluation Note No information No information No information No information No information			-	on					able	nation availa	No inforn	N		Soil
% Degradation Time (days) Method Evaluation Note No information No information No information No information No information														
No information No information No information No information No information											dation	degrad	Bio	
		Note		on	Evaluatio		lethod	N)	Time (days		ation	egrad	% D
				on				-	nation	No information No information available				
12.3 Bioaccumulative potential										ootential	nulative p	accum	Bio	12.3
Octanol-water partition coefficient (log Kow))	log Kow	icient (rtition coeff	water pa	anol-w	Oct	
Value Concentration pH °C Method Evaluation Note		Note		uation	Evalu		Method	°C	Н	tion p	oncentrat	Co	le	Valu
			-		-		-			-		-		-
Bioconcentration factor (BCF)						:		*		factor (BCF)	ntration	concer	Bio	
ValueSpeciesMethodEvaluationNote		Note		Evaluation			Vethod	١		Species			/alue	`
No informationNo informationNo informationavailableavailableavailableavailable		-		tion					ation			ion		
Chronic ecotoxicity		-					Ŷ		-	су.	ecotoxicit	onic eq	Chr	
ValueDoseExposure timeSpeciesMethodEvaluationNote		Note	luation	Evalu	Method	I	Species		-	Dose		lue	Va	
Chronic toxicity on fishLC50NoNoNoNoavailableavailableinformation availableinformation availableinformation availableinformation 		-		n inform	nformation	n inf	information		infor	onic toxicity on fish LC ₅₀ infor		Chroni		
Chronic toxicity on crustacea (Daphnia)EC50No information availableNo information availableNo information availableNo information availableNo information availableNo information availableNo information availableNo information availableNo information availableNo information availableNo information availableNo information availableNo information availableNo information availableNo information availableNo information availableNo information availableNo information availableNo information availableNo information availableNo information availableNo information availableNo information availableNo information availableNo information availableNo information availableNo information availableNo information availableNo information availableNo information availableNo information availableNo information availableNo information availableNo information availableNo information availableNo information availableNo information availableNo information availableNo information availableNo information availableNo information availableNo information availableNo information availableNo information availableNo information availableNo information availableNo information availableNo information available<		-		n inform	nformation	n inf	information		infor	EC ₅₀				



Page 13 of 17

Trading name:		CONGO RED REA	GENT		
Product code:	CR-OT-X**	Date of compilation:	21 Dec 2022	Version:	5

12.4	Mol	oility in soi	il							
	Kno	wn or pree	dicted distributi	on in environn	nental	compartments:				
	No	informatio	n available							
	Surf	Surface tension:								
	· ·	Value	°C	Concentra	ation	Meth	od		Note	
	No information available		No information available	No informa available	ation No information available		on	-		
	Ads		desorption							
Transpo	ort	-	's constant	log Kow	Eva	aporation rate	Meth	od	Note	
Soil-wa	iter	No information available No information available			No information available		-			
Water-	ater-air No available		information	No information available	No information available		No information available		-	
Soil-air	oil-air No inform available		information	No information available	No information available		No information available		-	
12.5.	The acco	substance ording to F		not contain cor 7(f) or Commis	sion D	elegated regula			srupting properties or Commission	
12.6.			upting properti							
	acco	ording to F		7(f) or Commis	sion D	elegated regula			srupting properties or Commission	
12.7.	Oth	er adverse	effects							
			n available							
SECTIO)N 12	Disposal	consideration	c						



Page 14 of 17

Trading name: Product code:		CONGO RED REAGENT					
		CR-OT-X**	Date of compilation:	21 Dec 2022	Version:	5	
13.1	Waste treatment methods						
13.1.1.	Product	/Packaging disposal:					
	Submit for disposal to the legal person authorized by the Ministry of Environmental and Nature Protection.						
	····						

13.1.2.	Waste codes/waste designations according to Law:
	Packaging that contains residual hazardous substances or is contaminated with hazardous substances
13.1.3.	Waste treatment – relevant information:
	No information available
13.1.4.	Sewage disposal – relevant information:
	Waste must not be disposed of into the sewage system.
13.1.5.	Other disposal recommendations:
	Do not dispose of the product's remains into the sewage system. Submit the remains to the collectors authorized by the ministry in charge. Do not dispose of the packaging into the sewage system. Submit the packaging to the collectors authorized by the ministry in charge.
13.1.6.	Relevant Community provisions:
	-
SECTION	N 14 TRANSPORT INFORMATION

Transporting/shipment by road (ADR)				
UN number:	1170			
UN proper shipping name:	Ethanol solution			
Transport hazard class(es):	3			
Packing group:	III			
Environmentally hazardous:	-			
Special precautions for user:	-			
Transporting/shipment by r	rail (RID)			
UN number:	1170			
UN proper shipping name:	Ethanol solution			
Transport hazard class(es):	3			
Packing group:	III			
Environmentally hazardous:	-			



Page 15 of 17

Trading name:	CONGO RED REAGENT					
Product code:	CR-OT-X**	Date of compilation:	21 Dec 2022	Version:	5	

Special precautions for user:	-
Inland waterway transport (ADN)	
UN number:	1170
UN proper shipping name:	Ethanol solution
Transport hazard class(es):	3
Packing group:	III
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:	III
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:	-
Further information: -	

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



Page 16 of 17

Trading name:		AGENT			
Product code:	CR-OT-X**	Date of compilation:	21 Dec 2022	Version:	5
	1		:	i	,

	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 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			

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



Page 17 of 17

Trading name:	CONGO RED REAGENT				
Product code:	CR-OT-X**	Date of compilation:	21 Dec 2022	Version:	5

16.4.	Classification and procedure used to derive the classification for mixture according to Regulation (EC) 1272/2008 (CLP)					
Classifi	icatior	ו	Classification procedure			
-			-			
16.5.	Rele	evant H statements (num	ber and full text)			
	225 H: 226		Highly flammable liquid and vapour.			
			Flammable liquid and vapour.			
		350	May cause cancer.			
	361d		Suspected of damaging the unborn child.			
16.6.	Trai	ning advice:	-			
			** "X" in the product code marks different volumes (different packagings of the product)			
16.7.	16.7. Further information:		We are not responsible for consequences in case of failure to comply with instructions for use or improper use of the product described in this material safety data sheet.			

