

TISSUE MARKING DYES, 5 COLOR SET

The set contains:

Tissue marking dye, black Tissue marking dye, blue Tissue marking dye, green Tissue marking dye, red Tissue marking dye, yellow



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Trade name:		TISSUE MARKING DYES, BLACK						
Product code:	3408-3-X**	Date of compilation:	14 November 2022	Version:	5			

1.1.	Product identifier				
	Trading name:	TISSUE I	MARKII	NG DYES, BL	ACK
	Chemical name:	-			
	Product code:	3408-3-	X**		
1.2.	.2. Relevant identified uses of the substance or mixture and uses advised against				re and uses advised against
	Uses:			For marking	g and orientation of tissue samples.
	Uses advised against:			Only the ide	entified uses are advised.
	Reason why uses advi	sed agai	nst:		t is intended for use only as an <i>in vitro</i> diagnostic vice and there is no reason to use it for other
1.3.	Details of the supplier	of the s	afety d	ata sheet	
	Supplier: BioG		BioGr	inost Ltd.	
	Address: Med		Medjı	ljugorska 59, Zagreb	
	Telephone number:		+385	85 1 2409997	
	Telefax: +38		+385	35 1 2404039	
	e-mail of competent p	person:	<u>msds</u>	ds@biognost.hr	
	National contact:		-		
1.4.	Emergency telephone	Emergency telephone numbers			
	National Protection ar	nd Rescu	e Direc	ctorate:	112
	Medical information:				+385 1 2348 342
	Other information:				-

SECTIO	SECTION 2. Hazards identification					
2.1.	Classification of the substance or mixture					
2.1.1.	Classification according to Regulation (EC) No 1272/2008 (CLP)					
	Hazard class and category code: Hazard statement*:					
	Skin Irr. 2		H315			
	Eye Irr. 2 H319					
2.1.2.	Additional information					
	-					
*For the	full text of H and EUH phrases	see Section 16.				
2.2.	Label elements					
	Product identification: TISSUE MARKING DYES, BLACK					
	Identification number: -					
	Authorisation number:	-				



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	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. P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P302+P352 IF ON SKIN: Wash with plenty of soap and water. P337+P313 If eye irritation persists: 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. Co	SECTION 3. Composition/information on ingredients						
CAS/ EC/ Index number	REACH Registration No	Weight % content (or range)	Identification name	Classification according to Regulation (EC) No 1272/2008 (CLP)			
67-63-0/ 200-661-7/ 603-117-00-0	-	<4	propan-2-ol	Flam. Liq. 2; H225 Eye Irr. 2; H319 STOT SE 3; H336			
7664-41-7 231-635-3/ 007-001-00-5	-	<1	ammonia	Flam. Gas 2; H221 Skin Corr. 1B; H314 Acute Tox. 3; H331 Aquatic Acute 1; H400			

SECTIO	SECTION 4. First aid measures				
4.1.	Description of first aid mea	Description of first aid measures			
	General notes:	Move out of dangerous area. Show this safety data sheet to the doctor and first responders.			



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	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 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	ns and effects, both acute and delayed
	Following inhalation:	No information available.
	Following skin contact:	No information available.
	Following eye contact:	No information available.
	Following ingestion:	No information available.
4.3.	Indication of any immedi	ate medical attention and special treatment needed
	Treat symptomatically.	

SECTIO	ON 5. Firefighting measures				
5.1.	Extinguishing media				
	Suitable extinguishing media:	Use dry chemical, CO ₂ , water spray (FOG) or foam.			
	Unsuitable extinguishing media:	Avoid solid water stream as it may scatter and spread fire.			
5.2.	Special hazards arising from the su	bstance or mixture			
	Hazardous by products of fire:	Use water spray to cool fire exposed container surfaces and to protect personnel. Thermal decomposition can produce carbon monoxide (highly toxic) and carbon dioxide (an asphyxiant at sufficient concentrations).			
5.3.	Advice for firefighters				
	Use a self-contained open-circuit compressed air breathing apparatus and fireproof clothing. Cool closed containers exposed to fire with water spray or vapor.				
5.4.	Additional information				
	9 7	ing due to increase in pressure. Remove sources of heat and nvironment with extinguishing media.			

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



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

SECTIO	DN 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. The	noroughly w	ash hands after work and before eating.
7.2.	Conditions for safe storage, including any incor	npatibilities	
	Technical measures and storage conditions:	well venti	ghtly closed and upright set containers in a lated storage rooms at temperatures rom 15 to 25°C.
	Packaging materials: Manufa		urer's original packaging.
	Requirements for storage rooms and vessels:	Keep awa	y from food and drink. Keep the containers osed.



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

SECTION 8. EXPO	SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION								
8.1. Control p	aramete	rs							
Substance		CAS No		•	Occupational exposure limit values/short term values		Bio	Biological limit values	
				ppm	mg/	m³			
Isopropanol		67-63	3-0	400/500	999/1	.250		-	
Ammonia		7664-4	11-7	20/50	14/3	36		-	
Substance: -									
EC No: -		CAS No:							
DNEL									
				Industrial					
Route of exposure:		te effect local	Acute effect systemic		Chronic effect			Chronic effect systemic	
Oral	-		-	,	-			-	
Inhalation	36 mg		47.6 mg	-	14 mg/ (ammor			500 mg/m ³ (propan-2-ol) 47.6 mg/ m ³ (ammonia)	
I Dermai		6.8 mg,	/kg bw/day nia)	-			888 mg/kg bw/day (propan-2-ol) 6.8 mg/kg bw/day (ammonia)		
Critical physical parameters: solubility, flammability, corrosivity:									
	Consumer								
Route of exposure:		te effect local		ute effect ystemic	Chro	onic effect local		Chronic effect systemic	



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Oral		-	6.8 mg/kg (ammonia)	•	-	26 mg/kg bw/day (propan-2-ol) 6.8 mg/kg bw/day (ammonia)	
Inhalation	n	-	-		-	89 mg/m³ (propan-2	2-ol)
Dermal		-	6.8 mg/kg (ammonia)	-	-	319 mg/kg (propan-2-ol) 6.8 mg/kg bw/day (ammonia)	
PNEC							
Environm	ental pro	otection target		PNEC			
Fresh wat	ter			No in	formation available		
Freshwate	er sedime	ents			formation available		
Marine w	ater			No in	formation available		
Marine se	ediments			No in	formation available		
Food cha	in			No information available			
Microorg	anisms ir	n sewage treatmer	nt	No information available			
Soil (agrid	cultural)			No information available			
Air				No information available			
8.2.	Exposi	ure controls					
8.2.1.	Appro	priate engineering	g controls				
		ance/mixture relat vent exposure dur		Use personal protective equipment. Do not eat, drink or smoke in the workspace.			r
	Structi exposi	ural measures to p ure:	prevent	No information available			
	Organ expos	isational measure ure:	s to prevent	Organization of work in order to reduce other worker's influence during work process.			
	i i		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.	FIVE and tace protection.		Safety glasses tested and approved under appropriate standards such as EN 166(EU).				
8.2.2.2.	Skin p	rotection:					
	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 it.			