ANNEX: Exposure scenario resulting to chemical safety assessment



Page 1 of 16

Trading name:	HEMATOXYLIN G2					
Product code:	HEMG2-OT-X**	Revision date:	03 April 2023	Version:	8	

SECTI	ON 1 IDENTIFICATION (OF THE SUB	STANCE/MI	XTURE AND OF THE COMPANY/UNDERTAKING		
1.1.	Product identifier					
	Trading name:	HEMATOX	YLIN G2			
	Chemical name:	-				
	Catalogue number:	HEMG2-O	T-X**			
1.2.	Relevant identified use	s of the sub	stance or mi	xture and uses advised against		
	Uses:		Hematoxy	lin according to Gill for nuclear staining.		
	Uses advised against:		Only the i	dentified uses are advised.		
	Reason why uses advis	sed against: The product is intended for use only as an <i>in vitro</i> diagnostic medical device, registered at the Agency for Medicinal Product Medical Devices and there is no reason to use it for other purp				
1.3.	Details of the supplier	of the safety	data sheet			
	Supplier:	В	ioGnost Ltd.			
	Address:	Ν	Medjugorska 59, Zagreb			
	Telephone number:	+	+385 1 2409997 +385 1 2404039			
	Fax no.:	+				
	e-mail of competent p	erson: <u>n</u>	nsds@biogn	<u>ost.hr</u>		
	National contact:	-				
1.4.	Emergency telephone	number				
	National Protection an	d Rescue Di	rectorate:	112		
	Medical information:			+385 1 2348 342		
	Other information:			-		

SECTIO	SECTION 2 HAZARDS INFORMATION				
2.1.	Classification of the substa	nce or mixture			
2.1.1.	Classification (REGULATION	l (EC) No. 1272/2008	(CLP)		
	Hazard class and ca	itegory code:	Hazard statements*:		
	Acute Tox. 4		H302		
2.1.2.	Additional information				
	-				
*For ful	l text of Hazard- and EU Haz	ard-statements: see S	ection 16		
2.2.	Label elements				
	Product identification:	HEMATOXYLIN G	2		
	Identification number: -				
	Authorization no.:	-			



Page 2 of 16

Trading name:	HEMATOXYLIN G2					
Product code:	HEMG2-OT-X**	Revision date:	03 April 2023	Version:	8	

	Hazard pictograms:	GHS07			
	Signal word:	Warning			
	Hazard statements:	H302 Harmful if swallowed.			
	Precautionary statements:	 P280 Wear protective gloves/protective clothing/eye/protection/face protection. P301 + P312 IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell. 			
	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 CC	SECTION 3 COMPOSITION/INFORMATION ON INGREDIENTS						
CAS/ EC/ Index no.	REACH Registration No	Weight % content (or range)	Identification name	Classification according to Regulation (EC) No 1272/2008 (CLP)			
107-21-1/ 203-473-3/ 603-027-00-1	01-2119456816- 28-xxxx	25 - 45 %	ethylene glycol	Acute Tox. 4, H302			

SECTI	SECTION 4 FIRST AID MEASURES				
4.1.	Description of first aid measu	res			
	General notes:	-			
	Following inhalation:	Carry the afflicted person out of the contaminated area into a well- ventilated area or out for fresh air. If breathing becomes erratic or it stops, immediately apply artificial respiration (other than mouth-to- mouth) and contact a physician.			
	Following skin contact:	Remove contaminated clothing. Immediately wash with plenty of water and soap. Seek medical assistance if the symptoms of irritation remain.			
	Following eye contact:	Rinse out with plenty of water with the eyelid held wide open using clean fingers. If the symptoms remain, immediately call a physician.			



Page 3 of 16

Trading name:	HEMATOXYLIN G2					
Product code:	HEMG2-OT-X**	Revision date:	03 April 2023	Version:	8	

	Following ingestion:		Do not induce vomiting. Make the afflicted person drink a glass of water. If spontaneous vomiting occurs, wash the mouth with water, then make the person drink 100-200 ml of water and seek medical attention.	
	Self-protection of the first ai	der:	Treat symptomatically.	
4.2.	Most important symptoms a	nd effe	cts, both acute and delayed	
	Following inhalation:	Inhalation of large amounts of vapors in inadequately ventilated perimeter may cause coughing, sneezing, headache and nausea.		
	Following skin contact:	Slight irritation. After short exposure, resorption effects are not likely. Long- term exposure may cause drying, cracking and tingling sensation of skin.		
	Following eye contact:		t eye contact may cause slight to moderate irritation, lacrimation and ng sensation. If the symptoms persist, immediately call a physician.	
	Following ingestion:	Swallowing may cause irritation of mucosa, tingling sensation in the mouth burning sensation; higher levels of concentration may cause nausea, abdominal pain and vomiting. In case of vomiting, aspiration causes coughing, difficult breathing. Higher levels of concentration may cause suffocation.		
4.3.	Indication of any immediate	e medical attention and special treatment needed		
	-			

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

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).			



Page 4 of 16

						raye 4	
Tradin	ng name:			HEMATO	DXYLIN G2		
Product code:		HEMG2-OT-X**	* Revision date:		03 April 2023	Version:	8
	Accident	prevention methods	s: meml	bers without	rs of all non-essentia protective equipment n. Do not smoke.	•	
	Emergeno	y procedures:	Mark	the area usin	ig proper signs.		
6.1.2.	For emerg	gency responders:					
	Wear pro ⁻	tective equipment (s	see Section 8).				
6.2.	Environm	ental precautions:					
	Do not dispose of in sewage, drainage system and waterways. In case of large spillage contact Protection and Rescue Directorate (NPRD) on 112.				illage contact	National	
6.3.	Methods	and material for cor	ntainment and c	leaning up			
6.3.1.	-	covering of drains; procedures:	Sand or clay barriers.				
6.3.2.	Cleaning	up:	Where possible, the substance can be absorbed by using inflammable material (sand, diatomaceous earth, vermiculite). Place the waste material in tightly closed impermeable containers. Store the substance in well ventilated storage rooms until disposal. Submit for disposal to the legal persons authorized by the Ministry of Environmental and Nature Protection. After disposal of the products, wash the area and and involved materials with water.				e material n well he legal e
6.3.3.	Other info	ormation:	-				
6.4.	Reference	to other sections					
	See Section 7 for information about secure handling. See Section 8 for information about personal protective equipment. See Section 13 for information about containment.						

SECTIO	SECTION 7 HANDLING AN STORAGE				
7.1.	Precautions for safe handling				
7.1.1.	Protection measures				
	Measures to prevent fire:	Keep away from sources of heat and ignition. Do not smoke.			
	Measures to prevent aerosol and dust generation:	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 incompat	ibilities			



Page 5 of 16

Trading name:		HEMAT	OXYLIN G2		
Product code:	HEMG2-OT-X**	Revision date:	03 April 2023	Version:	8
		i.		1	

	Technical measures and storage conditions:	Keep in tightly closed and upright set containers in a well ventilated storage rooms, and away from sources of heat, sunlight, and other incompatible substances.
	Packaging materials:	Manufacturer's original packaging.
	Requirements for storage rooms and vessels:	Keep away from food and drink. Keep the containers tightly closed.
	Advices for storage equipment:	The storage must be made of hard material; floors must be resistant to chemicals. There must be no drain that directly leads into sewage system. Secure proper ventilation.
	Further information on storage conditions:	Do not place the unused material in the storage room and do not use empty containers for storing other chemicals. Do not store with incompatible materials (see Section 9).
7.3.	Specific end use(s)	
	Recommendations:	-
	Industrial sector specific solutions:	-

SECTION 8 EX	(POSUF		TROLS/PER	SONAL	PROTECTION			
8.1. Cont	rol para	meters						
Substance			CAS No			exposure limit term values	Bie	ological limit values
					ppm	mg/m ³		
Ethylene glycol 107-21-			-1	20/40	52/104	No infor	mation available	
Substance name:	-							
EC No:	-		CAS No:	-				
DNEL								
					Industrial			
Route of		A	Acute		Acute	Chronic		Chronic
exposure:		effe	ect local	effe	ect systemic	effect lo	ocal	effect systemic
Oral		-		-		-		-
Inhalation		-		-		35 mg/ kg (ethylene gly	col)	
Dermal		_		-		-		106 mg/kg (ethylene glycol)
Critical physic	al paran	neters: s	olubility, flai	mmabili	ty, corrosivity:	-		
					Consumer			



Page 6 of 16

							Page 6	OT 16	
Trading r	name:				HEMAT	OXYLIN G2			
Product of	code:	HEMG2-OT-X**		Revisio	on date:	03 April 2023	Version:	8	
Route of		Acute		Acut		Chronic	_	onic	
exposure	:	effect local		effect sys	temic	effect local	effect s	systemic	
Oral		-	-			-	-		
Inhalation	ı	-	-	- 7 mg/kg - (ethylene glycol)		-			
Dermal		-	-			-	53 mg/kg (glycol)	ethylene	
PNEC						I			
Environme	ental prot	ection target			PNEC				
Fresh wate	er				10 mg/l ((ethylene glycol)			
Freshwate	er sedime	nts			37 mg/kg	g (ethylene glycol)			
Marine wa	ater					thylene glycol)			
Marine se	diments				3.7 mg/k	g (ethylene glycol)			
Food chai	in				No inform	mation available			
Microorga	anisms in	sewage treatment			199.5 mg	g/l (ethylene glycol)			
Soil (agric	cultural)				1.53 mg/	'kg (ethylene glycol)			
Air					No inform	mation available			
8.2.	Exposi	ure controls							
8.2.1.	Engine	ering measures							
	measu	nce/mixture related res to prevent expos identified uses:	ure		Jse the product in well ventilated rooms. Use personal protective equipment. Do not eat, drink or smoke in the workspace.				
	Structi exposi	ural measures to prev ure:	/ent	No info	information available				
	_	isational measures to nt exposure:)	0	Drganization of work in order to reduce other worker's influence during work process.				
	Techni exposi	cal measures to prev ure:	ent		e proper workspace ventilation in order to keep ntration levels in air below permitted levels.				
8.2.2.	Persor	al protection equipr	nent						
8.2.2.1.	Eye an	and face protection: Safety glasses that stick to face (preventing s visor.					ing splashing) ((EN 166) or	
8.2.2.2.	Skin p	rotection							
	Hand	protection:	Protec	Glove n Glove t	naterial: nit hickness: ≥	according to standard trile rubber :0.11 mm ne: >480 min	d EN 374.		



exposure:

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

Page 7 of 16

						Page /	01 10	
Trading	Other skin prote 2.2.3. Respiratory prot 2.2.4. Thermal hazards 2.3. Environmental e Substance/mixtu measures to pre Structural measures Structural measures			HEMAT	OXYLIN G2			
Product	code:	HEMG2-OT-X**	4	Revision date:	03 April 2023	Version:	8	
	Other skin protection: Wear antistatic clothing made of natural fi sleeves (EN 13034), and shoes that cover t							
8.2.2.3.	Respi	ratory protection:	filter fo	or organic vapors, ty	EN 136) or half mask (/pe "A" (boiling point tration levels exceed (>65°C) acordin		
8.2.2.4.	Therm	nal hazards:	No inf	ormation available				
8.2.3.	Enviro	onmental exposure	controls					
		ance/mixture relate ures to prevent exp		See Section 6				
		ural measures to pi ure:	revent	Use modern equipment.				
		Organisational measures to prevent exposure:		Adapt the work process to the required working conditions of the workplace.				
		Fechnical measures to prevent		See Section 6				

.1.	Information on basic physical and cher	mical properties	
		Value	Method
	Physical state:	liquid	No information available
	Color:	dark red	No information available
	Odour/odour threshold:	very mild vinegar odour/no information available	No information available
	Melting point / freezing point:	No information available	No information available
	Boiling point or initial boiling point and boiling range:	No information available	No information available
	Flammability:	No information available	No information available
	Lover and upper explosion limit:	No information available	No information available
	Flash point:	No information available	No information available
	Auto-ignition temperature:	No information available	No information available
	Decomposition temperature:	No information available	No information available
	pH:	No information available	No information available
	Kinematic viscosity:	No information available	No information available
	Solubility:	No information available	No information available
	Partition coefficient n-octanol/water (log value):	No information available	No information available
	Vapour pressure:	No information available	No information available
	Density and/or relative density	No information available	No information available



Page 8 of 16

Tradi	ing name:		HEMAT	OXYLIN G2			
Product code:		HEMG2-OT-X**	Revision date:	Revision date: 03 April 2023		Version:	8
	Relative v	vapour density:	No information a	available	No info	ormation avai	lable
	Particle characteristics:		No information available No information available				
9.2.	Other inf	ormation					

SECTIO	SECTION 10 STABILITY AND REACTIVITY							
10.1.	Reactivity:	See subsections 10.3 through 10.5.						
10.2.	Chemical stability:	The product is chemically stable under standard ambient conditions of storing and using.						
10.3.	Possibility of hazardous reactions:	With strong oxidants, sodium-hydroxide, sulfuric acid, aluminum.						
10.4.	Conditions to avoid:	Sources of heat, sparks, and ignition.						
10.5.	Incompatible materials:	Aluminum.						
10.6.	Hazardous decomposition products:	No information available.						

SECTIO	ON 11 TOXIC	OLOGICAL INFORM	ATION			
11.1.	Information	n on hazard classes as	defined in Reg	Julation (EC) No 1272	2/2008	
	Acute toxic	ity:				
Route o exposu		Method	Species	Effective dose LD ₅₀ /LC ₅₀ or ATE _{mixture}	Exposure time	Results
Oral ex	posure:	anhydrous (ECHA)	rabbit	LD ₅₀	-	7.712 mg/kg (ethylene glycol)
Dermal exposure:		anhydrous (ECHA)	rat	LD ₅₀	-	>3.500mg/kg (ethylene glycol)
Inhalation exposure:		No information available	-	LC ₅₀	-	-
	Specific tar	get organ toxicity – si	ngle exposure	(STOT SE):		
		Specif	ic effects	Target	organ	Note
Oral ex	posure:	No information	available	No informatio	n available	-
Derma	l exposure:	No information	available	No informatio	n available	_
Inhalat	ion exposure:	No information	available	No informatio	n available	-
	Respiratory	rirritation:	No info	ormation available		
	1		;			
	irritation ar	nd corrosion	- ·			
		Exposure time	Species	Evaluation	Method	Note