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	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 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	

Information on basic physica	l and chemical properties	
	Value	Method
Physical state:	liquid	No information available
Colour:	black	No information available
Odour/odour threshold:	faint ammonia	No information available
Melting point / freezing point:	No information available	No information available
Boiling point or initial boiling point and boiling range:	No information available	No information available
Flammability:	No information available	No information available
Lower and upper explosion limit:	No information available	No information available
Flash point:	> 93.3 °C	No information available
Auto-ignition temperature:	No information available	No information available
Decomposition temperature	No information available	No information available
pH:	8.5 -10.0	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	1.02 - 1.14 (20°C)	No information available



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

SECTION 11. To	xicological information				
11.1. Inform	ation on toxicological eff	ects			
Acute	toxicity:				
Route of exposure:	Method	Species	Effecti Dose LD ₅₀ /LC ATE _{mix}	Exposure time	e Results
Oral:	No information available	rat	LD ₅₀	No information available	(2-propanoll)
Dermal:	No information available	rabbit	LD ₅₀	No information available	(2-propanol)
Inhalation:	No information available	rat	LC ₅₀	8 h (isopropan 4 h (ammonia	9.850 mg/m³ air
Specif	ic target organ toxicity - s	single exposure ((STOT-SE):		
	Spec	ific effects		Target organ	Note
Oral:	No information availa	able	_	_	-



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Dermal:	No info	ormatio	n available		_	_		
Inhalation:			n available		_	_		
						!		
Aspira	ation hazard	d:		-				
<u> </u>			<u> </u>					
Irritati	on and cor	rosion						
·		Exp	osure time	Species	Evaluation	Method	Note	
Skin corrosion/i	rritation:	No availa	information able	rabbit	-	-	mild skin irritation	
Serious irritation to eyes: No avail		No availa	information able	rabbit	24 h	-	eye irritation	
	ization							
Skin sensitizatio	n: Ma	ay cause	e an allergic sk	in reaction.				
Respiratory sensitization:	All	ergic pe	ersons may dis	play irritation.				
Symn	toms relate	d to ph	vsical chemica	al, and toxicolog	ical properties			
Oral exposure:		•	•		ause discomfort if	swallowed.		
Dermal exposur	e:				ause discomfort.			
Inhalation expos			known specific symptoms. Aerosols/vapor may cause respiratory system irritation.					
Eye exposure:		No kno	nown specific symptoms. May cause mild eye irritation.					
Repea	ited dose to	oxicity (subacute, subo	chronic, chronic)				
	Dos	e	Exposure time	Species	Method	Evaluation	Note	
Subacute oral	No inforr available	nation	No information available	No information available	No information available	No information available	No information available	
Subacute dermal	No inforr available	nation	No information available	No information available	No information available	No information available	No information available	
Subacute inhalation	No inforr available	nation	No information available	No information available	No information available	No information available	No information available	
Subchronic oral	No inforr available	nation	No information available	No information available	No information available	No information available	No information available	



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Subchronic dermal	No information available	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	No information available
Chronic oral	No information available	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	No information available
Chronic inhalation	No information available	No information available	No information available	No information available	No information available	No information available

Specific target or	rgan toxicity - repeated exposure	(STOT-RE):	
	Specific effects	Target organ	Note
Subacute oral	No information available	No information available	No information available
Subacute dermal	No information available	No information available	No information available
Subacute inhalation	No information available	No information available	No information available
Subchronic oral	No information available	No information available	No information available
Subchronic dermal	No information available	No information available	No information available
Subchronic inhalation	No information available	No information available	No information available
Chronic oral	No information available	No information available	No information available
Chronic dermal	No information available	No information available	No information available
Chronic inhalation	No information available	No information available	No information available

CMR effects (carcinogenicity, mutagenicity, reproductive toxicity)



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	Carcinogenicity:	Product not classified as a carcinogen by the National Toxicology Program (NTP), the International Agency for Research on Cancer (IARC), or the Occupational Safety and Health Administration (OSHA).					
	Mutagenicity in-vitro:	No information available					
	Genotoxicity:	No information available					
	Mutagenicity in-vivo:	No information available					
	Germ cell mutagenicity:	No information available					
	Reproductive toxicity:	No information available					
	Summary of evaluation of the CMR properties:	No information available					
11.2.	Information on other hazards:						
11.2.1.	Endocrine disrupting properties:						
	No known endocrine disrupting properties that affect human health.						
11.2.2.	Other information:						
	-						

SECTION 12. Ecologic	al informa	ntion				
12.1. Toxicity						
Acute (short-term) toxicity	Dose	Exposure time	Species	Method	Evaluation	Note
Fish	LC ₅₀	96 hours	Pimephales promelas (fathead minnow)	-	-	9.640 mg/l (2-propanol)
Crustacea:	EC ₅₀	48 hours	Daphnia magna (water flea)	-	-	13.299 mg/l (2-propanol) 25.4 mg/l (ammonia)
Algae/aquatic plants:	IC ₅₀	72 hours	Desmodesmus subspicatus (green algae)	-	-	>1.000 mg/l (2-propanol)
Other organisms	-	-	-	-	-	-
Chronic (long-term) toxicity	Doza	Exposure time	Species	Method	Evaluation	Note
Fish	LC ₅₀	96 hours	-	-	-	-
Crustacea:	EC ₅₀	48 hours	-	-	-	-



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					-					
Algae/aquati	c plants:	IC ₅₀	72 h	ours	-	-			-	
Other organi	sms	-	-		-	-			-	
12.2. Per	sistence	and degrad	ability							
Abi	iotic deg	radation								
	Deg	gradation ha	lf-lives		Method			Evaluation		Note
Marine water	No info	ormation av	ailable	No	o information ava	ilable	No inforr	No information available		-
Fresh water	No info	ormation av	ailable	No	o information ava	ilable	No inforr	nation ava	ilable	-
Air	No info	ormation av	ailable	No	o information ava	ilable	No inforr	nation ava	ilable	-
Soil	No info	ormation av	ailable	No	o information ava	ilable	No inforr	nation ava	ilable	-
	I			i			i		:	
Bio	odegrada	ntion								
% Degradat	ion	Time (days)			Method	Evaluation			Note	
	lo information No information vailable available					No information available				
12.3. Bio	accumul	ative poten	ial							
Oct	tanol-wa	ter partition	coeffi	cient (lo	g Kow)					
Value	Conce	entration	рН	°C	Method		Evaluation	1	Note	
No		ormation	-	_	No informati	on				
information available	availab	ole			available		available			
available										
		1								
Bio	concent	ration Facto	r (BCF)							
Value		Specie			Method		Evaluation		Note	
No informati	on N	o informatio		No	information	No	o information			
available	a۱	ailable		av	ailable	av	vailable	-		
Ch	ronic ec	otoxicity	-							
Valu	ıe	Dose		posure time	Species		Method	Evaluation	n N	ote