Page 9 of 16

	1				гауе	9 of 16
Trading name:			HEMAT	OXYLIN G2		
Product code:	HEMG2-OT-X	** Re	evision date:	03 April 202	.3 Version:	8
Skin irritation:	-	rabb	it -	-	Slight irritatic glycol)	on (ethylene
Eye irritation:	24 h	rabb	it -	-	Slight irritatic glycol)	on (ethylene
	- +					
Sensitiz Dermal exposure		available				
Inhalation exposure:	No information					
Sympto	ms related to the p	hysical, chemic	al and toxicolog	gical characterist	ics	
Oral exposure:		ion available				
Dermal exposure		ion available				
Inhalation expos		ion available				
Eye exposure:	Causes serio	us eye damage	9			
Repeate	ed dose toxicity (sub	bacute, subchro	onic, chronic)			
1	Dose	Exposure time	Species	Method	Evaluation	Note
Subacute oral	No information available	No information available	No information available	No information available	No information available	-
Subacute dermal	No information available	No information available	No information available	No information available	No information available	-
Subacute inhalation	No information available	No information available	No information available	No information available	No information available	-
Subchronic oral	No information available	No information available	No information available	No information available	No information available	-
Subchronic dermal	No information available	No information available	No information available	No information available	No information available	-
Subchronic inhalation	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	-



Page 10 of 16

							P	age i	0 of 16
Trading name:				HEM	ΑΤΟ	DXYLIN G2		-	
Product code:	HE	MG2-OT-X*	* Re	evision date	e:	03 April 2023	Ver	sion:	8
Chronic dermal		ailable		No informatic available	on	No information available	No inform available	ation	-
Chronic inhalation		No information information in		No informatic available	on	No information available	No inform available	ation	-
Spacific	taraat	organ tovicit	v repeated a	Nacuro (ST)=\.			
Specific	larget		y – repeated e pecific effects	exposure (ST		Target orga	n		Note
Subacute oral			tion available		Noi	nformation availa		_	NOLE
Subacute derma					-	nformation availa		_	
Subacute inhalat			tion available			nformation availa		-	
Subchronic oral			tion available			nformation availa		-	
Subchronic derm						nformation availa			
Subchronic inhal	ation	No informa	tion available			nformation availa		9 -	
Chronic oral		No informa	tion available		No i	nformation avail	able	-	
Chronic dermal		No informa	tion available		No i	nformation availa	able	-	
Chronic inhalatic	on	No informa	tion available		No i	nformation avail	able	-	
CMR ef	fects (c	arcinogenicit	y, mutagenicity	y, reproduct	tive t	oxicity)			
Carcino	genicit	y:	Current s	tudies on te	est ai	nimals did not ind	dicate carcir	ogeni	effects.
Mutage	nicity <i>i</i>	n-vitro:	Current i	Current in vitro tests did not indicate mutagenic effects.					
Genoto				nation avail					
Mutage						d not indicate m	utagenic eff	fects.	
Germ ce	ell muta	agenicity:		nation avail					
Reprod	uctive t	oxicity:	No toxic organs.	ity on rep	rodu	ctive organs wa	is determin	ed in	reproductive
Summa	ry of ev	valuation of tl	ne CMR prope	rties: -					
11.2. Informa	ition or	n other hazard	ds:						
11.2.1. Endocri	ne disr	upting prope	rties:						
	nown	endocrine	disrupting						
		t affect huma	n health.						
11.2.2. Other in	nformat	tions:							
-									



Page 11 of 16

Trading name:		HEMAT	OXYLIN G2		
Product code:	HEMG2-OT-X**	Revision date:	03 April 2023	Version:	8

12.1. Toxicity						
Acute (short-term) toxicity	Dose	Exposure time	Species	Method	Evaluation	Note
Fish	LC ₅₀	96 hours	Fish	No information available	72.860 mg/l (ethylene glycol)	-
Crustacea:	EC ₅₀	48 hours	water flea	No information available	>100 mg/l (ethylene glycol)	-
Algae/aquatic plants	IC ₅₀	8 days	algae	No information available	6.500-13.000 mg/l (ethylene glycol)	-
Microorganisms	LC ₅₀	72 hours	-	-	-	-
Chronic toxicity	Dose	Exposure time	Species	Method	Evaluation	Note
Fish	LC ₅₀	96 hours	No information available	No information available	No information available	-
Crustacea:	EC ₅₀	48 hours	No information available	No information available	No information available	-
Algae/aquatic plants	IC ₅₀	72 hours	No information available	No information available	No information available	-
Other organisms	-	-	-	_	-	-

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

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



Page 12 of 16 Trading name: **HEMATOXYLIN G2** Product code: HEMG2-OT-X** Revision date: 03 April 2023 Version: 8 12.3. Bioaccumulative potential Partition coefficient: n-octanol/water (log Kow): °C Value Concentration Method Evaluation pН Note No information No information No information _ _ _ available available available **Bioconcentration factor (BCF)** Value Method Evaluation Note **Species** No information No information No information No information No information available available available available available Chronic ecotoxicity Exposure Value Dose Species Method Evaluation Note time No No No No information LC_{50} Chronic toxicity on fish information information information _ available available available available No No No No information Chronic toxicity on information information information EC_{50} _ crustacea (Daphnia) available available available available 12.4. Mobility in soil Known or predicted distribution in environmental compartments: No information available Surface tension: °C Value Concentration Method Note No No No information No information information information available available available available



Γ

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

Page 13 of 16

....

Trading name:		HEMAT	OXYLIN G2		
Product code:	HEMG2-OT-X**	Revision date:	03 April 2023	Version:	8

	Adsorption / desorption				
Transpo	A/D coefficient Henry's constant	log Kow	Evaporation rate	Method	Note
Soil-wa	ter No information available	No information available	No information available	No information available	-
Water-a	air No information available	No information available	No information available	No information available	-
Soil-air	No information available	No information available	No information available	No information available	-
	Ĩ				
12.5.	Results of PBT and vPvB ass	essment			
	Based on available data, the	product does not o	contain any PBT or v	PvB substances.	
12.6.	Endocrine disrupting properties				
	No known endocrine disrup	ing properties that	affect the environn	nent.	
12.7.	Other adverse effects				
	No adverse effects are expe	ted			
	No daverse effects are expe				
SECTIO	DN 13 DISPOSAL CONSIDER				
SECTIO 13.1.	•				
	ON 13 DISPOSAL CONSIDER				
13.1.	ON 13 DISPOSAL CONSIDER	TIONS			
	DN 13 DISPOSAL CONSIDER Waste treatment methods	ATIONS al:	rized by the Ministr	y of Environmental	and Nature
13.1. 13.1.1.	N 13 DISPOSAL CONSIDER/ Waste treatment methods Product/Packaging dispos Submit for disposal to the Protection.	A TIONS al: legal person autho		y of Environmental	and Nature
13.1.	N 13 DISPOSAL CONSIDER/ Waste treatment methods Product/Packaging dispos Submit for disposal to the Protection. Waste codes/waste design	A TIONS al: legal person autho		y of Environmental	and Nature
13.1. 13.1.1.	N 13 DISPOSAL CONSIDER/ Waste treatment methods Product/Packaging dispos Submit for disposal to the Protection.	A TIONS al: legal person autho		y of Environmental	and Nature
13.1. 13.1.1. 13.1.2.	N 13 DISPOSAL CONSIDER/ Waste treatment methods Product/Packaging dispos Submit for disposal to the Protection. Waste codes/waste design	ATIONS al: legal person autho ations according to		y of Environmental	and Nature
13.1. 13.1.1.	DN 13 DISPOSAL CONSIDER/ Waste treatment methods Product/Packaging dispos Submit for disposal to the Protection. Waste codes/waste design No information available	ATIONS al: legal person autho ations according to		y of Environmental	and Nature
13.1. 13.1.1. 13.1.2.	N 13 DISPOSAL CONSIDER/ Waste treatment methods Product/Packaging dispos Submit for disposal to the Protection. Waste codes/waste design No information available Waste treatment – relevant	ATIONS al: legal person autho ations according to t information:		y of Environmental	and Nature



		-	Jeneral and the galaxy		Page 14	of 16	
Trading r	name:		HEMATOXYLIN G2				
Product of	code:	HEMG2-OT-X**	Revision date:	03 April 2023	Version:	8	
13.1.5.	Other di	sposal recommendatio	ons:				
	authorize the pack	ed by the ministry in cl	s remains into the seway harge. Do not dispose of authorized by the minis	f the packaging into the	e sewage syster	m. Submit	
13.1.6.	Relevant	Community provision	s:				
	-						
1							
SECTION	14 TRAN	SPORT INFORMATIO	N				
Т	ransporti	ng/shipment by road (ADR)				
UN numb	er:		Not subject to transpo	rt regulations.			
UN prope	r shipping	g name:	-				
Transport	hazard cl	ass(es):	-				
Packing g			-		,		
Environm	entally ha	zardous:	-				
Special pr	ecautions	for user:	-				
Т	ransporti	ng/shipment by rail (Rl	ID)				
UN numb	er:		Not subject to transpo	rt regulations.			
UN prope	r shipping	g name:	-				
Transport	hazard cl	ass(es):	-				
Packing g	roup:		-				
Environm	entally ha	zardous:	-				
Special pr	ecautions	for user:	-				
l	nland wat	erway transport (ADN)					
UN numb	er:		Not subject to transpo	rt regulations.			
UN prope	r shipping	g name:	-				
Transport	hazard cl	ass(es):	-				
Packing g	roup:		-				
Environm	entally ha	zardous:	-				
Special pr	ecautions	for user:	-				
Т	ransporti	ng/shipment by sea (IN	MDG)				
UN numb	er:		Not subject to transpo	rt regulations.			
UN prope	r shipping	g name:	-				
Transport	hazard cl	ass(es):	-				
Packing g	roup:		-				
Environm	entally ha	zardous:	-				



Page 15 of 16

Trading name:		ΗΕΜΑΤΟ	XYLIN G2		
Product code:	HEMG2-OT-X**	Revision date:	03 April 2023	Version:	8

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

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:	-
	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 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 16

Tradin	g name:	HEMATOXYLIN G2				
Produ	oduct code: HEMG2-O		** Revision date:	03 April 2023	Version:	8
	National	legislation:	Chemicals Act, Regulation of dangerous substances, Ordi and on biological limit value classification of waste with a Ordinance on writing Mater Substances Act	nance on occupation es, Regulation on cate a waste catalog and li	al exposure limi egories, types ar st of hazardous	t values nd waste,
15.2.	Chemical	safety assessmen				
	None					

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

ANNEX: EXPOSURE SCENARIO RESULTING TO CHEMICAL SAFETY ASSESSMENT

-



Page 1 of 17

Trade name:	POTASSIUM HYDROXIDE, SOLUTION						
Product code:	KHO-OT-X**	Date of compilation:	14 November 2022	Version:	5		

SECTION	ON 1. Identification of t	he subst	tance/m	ixture and	of the company/undertaking
1.1.	Product identifier				
	Trading name:	POTASS	SIUM HYI	DROXIDE, S	SOLUTION
	Chemical name:	-			
	Product code:	KHO-O	T-X**		
1.2.	Relevant identified uses of the substance or mixture and uses advised against				
	Uses:			For use v	vith special staining kits.
	Uses advised against:			Only the identified uses are advised.	
	Reason why uses advised agains		inst:	The product is intended for use only as an <i>in vitro</i> diagnostic medical device and there is no reason to use it for other purposes.	
1.3.	Details of the supplier of the safety data sheet				
	Supplier:		BioGnost Ltd.		
	Address:		Medjugorska 59, Zagreb		
	Telephone number:		+385 1 2409997		
	Telefax:		+385 1 2404039		
	e-mail of competent person:		msds@biognost.hr		
	National contact:		-		
1.4.	Emergency telephone numbers				
	National Protection and Rescue		ue Directo	orate:	112
	Medical information:				+385 1 2348 342
	Other information:			-	

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



Page 2 of 17

Trade name:		ROXIDE, SOLUTION		
Product code:	KHO-OT-X**	Date of compilation:	14 November 2022	Version: 5

	Hazard pictograms:	GHS07		
	Signal word:	Warning		
	Hazard statement:	H315 Causes skin irritation H319 Causes serious eye irritation.		
	Precautionary statement:	 P280 Wear protective gloves/protective clothing/eye/protection/face protection. P303+P361+P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P308+P313 IF exposed or concerned: Get medical advice/attention. 		
	Supplemetal hazard information (EU):	-		
2.3.	Other hazards			
	No known endocrine disrupting properties. This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.			

SECTION 3. Composition/information on ingredients					
CAS/ EC/ Index number	REACH Registration No	Weight % content (or range)	Identification name	Classification according to Regulation (EC) No 1272/2008 (CLP)	
1310-58-3 215-181-3 019-002-00-8	-	1 - 2 %	potassium hydroxide	Met. Corr. 1; H290 Ac. Tox. 4; H302 Skin Corr. 1A; H314	

SECTION 4. First aid measures			
4.1.	Description of first aid measures		
	General notes:	Move out of dangerous area. Show this safety data sheet to the doctor and first responders.	
	Following inhalation:	If breathed in, move person into fresh air. If not breathing, give artificial respiration. Get medical advice.	
	Following skin contact:	Wash off with soap and plenty of water. If irritation occurs and persists: Get medical advice.	



Following skin contact:

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

Page 3 of 17

Trade r	de name: POTASSIUM HYDROXIDE, SOLUTION							
Product code: KHO-OT-X**		KHO-OT-X**	Date of compilation: 14 November 2022 Version: 5					
Following eye contact:		ing eye contact:	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation occurs and persists: Get medical advice.					
	Following ingestion:		Never give anything by mouth to an unconscious person. Rinse mouth with water.					
	Self-protection of the first aider		-					
4.2. Most important symptom		mportant symptom	s and effects, both acute and	delayed				
	Following inhalation:		According to our findings, of the substance have not	chemical, physical and toxic been entirely tested.	cological proper	ties		

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

of the substance have not been entirely tested.