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Chronic ·	toxicity or	available		No inform availab		No informa availab	ation le	No information available	-		
	c toxicity on EC ₅₀		No information available	No inform availab		No informa availab	ation	No information available	ı -		
12.4.	Mobility	in soil									
	Known o	r pred	licted dist	ribution in env	ironment	al comp	artments	•			
	Surface t	tensior	n:								
	Value		°C	Conce	ntration		Metho	od		Note	
	No informat n availab	io ir	lo nformatio vailable	No infor available		No in availa	information lable -		-		
Transpor	· /	A/D co	desorption efficient constant	loa Ko	w E	vaporat	ion rate	Me	thod	Note	
Soil-wate	No No	inform		No inform		lo inforr	mation	No info			
Water-ai	r No	ilable inform ilable	nation	available No inform available	ation N	vailable Io inforr vailable	mation	availabl No info availabl	rmation	_	
Soil-air	No	inform ilable	nation	No inform	ation N	lo inforr vailable		No info	rmation	_	
					1 -				- 1		
12.5.				assessment							
				contains no co persistent and	•			•			ive
12.6.	Endocrin	ne disri	upting pro	operties							
	The subs	stance, es acco	/mixture of ording to	does not conta REACH Article (EU) 2018/605	57(f) or C	ommiss	ion Deleg	gated reg			or
	Commis										_
12.7			offort-								
12.7.	Other ad	lverse	effects n available								



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13.1.	Waste treatment method	1c			
13.1.	waste treatment method				
13.1.1.	Product/Packaging dis	posal:			
	Submit for disposal to Protection.	the legal person authorized by the Ministry of Environmental and Nature			
13.1.2.	Waste codes/waste de	signations according to Law:			
	Disposal must be mad	e according to official regulations.			
13.1.3.	Waste treatment – rele	vant information:			
	No information availab	ole			
13.1.4.	Sewage disposal – rele	vant information:			
	Waste must not be disposed of into the sewage system.				
13.1.5.	Other disposal recomm	nendations:			
	authorized by the mini	product's remains into the sewage system. Submit the remains to the collectors stry in charge. Do not dispose of the packaging into the sewage system. to the collectors authorized by the ministry in charge.			
13.1.6.	Relevant Community p	rovisions:			
	-				
SECTION	N 14. Transport informa	tion			
	Transporting/shipment				
UN num		Not regulated			
UN prop	er shipping name:	-			
Transpo	rt hazard class(es):	-			
Packing	group:	-			
Environr	nental hazards:	-			
Special p	precautions for user:	-			
•	Transporting/shipment	by rail (RID)			
UN num		Not regulated			
UN prop	er shipping name:				
Transpo	rt hazard class(es):				



Trade name:

Further information:

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

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

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Product code:	3408-3-X**	Date of compilation:	14 November 2022	Version:	5		
Environmental ha	zards:	-					
Special precautio	ns for user:	_					
Transpo	orting/shipment by inl	and waterways (ADN)					
UN number:		Not regulated					
UN proper shippi	ng name:	-					
Transport hazard class(es):		-					
Packing group:		-					
Environmental hazards:		-					
Special precautions for user:		-					
Transporting/shipment by sea		a (IMDG)					
UN number:		Not regulated					
UN proper shipping name:		-					
Transport hazard	class(es):	-					
Packing group:		-					
Environmental ha	zards:	-					
Special precautio	ns for user:	-					
	according to Annex II and the IBC code:	-					
Transpo	orting/shipment by air	(ICAO-TI/IATA-DGR)					
UN number:		Not regulated					
UN proper shippi	ng name:	-					
Transport hazard	class(es):	-					
Packing group:		-					
Environmental ha	zards:	-					
Special precautio	ns for user:	-					

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



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Trade name:		TISSUE MARKING DYES, BLACK				
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	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 (EC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC; Directive 2004/42/CE of the European Parliament and of the Council of 21 April 2004 on the limitation of emissions of volatile organic compounds due to the use of organic solvents in certain paints and varnishes and vehicle refinishing products and amending Directive 1999/13/EC; Council Directive 98/24/EC of 7 April 1998 on the protection of the health and safety of workers from the risks related to chemical agents at work; Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006; REACH Restrictions on the manufacturing, placing on the market and use of certain dangerous substances, mixtures and articles (Annex XVII);
	Information according 1 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 assessn	nent

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



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16.4.		Classification and procedure used to derive the classification for mixture according to Regulation (EC) 1272/2008 (CLP)				
Classific	lassification		Classification procedure			
_			-			
16.5.	Rele	vant H statements (nu	mber and full text)			
		221	Flammable gas.			
	225 314 315		Highly flammable liquid and vapour.			
			Causes severe skin burns and eye damage.			
			Causes skin irritation.			
	П.	319	Causes serious eye irritation.			
		331	Toxic if inhaled.			
		336	May cause drowsiness or dizziness.			
		400	Very toxic to aquatic life.			
16.6.	Trair	ning advice:	-			
	16.7. Further information:				"X" in the product code marks different volumes (different packaging of the product)	
16.7.			We are not responsible for consequences in case of failure to comply with instructions for use or improper use of the product described in this material safety data sheet.			

ANNEX:	Exposure	scenario	resulting	to Chemical	safety	assessment

-



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Trade name:	TISSUE MARKING DYES, BLUE					
Product code:	3408-5-X**	Date of compilation:	14 November 2022	Version:	5	

1.1.	Product identifier					
	Trading name:	TISSUE	MARKI	NG DYES, BL	UE	
	Chemical name:	-				
	Product code:	3408-5-	X**			
1.2.	Relevant identified uses of the substance or mixture and uses advised against					
	Uses:			For marking	g and orientation of tissue samples.	
	Uses advised against:			Only the id	entified uses are advised.	
	Reason why uses advi	· · · · · · · · · · · · · · · · · · ·			t is intended for use only as an <i>in vitro</i> diagnostic vice and there is no reason to use it for other	
1.3.	Details of the supplier of the safety data sheet					
	Supplier:	Supplier: [BioGnost Ltd.		
	Address:		Medjugorska 59, Zagreb			
	Telephone number:		+385	+385 1 2409997		
	Telefax:		+385	385 1 2404039		
	e-mail of competent p	person:	<u>msds</u>	sds@biognost.hr		
	National contact:		-			
1.4.	Emergency telephone	number	'S			
	National Protection ar	nd Rescu	e Direc	ctorate:	112	
	Medical information:				+385 1 2348 342	
	Other information:				-	

SECTIO	N 2. Hazards identification				
2.1.	Classification of the substance or mixture				
2.1.1.	Classification according to R	egulation (EC) No	1272/2008 (CLP)		
	Hazard class and cat	egory code:	Hazard statement*:		
	Skin Irr. 2		H315		
	Eye Irr. 2		H319		
2.1.2.	Additional information				
	-				
*For the	full text of H and EUH phrase	s see Section 16.			
2.2.	Label elements				
	Product identification:	TISSUE MARKIN	NG DYES, BLUE		
	Identification number:	-			
	Authorisation number:	-			



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Trade name:	TISSUE MARKING DYES, BLUE					
Product code:	3408-5-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. P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P302+P352 IF ON SKIN: Wash with plenty of soap and water. P337+P313 If eye irritation persists: Get medical advice/attention.	
	Supplemetal hazard information (EU):	-	
2.3.	Other hazards		
		oting properties. tains no components considered to be either persistent, bioaccumulative sistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.	

SECTION 3. Co	SECTION 3. Composition/information on ingredients				
CAS/ EC/ Index number	REACH Registration No	Weight % content (or range)	Identification name	Classification according to Regulation (EC) No 1272/2008 (CLP)	
67-63-0/ 200-661-7/ 603-117-00-0	-	<4	propan-2-ol	Flam. Liq. 2; H225 Eye Irr. 2; H319 STOT SE 3; H336	
7664-41-7 231-635-3/ 007-001-00-5	-	<1	ammonia	Flam. Gas 2; H221 Skin Corr. 1B; H314 Acute Tox. 3; H331 Aquatic Acute 1; H400	

SECTIO	SECTION 4. First aid measures		
4.1.	Description of first aid measures		
	General notes:	Move out of dangerous area. Show this safety data sheet to the doctor and first responders.	



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Trade name:		TISSUE MARK	ING DYES, BLUE		
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	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 eye contact:	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation occurs and persists: Get medical advice.		
	Following ingestion:	Never give anything by mouth to an unconscious person. Rinse mouth with water.		
	Self-protection of the first aider	-		
4.2.	Most important symptoms and effects, both acute and delayed			
	Following inhalation:	No information available.		
	Following skin contact:	No information available.		
	Following eye contact:	No information available.		
	Following ingestion:	No information available.		
4.3.	Indication of any immediate medical attention and special treatment needed			
	Treat symptomatically.			

SECTIO	ION 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	ubstance 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 clo containers exposed to fire with water spray or vapor.			
5.4.	Additional information			
	Heating may cause container cracking due to increase in pressure. Remove sources of heat and ignition. Do not contaminate the environment with extinguishing media.			

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



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Trade name:		TISSUE MARK	ING DYES, BLUE		
Product code:	3408-5-X**	Date of compilation:	14 November 2022	Version:	5

	Protective equipment:	Use suitable personal protective equipment (see Section 8).
	Accident prevention methods	Evacuate members of all non-essential personnel and those members without protective equipment.
	Emergency procedures:	Mark the area using proper signs.
6.1.2.	For emergency responders:	
	Use protective equipment; in 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 containment and cleaning up	
6.3.1.	Bunding, covering of drains; capping procedures:	Sand or clay barriers.
6.3.2.	Cleaning up:	After removing the product, use water to wash the work space and used materials.
6.3.3.	Other information:	No information available.
6.4.	Reference to other sections	
	-	

SECTIO	DN 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. The	noroughly w	ash hands after work and before eating.	
7.2.	Conditions for safe storage, including any incompatibilities			
	Technical measures and storage conditions:	well venti	ghtly closed and upright set containers in a lated storage rooms at temperatures rom 15 to 25 °C.	
	Packaging materials:	Manufact	urer's original packaging.	
	Requirements for storage rooms and vessels: Keep aw tightly cl		y from food and drink. Keep the containers osed.	



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Trade name:		TISSUE MARKING DYES, BLUE			
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7.3.	Specific end use(s)	chemicals. Do not store with incompatible materials (see Section 9).
7.0	6 (6)	(see Section 9).
	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
	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.

SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1. Control pa	rameter	rs						
Substance		CAS N	No	Occupational values/shor	•		Biological limit values	
				ppm	mg/ı	m^3		
Isopropanol		67-63	-0	400/500	999/1.	.250	-	
Ammonia		7664-4	1-7	20/50	14/3	36	-	
Substance: -								
EC No: -		CAS No:	-					
DNEL								
				Industrial				
Route of exposure:	Acute effect		Acute effect		Chronic effect		Chronic effect	
Route of exposure.		local	systemic		local		systemic	
Oral	-		-		-		-	
Inhalation	36 mg, (ammo		47.6 mg	•	14 mg/ m³ (ammonia)		500 mg/m ³ (propan-2-ol) 47.6 mg/ m ³ (ammonia)	
Dermal -			6.8 mg/kg bw/day (ammonia)		-		888 mg/kg bw/day (propan-2-ol) 6.8 mg/kg bw/day (ammonia)	
Critical physical para	ammabil	ity, corrosivity:		-				
				Consumer				
Route of exposure:		te effect local		ute effect ystemic	Chronic effect local		Chronic effect systemic	