According to our findings, chemical, physical and toxicological properties

SECTIC	SECTION 5. Firefighting measures				
5.1.	Extinguishing media				
	Suitable extinguishing media:	Use dry chemical, CO ₂ , water spray (FOG) or foam.			
	Unsuitable extinguishing media:	Avoid solid water stream as it may scatter and spread fire.			
5.2.	Special hazards arising from the su	ibstance or mixture			
	Hazardous by products of fire:	Use water spray to cool fire exposed container surfaces and to protect personnel. Thermal decomposition can produce carbon monoxide (highly toxic) and carbon dioxide (an asphyxiant at sufficient concentrations).			
5.3.	Advice for firefighters				
	Use a self-contained open-circuit compressed air breathing apparatus and fireproof clothing. Cool closed containers exposed to fire with water spray or vapor.				
5.4.	Additional information				
	5 ,	king due to increase in pressure. Remove sources of heat and 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 suitable personal protective equipment (see Section 8).		



Page 4 of 17

Trade name:		ROXIDE, SOLUTION	J		
Product code:	KHO-OT-X**	Date of compilation:	14 November 2022	Version:	5

	Accident prevention methods	s: Evacuate members of all non-essential personnel and those members without protective equipment.				
	Emergency procedures: Mark the area using proper signs.					
6.1.2.	For emergency responders:					
	Use protective equipment; in case of inadequate ventilation use adequate airways protective equipment (see Section 8).					
6.2.	Environmental precautions:					
	Do not dispose of in sewage, drainage system and waterways. In case of large spillage contact National Protection and Rescue Directorate (NPRD) on 112.					
6.3.	Methods and materials for co	ontainment and cleaning up				
6.3.1.	Bunding, covering of drains; capping procedures:	Sand or clay barriers.				
6.3.2.	Cleaning up: After removing the product, use water to wash the work space and used materials.					
6.3.3.	Other information: No information available.					
6.4.	Reference to other sections					
	-					

SECTIC	ECTION 7. Handling and storage					
7.1.	Precautions for safe handling					
7.1.1.	Protection measures					
	Measures to prevent fire:	Use in well ventilated storage rooms. Refer to the manufacturer's recommendations.				
	Measures to prevent aerosol and dust 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 incom	npatibilities				
	Technical measures and storage conditions: Keep in tightly closed and upright set containe well ventilated storage rooms at temperatures ranging from 15 to 25 °C.					
	Packaging materials:	Manufacturer's original packaging.				
	Requirements for storage rooms and vessels:	Keep away from food and drink. Keep the containers tightly closed.				



Page 5 of 17

Trade name:	POTASSIUM HYDROXIDE, SOLUTION				
Product code: KHO-C	DT-X** Date of co	mpilation: 14 Novem	ber 2022 Ver	rsion: 5	

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

SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION							
8.1. Contr	rol pa	rameter	S				
Substance		CAS No			l exposure limit t term values	t Biological limit values	
					ppm	mg/m ³	
-			-		-	-	-
Substance:	-		1				
EC No:	-		CAS No:	-			
DNEL							
					Industrial		
Route of expos	ure:		te effect local		ute effect ystemic	Chronic e local	
Oral		-		-		-	-
Inhalation		-		-		-	-
Dermal		-		-		-	-
Critical physical	l para	meters:	solubility, fl	ammabil	ity, corrosivity:	-	
					Consumer		
Route of exposure:			te effect local		ute effect ystemic	Chronic e local	
Oral		-		-		-	-
Inhalation		-		-		-	-
Dermal		-		-		-	-
PNEC							
Environmental	prote	ction ta	rget		PNEC		



Page 6 of 17

Trade name:		POTASSIUM HYD	ROXIDE, SOLUTION		
Product code:	KHO-OT-X**	Date of compilation:	14 November 2022	Version:	5

Fresh water	No information available
Freshwater sediments	No information available
Marine water	No information available
Marine sediments	No information available
Food chain	No information available
Microorganisms in sewage treatment	No information available
Soil (agricultural)	No information available
Air	No information available

8.2.	Exposure controls						
8.2.1.	Appropriate engineering controls						
	Substance/mixture related measu to prevent exposure during identi uses:		Use personal protective equipment. Do not eat, drink or smoke in the workspace.				
	Structural measures to prevent exposure:		No information available				
	Organisational measures to preve exposure:	nt	Organization of work in order to reduce other worker's influence during work process.				
	Technical measures to prevent exposure:		Secure proper workspace ventilation in order to keep concentration levels in air below permitted levels.				
8.2.2.	Personal protection equipment:						
8.2.2.1.	Eye and face protection:		Safety glasses tested and approved under appropriate standards such as EN 166(EU).				
8.2.2.2.	Skin protection:						
	Hand protection:		Handle with chemical resistant gloves. The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.				
	Other skin protection:		No specific protective equipment required.				
8.2.2.3.	Respiratory protection:		Use when overexposure potential. Improper use of respirators is dangerous.				
8.2.2.4.	Thermal hazards:		No information available				
8.2.3.	Environmental exposure controls						
	Substance/mixture related measures to prevent exposure:	See S	Section 6				
	Structural measures to prevent exposure:	Use ı	modern equipment.				
	Organisational measures to prevent exposure:		ot the work process to the required working conditions of the place.				



Page 7 of 17

Trade name:		POTASSIUM HYD	ROXIDE, SOLUTION	
Product code:	KHO-OT-X**	Date of compilation:	14 November 2022	Version: 5
5				

Technical measures to prevent exposure:

See Section 6

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

SECTIO	SECTION 10. Stability and reactivity					
10.1.	Reactivity:	Not reactive under normal conditions.				
10.2.	Chemical stability:	The product is chemically stable under standard ambient conditions of storing and using (room temperature).				
10.3.	Possibility of hazardous reactions:	No information available.				