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Trade na	ame:	TISSUE MARKING DYES, BLUE							
Product	code:	3408-5-X**	Date of c	ompilatio	า: 14	4 November 2022	2	Version:	5
Oral		-	6.8 mg/kg (ammonia	-	ow/day -		26 mg/kg bw/day (propan-2-ol) 6.8 mg/kg bw/day (ammonia)		
Inhalatio	n	-	-		-		89 mg/r	m³ (propan-	2-ol)
Dermal		-	6.8 mg/kg (ammonia	-	-		319 mg. (propan 6.8 mg/ (ammor	-2-ol) kg bw/day	
PNEC									
Environm	nental pro	tection target		PNEC					
Fresh wa	ter			No info	ormatic	on available			
Freshwat	er sedime	nts		No info	ormatic	on available			
Marine w	/ater			No info	ormatic	on available			
Marine sediments			No info	ormatic	on available				
Food cha	nin			No info	No information available				
Microorg	janisms in	sewage treatment	t	No info	No information available				
Soil (agri	cultural)			No info	No information available				
Air				No info	No information available				
8.2.	Exposu	re controls							
8.2.1.	Approp	oriate engineering	controls	·					
		nce/mixture relate rent exposure duri		Use perso	•	otective equipment orkspace.	t. Do not	eat, drink o	r
	Structu exposu	iral measures to pr ire:	revent	No inform	No information available				
	Organi exposu	sational measures ire:	to prevent			work in order to re work process.	educe oth	er worker's	
	Technic exposu	cal measures to pr ire:	event		-	orkspace ventilation vels in air below pe		•	
8.2.2.	Person	al protection equip	oment:						
8.2.2.1.	Eye and	d face protection:				sted and approved as EN 166(EU).	d under a	ppropriate	
8.2.2.2.	Skin pr	otection:							
	Hand p	protection:		protective	glove	mical resistant gloves have to satisfy the /EEC and the stand	e specific	ations of EL	



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	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:	Adapt the work process to the required working conditions workplace.				
	Technical measures to prevent exposure:	t See Section 6				

9.1.	Information on basic physical a	and chemical properties	
		Value	Method
	Physical state:	liquid	No information available
	Colour:	blue	No information available
	Odour/odour threshold:	faint ammonia	No information available
	Melting point / freezing point:	No information available	No information available
	Boiling point or initial boiling point and boiling range:	No information available	No information available
	Flammability:	No information available	No information available
	Lower and upper explosion limit:	No information available	No information available
	Flash point:	> 93.3 °C	No information available
	Auto-ignition temperature:	No information available	No information available
	Decomposition temperature:	No information available	No information available
	рН:	8.5 -10.0	No information available
	Kinematic viscosity:	No information available	No information available
	Solubility:	No information available	No information available
	Partition coefficient noctanol/water (log value):	No information available	No information available
	Vapour pressure:	No information available	No information available
	Density and/or relative density	1.02 - 1.14 (20°C)	No information available



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

SECTIO	N 11. Toxi	icological information					
11.1.	Informat	ion on toxicological eff	ects				
	Acute to	xicity:					
Route o exposur		Method	Species	Effectiv Dose LD ₅₀ /LC ₅ ATE _{mixt}	Exposur Exposur	e Results	
Oral:		No information available	rat	LD ₅₀	No informati availabl	(2-propanoll)	
Dermal:		No information available	rabbit	LD ₅₀	No informati availabl	(2-propanol)	
Inhalatio	on:	No information available	rat	LC ₅₀	8 h (isopropar 4 h (ammoni	9.850 mg/m³ air	
	Specific	target organ toxicity - s	ingle exposure (STOT-SE):			
		Spec	ific effects		Target organ	Note	
Oral:		No information availa	able		-	-	



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Trade name:				TISSUE MARK	ING DYES, BL	UE		
Product code:	3408	-5-X**	Date o	of compilation:	14 Novembe	er 2022	Version:	5
Dermal:	No inf	ormatio	n available		_	_		
Trade name: Product code: 3408-5-X** Date of compilation: 14 November 2022 Dermal: No information available								
	140 1111	Jimatio	available					
Aspira	tion hazar	d:						
Irritati	on and co	rrosion						
÷		Exp	osure time	Species	Evaluation	Method	Note	
Skin corrosion/ii	ritation:			rabbit	-	-	mild skin irritation	
Serious irritation	to eyes:			rabbit	24 h	-	eye irritatic	on
Sensit	ization							
Skin sensitizatio	n: M	ay cause	e an allergic sk	in reaction.				
	Al	lergic pe	ersons may dis	play irritation.				
	oms relate		•					
-						f swallowed.		
•								
······································	sure:						system irritat	ion.
Eye exposure:		No kno	own specific sy	mptoms. May cau	use mild eye irrit	ation.		
Repea	ted dose t	oxicity (chronic, chronic)				
	Dos	se .		Species	Method	Evaluation	Note	
Subacute oral			information	information	information	information	No informati available	on
			information	information	information	information	No informati available	on
Subacute inhalation	No infor						No informati available	on
Subchronic	No infor	mation	No information	No information	No information	No information	No informati	



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Trade name:		TISSUE MARK	ING DYES, BLUE	<u> </u>	
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Subchronic dermal	No information available	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	No information available
Chronic oral	No information available	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	No information available
Chronic inhalation	No information available	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	No information available
Subacute dermal	No information available	No information available	No information available
Subacute inhalation	No information available	No information available	No information available
Subchronic oral	No information available	No information available	No information available
Subchronic dermal	No information available	No information available	No information available
Subchronic inhalation	No information available	No information available	No information available
Chronic oral	No information available	No information available	No information available
Chronic dermal	No information available	No information available	No information available
Chronic inhalation	No information available	No information available	No information

CMR effects (carcinogenicity, mutagenicity, reproductive toxicity)



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Product code:	3408-5-X**	Date of compilation:	14 November 2022	Version:	5

	Carcinogenicity:	Product not classified as a carcinogen by the National Toxicology Program (NTP), the International Agency for Research on Cancer (IARC), or the Occupational Safety and Health Administration (OSHA).			
	Mutagenicity in-vitro:	No information available			
	Genotoxicity:	No information available			
	Mutagenicity in-vivo:	No information available			
	Germ cell mutagenicity:	No information available			
	Reproductive toxicity:	No information available			
	Summary of evaluation of the CMR properties:	No information available			
11.2.	Information on other hazards:				
11.2.1.	Endocrine disrupting properties:				
	No known endocrine disrupting properties that affect human health.				
11.2.2.	Other information:				
	-				

SECTION 12. Ecologic	al informa	ation				
12.1. Toxicity						
Acute (short-term) toxicity	Dose	Exposure time	Species	Method	Evaluation	Note
Fish	LC ₅₀	96 hours	Pimephales promelas (fathead minnow)	-	-	9.640 mg/l (2-propanol)
Crustacea:	EC ₅₀	48 hours	Daphnia magna (water flea)	-	-	13.299 mg/l (2-propanol) 25.4 mg/l (ammonia)
Algae/aquatic plants:	IC ₅₀	72 hours	Desmodesmus subspicatus (green algae)	-	-	>1.000 mg/l (2-propanol)
Other organisms	-	-	-	-	-	-
Chronic (long-term) toxicity	Doza	Exposure time	Species	Method	Evaluation	Note
Fish	LC ₅₀	96 hours	-	_	-	-
Crustacea:	EC ₅₀	48 hours	-	-	-	-