Page 8 of 17

Trade name: Product code: KHO-C		POTASSIUM HYDROXIDE, SOLUTION							
		KHO-OT-X**	Date of compilation: 14 November 20			Version:	5		
10.4.	Condit	ions to avoid:		Contact wit extremes.	h incompatible materials ar	nd temperature			
10.5.	Incomp	patible materials:		Strong oxidizers.					
10.6.	Hazardous decomposition products:			thermal dec	ecompose under normal co composition can produce ca c) and carbon dioxide (as as ons).	arbon monoxide			

11.1. Inform	nation on toxicologic	al effects						
Acute	toxicity:							
Route of exposure:	Method	Sp	pecies			Exposu time	'e	Results
Oral:	No informatio available	n	-	N inforn avail		-		-
Dermal:	No informatio available	n	-	inforn	lo nation lable	-		-
Inhalation:	No informatio available	n	-	No information available		-		-
Speci	fic target organ toxic	tity - single e	exposure (ST	OT-SE):				
÷ •		Specific effe			Targe	t organ		Note
Oral:	No information	available			-		-	
Dermal:	No information	available			-		-	
Inhalation:	No information	available			-		-	
Aspira	ation hazard:		-					
	· · · · · · · · · · · · · · · · · · ·							
Irritat	ion and corrosion		C a c a c	_	Fuel and			NI-+-
Skin corrosion/i	No	sure time information le	Species rabbit	<u>s</u> -	Evaluatio	on N -	lethod	Note mild skin irritation
Serious irritation to eyes: No information available			rabbit	2	4 h	-		eye irritation



Page 9 of 17

Trade name:		POTASSIUM HYD	ROXIDE, SOLUTION		
Product code:	KHO-OT-X**	Date of compilation:	14 November 2022	Version:	5

Sensi	tization						
Skin sensitizatio	on: N	lo inform	ation available.				
Respiratory sensitization:	٩	lo inform	ation available.				
Symp	toms relat	ted to ph	ysical, chemical	, and toxicologi	cal properties		
Oral exposure:		No kno	own specific syn	nptoms.			
Dermal exposur	re:	No kno	own specific syn	nptoms. May ca	use skin irritatioi	1.	
Inhalation expo	sure:	No kno	own specific syn	nptoms.			
Eye exposure:		No kno	own specific syn	nptoms. May ca	use mild eye irrit	ation.	
Repea	ated dose	toxicity (subacute, subcł	nronic, chronic)			
	Dc	se	Exposure time	Species	Method	Evaluation	Note
Subacute oral	No info availabl		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	No information available
Subacute inhalation	No information available		No information available	No information available	No information available	No information available	No informatior available
Subchronic oral	No information available		No information available	No information available	No information available	No information available	No informatior available
Subchronic dermal	No info availabl		No information available	No information available	No information available	No information available	No informatior available
Subchronic inhalation	No info availabl	rmation e	No information available	No information available	No information available	No information available	No informatior available
Chronic oral	No info availabl		No information available	No information available	No information available	No information available	No informatior available
Chronic dermal	No info availabl		No information available	No information available	No information available	No information available	No informatior available



Page 10 of 17

Trade name:		ROXIDE, SOLUTION		
Product code:	KHO-OT-X**	Date of compilation:	14 November 2022	Version: 5

Chronic inhalation	No information available	No information available	No informatio available	on	No information available	No informatic available	No information available	
Spe	ecific target organ to	xicity - repeated	exposure (S	STOT	-RE):			
		Specific eff	ects		Target org	an	Note	
Subacute ora	۱ N	lo information a	vailable	No	information av	ailable	No information available	
Subacute der	mal N	lo information a	vailable	No	information av	ailable	No information available	
Subacute inha	alation N	lo information a	vailable	No	information av	ailable	No information available	
Subchronic o	ral N	lo information a	vailable	No	information av	ailable	No information available	
Subchronic de	ermal N	lo information available		No information available		ailable	No information available	
Subchronic in	halation N	lo information available		No information available		ailable	No information available	
Chronic oral	٢	lo information available		No information available		ailable	No information available	
Chronic derm	al N	lo information available		No	No information available		No information available	
Chronic inhal	ation N	o information available		No information available		ailable	No information available	
CM	R effects (carcinoge	nicity mutagenic	city reprodu	ictive				
	cinogenicity:	nerty, matageme	<u> </u>		3 .	e classificatio	on criteria are not	
Mu	tagenicity <i>in-vitro</i> :			Based on available data, the classification criteria are r				
Ger	notoxicity:		Based met.	Based on available data, the classification criteria are not				
Mu	Mutagenicity in-vivo:			on a	vailable data, th	e classificatio	on criteria are not	
Ger	Germ cell mutagenicity:						on criteria are not	
Rep	Reproductive toxicity:			on a	vailable data, th	e classificatio	on criteria are not	
	nmary of evaluati perties:	on of the CN	/IR No infe	orma	tion available			



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

Page 11 of 17

Trade name:		POTASSIUM HYD	ROXIDE, SOLUTION		
Product code:	KHO-OT-X**	Date of compilation:	14 November 2022	Version:	5

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 (s toxicity	hort-term)	Dose	Exposu time		Species	Ν	1ethod	Evaluation	Note
Fish		LC ₅₀	96 hours		-	-		-	-
Crustace	ea:	EC ₅₀	48 hours		-	-		-	-
Algae/a	quatic plan	ts: IC ₅₀	72 hours		-	-		-	-
Other organisms		-	-		-	-		-	-
Chronic (long-term) toxicity) Doza	Exposu time		Species	N	1ethod	Evaluation	Note
Fish		LC ₅₀	96 hours		-	-		-	-
Crustacea:		EC ₅₀	48 hours		-	-		-	-
Algae/aquatic plants:		ts: IC ₅₀	72 hours		-	-		-	-
Other o	ther organisms		-		_	-		_	-
		:	:	i					2
12.2.	Persisten	e and degrac	lability						
	Abiotic de	egradation							
	D	egradation ha	lf-lives		Method			Evaluation	Note
Marine water	No ii	nformation av	ailable	No in	formation avail	able	No info availab	ormation lle	-
Fresh w	ater No ii	nformation av	ailable	No in	formation avail	able	No information available		-
Air	No ii	nformation av	ailable	No in	formation avail	able	No info availab	ormation le	-
Soil	No ii	nformation av	ailable	No in	formation availa	able	No info availab	ormation le	-
	Biodegra	dation							
	adation	Time (d			Method		Evaluatio		Note



Page 12 of 17

Trade name:	•					POT	ASSIUN)RO)	KIDE, SOLU	TION		12 01 17	
Product cod	e:	КНС	D-OT-X*	*	Da	te of	compilat	tion:	14	November	2022	,	Version:	5
No informat available	ion	No ir avail	nformatio able	on		No ir avail	nformatic able	on		information lable		-		
												,		
12.3. Bic	baccum	nulati	ve poten	tial										
			- partitior		icient		1							
Value			ration	рН		°C		ethod		Evaluat			Note	
No information available	avail		nation	-	-		No info availab		on	No informa available	ition	-		
Bio	oconce	entrat	ion Facto	or (BCF)									
Value			Speci	es			Method			Evaluation			Note	
No informat available	ion		information ailable			No information available		No information available		-				
Ch	nronic e	ecoto	xicity											
Valı	ue		Dose	E:	xposı time		Spec	cies		Method	Ev	aluation	No	ote
Chronic toxi	city on	fish	LC ₅₀		No information available		No informa availabl			o formation ⁄ailable		rmation lable	-	
	Chronic toxicity on crustacea (Daphnia) EC ₅₀ No			No information available		No informa availabl		No information available		1	rmation lable	-		
12.4. Mo	obility i	in soi	1											
				stributi	on in	envir	onmenta	l com	partm	nents:				
Su	rface to	ensio	n:											
	Value		°C		Co	oncent	tration		Ν	1ethod			Note	
	o ormati availab	o iı	No nformatio ivailable	on		inforn ilable	nation	No ii avail		nation	_			