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Trade name		TISSUE MARKING DYES, BLUE									
Product cod	e:	3408-5-X*	r *	Date of	f compilation	: 14	November	2022		Versio	n: 5
Algae/aquation		nts: IC ₅₀	72 ho	urs -		-	-		-		
Other organis	sms	_	-	-		_					
		nce and degra	dability								
Abi		degradation					-			-	
		Degradation h	alf-lives		Method			Evalu	ıation		Note
Marine water	No	information a	vailable	No ir	nformation av	ailable	No info	rmatio	n availak	ole	_
Fresh water	No	information a	vailable	No ir	nformation av	ailable	No info	rmatio	n availab	ole	-
Air	No	information a	vailable	No ir	nformation av	ailable	No info	rmatio	n availab	ole	-
Soil	No	information a	vailable	No ir	nformation av	ailable	No info	rmatio	n availak	ole	-
Bio	degr	adation						_		_	
% Degradati	on	Time (days)		Method		Evaluation			Note	
No information	on	No informat	ion	No ir	nformation	No in availa	nformation		-	_	
availaDIE		avalidDIE		avall	avit	availa	301E				
12.3. Bioa	accur	mulative poter	ntial								
		-water partitio		ient (log l	(ow)						
Value	1	ncentration	рН	°C	Method		Evaluati	on		Note	
No		information	-	-	No informat		No informat		-		
information		ilable			available		available				
available											
		=									
	conc	entration Fact			NA		F. 1			N	
Value No information	3 0	Spec No informat		N1 - *	Method		Evaluation information	-		Note	
No information available available		No ir availa	nformation able		information ailable	_	-				
				- 7 Jill	=	3,0	- · -				
		:		<u> </u>				<u> </u>			
Chr	onic	ecotoxicity									
Valu		Dose		oosure ime	Species	ľ	Method	Eval	uation	N	Note



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Trade r	name:				TISSUE	MARK	ING DY	ES, BLU	JE	······································	
Produc	t code:	340)8-5-X**	Date o	f compil	lation:	14 No	vember	2022	Version: 5	
Chronic	toxicity or	fish	LC ₅₀			No ormation informa iilable availabl			No information available	n -	
	toxicity or ea (Daphni		EC ₅₀	No information available	No inform availab		No informavailab		No information available	n -	
12.4.	Mobility	in soil									
	Known c	r pred	licted distr	ibution in envir	ronmenta	al comp	artments	•			
	Surface t	ensior	n:								
	Value		°C	Concen	tration		Metho	od		Note	
	No informat n availab		lo nformation vailable	No inforr available		No in availa	formation ble	n	-	-	
Transpo	rt	A/D co	lesorption pefficient	log Kov	v E	vaporat	on rate	M	ethod	Note	
Soil-wat	.er No	enry s inform lable	constant	No informa		lo inforn vailable	nation	No info	ormation	-	
Water-a	ir No	inform lable	nation	No informa available	ation N	lo inforn vailable	nation		ormation	_	
Soil-air		inform lable	nation	No informa available		lo inforn vailable	nation	No info	ormation ole	-	
12.5.	Results o	of PBT	and vPvB	assessment							
				ontains no com ersistent and v						nioaccumulative r higher.	
12.6.	Endocrin	e disrı	upting pro	perties							
	propertie	es acco	ording to F	oes not contair REACH Article 5 (EU) 2018/605 a	7(f) or C	ommissi	on Deleg	gated re			
12.7.	Other ac	verse	effects								



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Trade name:		ING DYES, BLUE			
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12.1	N 13. Disposal considera				
13.1.	Waste treatment method	35			
13.1.1.	Product/Packaging dis	posal:			
	Submit for disposal to Protection.	the legal person authorized by the Ministry of Environmental and Nature			
13.1.2.	Waste codes/waste de	signations according to Law:			
	Disposal must be made	e according to official regulations.			
13.1.3.	Waste treatment – rele	vant information:			
	No information availab	ole			
13.1.4.	Sewage disposal – rele	vant information:			
	Waste must not be dis	posed of into the sewage system.			
13.1.5.	Other disposal recomn	nendations:			
	Do not dispose of the product's remains into the sewage system. Submit the remains to the colle authorized by the ministry in charge. Do not dispose of the packaging into the sewage system. S the packaging to the collectors authorized by the ministry in charge.				
13.1.6.	Relevant Community p				
	-				
SECTION	N 14. Transport informa	tion			
	Transporting/shipment				
UN num		Not regulated			
UN prop	er shipping name:	-			
Transpo	rt hazard class(es):	-			
Packing	group:	-			
Environmental hazards:		-			
Special precautions for user:		-			
Transporting/shipment by		by rail (RID)			
UN number:		Not regulated			
UN prop	er shipping name:				
	rt hazard class(es):				
Transpo	t Hazara Class(Cs).				



Trade name:

SAFETY DATA SHEET

TISSUE MARKING DYES, BLUE

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

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Product code: 3	408-5-X^^	Date of compliation:	14 November 2022	version: 5			
Environmental hazard	S :	-					
Special precautions for	r user:	-					
Transporting	g/shipment by inla	nd waterways (ADN)					
UN number:		Not regulated					
UN proper shipping n	ame:	-					
Transport hazard class	s(es):	-					
Packing group:		-					
Environmental hazard	s:	-					
Special precautions fo	or user:	-					
Transportin	g/shipment by sea	(IMDG)					
UN number:		Not regulated					
UN proper shipping n	ame:	-					
Transport hazard class	s(es):	-					
Packing group:		-					
Environmental hazard	s:	-					
Special precautions fo	or user:	-					
Transport in bulk according of MARPOL73/78 and		-					
Transporting	g/shipment by air	ICAO-TI/IATA-DGR)					
UN number:		Not regulated					
UN proper shipping n	ame:	-					
Transport hazard class	Transport hazard class(es):		-				
Packing group:		-					
Environmental hazards:		-					
Special precautions fo	or user:	-					
Further information:	_						

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



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Trade name:		TISSUE MARK	ING DYES, BLUE		
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	Other EU regulations:	Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC; Directive 2004/42/CE of the European Parliament and of the Council of 21 April 2004 on the limitation of emissions of volatile organic compounds due to the use of organic solvents in certain paints and varnishes and vehicle refinishing products and amending Directive 1999/13/EC; Council Directive 98/24/EC of 7 April 1998 on the protection of the health and safety of workers from the risks related to chemical agents at work; Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006; REACH Restrictions on the manufacturing, placing on the market and use of certain dangerous substances, mixtures and articles (Annex XVII);
	Information according 1 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 assessn	nent
	-	