Page 13 of 17

Trade name:			POTASSIUM HYDROXIDE, SOLUTION									
Product code:		KHO-OT-X**	Date of comp	Date of compilation: 14 November 2022		Version: 5						
	Adso	rption / desorption										
Transpor	t	A/D coefficient Henry's constant	log Kow	Evaporation rate	Method	Note						
Soil-wate		No information available	No information available	No information available	No information available	-						
Water-ai		No information available	No information available	No information available	No information available	-						
Soil-air		No information available	No information available	No information available	No information available	-						
12.5. 12.6.	This s and to Endoo The su prope	oxic (PBT), or very pe crine disrupting prop ubstance/mixture do	ntains no compone rsistent and very bi erties es not contain com EACH Article 57(f) o	oaccumulative ponents consi r Commission	d to be either persistent (vPvB) at levels of 0.1% dered to have endocrin Delegated regulation (B nigher.	o or higher.						
12.7.	Other	adverse effects										
	No in	formation available										
SECTION	112 0	lisposal consideratio	onc									
13.1.		Disposal consideration e treatment methods										
13.1.1.	Sub	duct/Packaging dispo mit for disposal to th rection.		norized by the	Ministry of Environmen	tal and Nature						
13.1.2.	11/20	to codos/wasta dasis	anations according	to Low:								
15.1.2.		te codes/waste designosal must be made a										
	- -			<u> </u>								
13.1.3.	Was	ste treatment – releva	ant information:									



Page 14 of 17

Trade name:				
Product code:	KHO-OT-X**	Date of compilation:	14 November 2022	Version: 5

	No information availabl	e						
13.1.4.	Sewage disposal – relev	Sewage disposal – relevant information:						
	Waste must not be disp	osed of into the sewage system.						
13.1.5.	Other disposal recomm	endations:						
	authorized by the minis	roduct's remains into the sewage system. Submit the remains to the collectors try in charge. Do not dispose of the packaging into the sewage system. o the collectors authorized by the ministry in charge.						
13.1.6.	Relevant Community pr	ovisions:						
	-							
SECTION	N 14. Transport informati	on						
	Transporting/shipment b	y road (ADR)						
UN num	ber:	Not subject to transport regulations						
UN prop	er shipping name:	-						
Transpor	rt hazard class(es):	-						
Packing group:		-						
Environmental hazards:		-						
Special p	precautions for user:	_						
	Transporting/shipment b	y rail (RID)						
UN num	ber:	Not subject to transport regulations						
UN prop	er shipping name:	-						
Transpor	rt hazard class(es):	-						
Packing	group:	-						
Environn	nental hazards:	-						
Special p	precautions for user:	-						
	Transporting/shipment b	y inland waterways (ADN)						
UN num	ber:	Not subject to transport regulations						
UN prop	er shipping name:	-						
Transpor	rt hazard class(es):	-						
Packing	group:	-						
Environn	nental hazards:	-						
Special p	precautions for user:	-						
	Transporting/shipment b	y sea (IMDG)						
UN num	ber:	Not subject to transport regulations						



Page 15 of 17

Trade name:		POTASSIUM HYD	POTASSIUM HYDROXIDE, SOLUTION					
Product code:	KHO-OT-X**	Date of compilation:	14 November 2022	Version: 5				
				· · · ·				
UN proper shippir	ng name:	-						
Transport hazard	class(es):	-						
Packing group:		-						
Environmental haz	zards:	-						
Special precaution	ns for user:	-						
	Transport in bulk according to Annex II of MARPOL73/78 and the IBC code:							
Transpo	rting/shipment by air	(ICAO-TI/IATA-DGR)						
UN number:		Not subject to transpor	rt regulations					
UN proper shippir	ng name:	-						
Transport hazard	class(es):	-						
Packing group:		-						
Environmental haz	Environmental hazards:							
Special precaution	ns for user:	-						
Further informatio	n: -							

15.1.	Safety, health and environmental regulations/legislation specific for the substance or mixture						
	EU regulations	EU regulations					
	Authorisation and/or restrictions on use						
	Authorisations:	-					
	Restrictions:	-					
	Other EU regulations:	 Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC; Directive 2004/42/CE of the European Parliament and of the Council of 21 April 2004 on the limitation of emissions of volatile organic compounds due to the use of organic solvents in certain paints and varnishes and vehicle refinishing products and amending Directive 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

Trade name:		POTASSIUM HYD	POTASSIUM HYDROXIDE, SOLUTION		
Product code:	KHO-OT-X**	Date of compilation:	14 November 2022	Version:	5
		·	1	1	<u>i</u>

	Information according ² guideline)	1999/13/EC about limitation of emissions of volatile organic compounds (VOC-
	National legislation:	Chemicals Act, Regulation on classification, packaging and labeling of dangerous substances, Ordinance on occupational exposure limit values and on biological limit values, Regulation on categories, types and classification of waste with a waste catalog and list of hazardous waste, Ordinance on writing Material safety data sheet, Transport of Hazardous Substances Act
15.2.	Chemical safety assess	nent
	-	

SECTIO	N 16. C	Other information				
16.1.	Indica	ation of changes:	-			
16.2.	Abbreviations and acronyms:		 ADR: Accord relatif au transport international des marchandises dangereus route (European Agreement Concerning the International Carriage of Dan Goods by Road) IMDG: International Maritime Code for Dangerous Goods IATA: International Air Transport Association GHS: Globally Harmonised System of Classification and Labelling of Chemical EINECS: European Inventory of Existing Commercial Chemical Substances CAS: Chemical Abstracts Service (division of the American Chemical Society DNEL: Derived No-Effect Level (UK REACH) LC50: Lethal concentration, 50 percent LD50: Lethal dose, 50 percent PBT: Persistent, Bioaccumulative and Toxic vPvB: very Persistent and very Bioaccumulative 			
16.3.	Key literature references and source of data:		Manufacturer's MSDS file.			
16.4.		ification and procedu /2008 (CLP)	re used to derive the classification for mixture according to Regulation (EC)			
Classific	ation		Classification procedure			
_			-			
16.5.	Relev	ant H statements (nu	mber and full text)			
		H90 H02	May be corrosive to metals. Harmful if swallowed.			
	H:	314	Causes severe skin burns and eye damage.			
		315	Causes skin irritation.			
		319	Causes serious eye irritation.			
16.6.	Train	ing advice:	-			



Page 17 of 17

Trade name: Product code: KH		POTASSIUM HYDROXIDE, SOLUTION							
		KHO-OT-X**	Date of compilation:	14 November 2022	Version:	5			
16.7.	Further	information:	product) We are not responsible for	rks different volumes (differ consequences in case of fai oper use of the product des	lure to comply with				

ANNEX: Exposure scenario resulting to Chemical safety assessment