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



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16.4.	Classification and procedure used to derive the classification for mixture according to Regulation (EC) 1272/2008 (CLP)						
Classifi	Classification		Classification procedure				
_	-		-				
16.5.	Rele	vant H statements (nu	mber and full text)				
		221	Flammable gas.				
		225	Highly flammable liquid and vapour.				
		314	Causes severe skin burns and eye damage.				
	11.	315	Causes skin irritation.				
	H:	319	Causes serious eye irritation.				
		331	Toxic if inhaled.				
		336	May cause drowsiness or dizziness.				
		400	Very toxic to aquatic life.				
16.6.	Training advice:		-				
16.7. Further information:			"X" in the product code marks different volumes (different packaging of the product)				
		ner 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 t	o Chemical	safety	assessment

-



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Trade name:	TISSUE MARKING DYES, GREEN				
Product code:	3408-1-X**	Date of compilation:	14 November 2022	Version:	5

1.1.	Product identifier						
	Trading name:	TISSUE I	TISSUE MARKING DYES, GREEN				
	Chemical name:	-					
	Product code:	3408-1-	408-1-X**				
1.2.	Relevant identified uses of the substance or mixture and uses advised against						
	Uses:			For marking and orientation of tissue samples.			
	Uses advised against:			Only the identified uses are advised.			
	Reason why uses advised against:		nst:	The product is intended for use only as an <i>in vitro</i> diagnostic medical device and there is no reason to use it for other purposes.			
1.3.	Details of the supplier	of the s	afety d	ata sheet			
	Supplier: B		BioGr	BioGnost Ltd.			
	Address:		Medjugorska 59, Zagreb				
	Telephone number:		+385 1 2409997				
	Telefax:		+385 1 2404039				
	e-mail of competent person: ms		<u>msds</u>	isds@biognost.hr			
	National contact:		-				
1.4.	Emergency telephone numbers						
	National Protection and Rescue Direction		ctorate:	112			
	Medical information:				+385 1 2348 342		
	Other information:				-		

SECTION 2. Hazards identification					
2.1.	Classification of the substance or mixture				
2.1.1.	Classification according to Regulation (EC) No 1272/2008 (CLP)				
	Hazard class and category code: Hazard statement*:				
	Skin Irr. 2		H315		
	Eye Irr. 2		H319		
2.1.2.	Additional information				
	-				
*For the	For the full text of H and EUH phrases see Section 16.				
2.2.	Label elements				
	Product identification: TISSUE MARKING DYES, GREEN				
	Identification number:	-			
	Authorisation number:	-			



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Trade name:	TISSUE MARKING DYES, GREEN				
Product code:	3408-1-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. P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P302+P352 IF ON SKIN: Wash with plenty of soap and water. P337+P313 If eye irritation persists: Get medical advice/attention.
	Supplemetal hazard information (EU):	-
2.3.	Other hazards	
		oting properties. tains no components considered to be either persistent, bioaccumulative sistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

SECTION 3. Co	SECTION 3. Composition/information on ingredients					
CAS/ EC/ Index number	REACH Registration No	Weight % content (or range)	Identification name	Classification according to Regulation (EC) No 1272/2008 (CLP)		
67-63-0/ 200-661-7/ 603-117-00-0	-	<4	propan-2-ol	Flam. Liq. 2; H225 Eye Irr. 2; H319 STOT SE 3; H336		
7664-41-7 231-635-3/ 007-001-00-5	-	<1	ammonia	Flam. Gas 2; H221 Skin Corr. 1B; H314 Acute Tox. 3; H331 Aquatic Acute 1; H400		

SECTIO	SECTION 4. First aid measures				
4.1.	Description of first aid measures				
	General notes:	Move out of dangerous area. Show this safety data sheet to the doctor and first responders.			



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Trade name:	TISSUE MARKING DYES, GREEN					
Product code:	3408-1-X**	Date of compilation:	14 November 2022	Version:	5	

4.3.	Indication of any immediation of any immediation of any immediation.	ate medical attention and special treatment needed			
	Following ingestion:	No information available.			
	Following eye contact:	No information available.			
	Following skin contact:	No information available.			
	Following inhalation:	No information available.			
4.2.	Most important symptoms and effects, both acute and delayed				
	Self-protection of the first aider	-			
	Following ingestion:	Never give anything by mouth to an unconscious person. Rinse mouth with water.			
	Following eye contact:	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation occurs and persists: Get medical advice.			
	Following skin contact:	Wash off with soap and plenty of water. If irritation occurs and persists: Get medical advice.			
	Following inhalation:	If breathed in, move person into fresh air. If not breathing, give artificial respiration. Get medical advice.			

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

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



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Trade name:	TISSUE MARKING DYES, GREEN					
Product code:	3408-1-X**	Date of compilation:	14 November 2022	Version:	5	

	Protective equipment:	Use suitable personal protective equipment (see Section 8).		
	Accident prevention methods	Evacuate members of all non-essential personnel and those members without protective equipment.		
	Emergency procedures:	Mark the area using proper signs.		
6.1.2.	For emergency responders:			
	Use protective equipment; in 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 containment and cleaning up			
6.3.1.	Bunding, covering of drains; capping procedures:	Sand or clay barriers.		
6.3.2.	Cleaning up:	After removing the product, use water to wash the work space and used materials.		
6.3.3.	Other information:	No information available.		
6.4.	Reference to other sections			
	-			

SECTIO	N 7. Handling and storage				
7.1.	Precautions for safe handling				
7.1.1.	Protection measures				
	Measures to prevent fire:		Use in well ventilated storage rooms. Refer to the manufacturer's recommendations.		
	Measures to prevent aerosol and dust generation	on:	Secure proper ventilation.		
	Measures to protect the environment:		Prevent spilling into the sewage system and waterways.		
	Other measures:	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 incon	npatibilities			
	Technical measures and storage conditions:	well venti	ghtly closed and upright set containers in a lated storage rooms at temperatures rom 15 to 25 °C.		
	Packaging materials:	Manufact	urer's original packaging.		
	Requirements for storage rooms and vessels:	Keep awa	y from food and drink. Keep the containers osed.		



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Product code:	3408-1-X**	Date of compilation:	14 November 2022	Version:	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. Control pa	rameter	S					
Substance		CAS No		Occupational exposure limit values/short term values			Biological limit values
				ppm	mg/ı	m³	
Isopropanol		67-63	-0	400/500	999/1.	.250	-
Ammonia		7664-4	1-7	20/50	14/3	36	-
Substance: -		T					
EC No: -		CAS No:	-				
DNEL							
				Industrial			
Doute of owners was	Acute effect A		Ac	ute effect Chronic effe		onic effect	Chronic effect
Route of exposure:	I	local s		ystemic	local		systemic
Oral	-		-		-		-
Inhalation	36 mg, (ammo		47.6 mg	•	14 mg/ (ammon		500 mg/m ³ (propan-2-ol) 47.6 mg/ m ³ (ammonia)
Dermal	-		6.8 mg/kg bw/day (ammonia)		-		888 mg/kg bw/day (propan-2-ol) 6.8 mg/kg bw/day (ammonia)
Critical physical para	meters:	solubility, fl	ammabil	ity, corrosivity:	_	-	
				Consumer			
Route of exposure:		te effect ocal	_	ute effect ystemic	Chronic effect		Chronic effect systemic



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Trade na	ıme:		TIS	SUE MAR	KING DY	ES, GREEN		
Product	code:	3408-1-X**	Date of c	ompilation	: 14 No	vember 2022	Version: 5	
Oral		-	6.8 mg/kg (ammonia)	-	-		26 mg/kg bw/day (propan-2-ol) 6.8 mg/kg bw/day (ammonia)	
Inhalation	า	-	-	-			89 mg/m³ (propan-2-ol)	
Dermal		-	6.8 mg/kg (ammonia)	-	-		319 mg/kg (propan-2-ol) 6.8 mg/kg bw/day (ammonia)	
PNEC								
Environm	ental prot	ection target		PNEC				
Fresh wat	ter			No info	rmation av	ailable		
Freshwate	er sedimer	nts		No info	rmation av	ailable		
Marine w	ater			No info	rmation av	ailable		
Marine se	ediments			No info	rmation av	ailable		
Food cha	in			No information available				
Microorg	anisms in	sewage treatment		No information available				
Soil (agrid	cultural)			No info	rmation av	ailable		
Air				No information available				
8.2.	•	re controls						
8.2.1.	Approp	riate engineering	controls					
		nce/mixture related ent exposure durir		Use perso smoke in t	•		. Do not eat, drink or	
	Structui	ral measures to pr re:	event	No information available				
	Organis exposui	sational measures re:	to prevent	Organization of work in order to reduce other worker's influence during work process.				
	Technic exposu	al measures to pre re:	event	-	•	•	n in order to keep ermitted levels.	
8.2.2.	Persona	al protection equip	oment:					
8.2.2.1.	Eye and	I face protection:		Safety glasses tested and approved under appropriate standards such as EN 166(EU).				
8.2.2.2.	Skin pro	otection:						
	Hand p	rotection:		protective	gloves hav	e to satisfy the	ves. The selected e specifications of EU lard EN 374 derived from	



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	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 Section 6			
	Structural measures to prevent exposure:	Use modern equipment.			
	Organisational measures to prevent exposure:		ot the work process to the required working conditions of the splace.		
	Technical measures to prevent exposure:	See Section 6			

Information on basic physica	l and chemical properties	
	Value	Method
Physical state:	liquid	No information available
Colour:	green	No information available
Odour/odour threshold:	faint ammonia	No information available
Melting point / freezing point:	No information available	No information available
Boiling point or initial boiling point and boiling range:	No information available	No information available
Flammability:	No information available	No information available
Lower and upper explosion limit:	No information available	No information available
Flash point:	> 93.3 °C	No information available
Auto-ignition temperature:	No information available	No information available
Decomposition temperature:	No information available	No information available
pH:	8.5 -10.0	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	1.02 - 1.14 (20°C)	No information available



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

SECTIO	N 11. Tox	icological information	ı							
11.1.	Informat	ormation on toxicological effects								
	Acute to	xicity:								
Route o		Method	Species	Effect Dos LD ₅₀ /LC ATE _{mi}	se C ₅₀ or	Exposur time	e	Results		
Oral:		No information available	rat	LD ₅	50	No informati available	•	5.840 mg/kg (2-propanoll)		
Dermal:		No information available	rabbit	LD ₅	50	No informati available		12.800 mg/kg (2-propanol)		
Inhalatio	on:	No information available	rat	LC ₅	50	8 h (isopropar 4 h (ammoni		37.5 mg/l (2-propanol) 9.850 mg/m³ air (ammonia)		
	Specific	target organ toxicity - s	single exposure (STOT-SE):						
•		Spec	ific effects		Targ	et organ	Note			
Oral:		No information availa	able		-		-			



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Trade name:				TISSUE MARKI	NG DYES, GR		age 9 of 17		
		-1-X**		of compilation:	14 Novembe		Version:	5	
	i			•			i		
Dermal:	No inf	ormatio	n available		-	-			
Inhalation:	No inf	ormatio	n available		-	-			
Α .	1								
Aspir	ation hazar	d:		-					
Irritat	ion and co	rrosion							
	.ioii aiia co		osure time	Species	Evaluation	Method	Note		
Skin corrosion/	irritation:	No availa	information	rabbit	-	-	mild skin irritation		
Serious irritatio	n to eyes:	No availa	information able	rabbit	24 h	-	eye irritatior	า	
Sensi	tization								
Skin sensitization	on: M	ay cause	e an allergic sk	in reaction.					
Respiratory sensitization:	Al	lergic pe	ersons may dis	play irritation.					
	otoms relate		•	al, and toxicologic					
Oral exposure:				mptoms. May cau		swallowed.			
Dermal exposur				mptoms. May cau		ice recniratory	system irritatio		
Eye exposure:	Juic.		known specific symptoms. Aerosols/vapor may cause respiratory system irritation. known specific symptoms. May cause mild eye irritation.						
тус скрозите.		110 1111	yww speeme sy	mp como: may car	ase mila eye im				
Repe	ated dose t	oxicity (subacute, sub	chronic, chronic)					
· ·	Dos	ie	Exposure time	Species	Method	Evaluation	Note		
Subacute oral	No infor		No information available	No information available	No information available	No information available	No informatio available	'n	
Subacute dermal	No infor		No information available	No information available	No information available	No information available	No informatio available	'n	
Subacute inhalation	No infor		No information available	No information available	No information available	No information available	No informatio available	'n	
Subchronic oral	No infor		No information available	No information available	No information available	No information available	No informatio available	'n	



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Trade name:		TISSUE MARKING DYES, GREEN						
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	323 3 .9 4 3	Specific ef	· ·	Target org	an	Note
Spec	ific target organ to	kicity - repeated	l exposure (STO	Γ-RE):		
Chronic inhalation	No information available	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	No information available
Chronic oral	No information available	No information available	No information available	No information available	No information available	No information available
Subchronic	No information available	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	No information available

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

CMR effects (carcinogenicity, mutagenicity, reproductive toxicity)



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Trade name:		TISSUE MARKING DYES, GREEN							
Product code:	3408-1-X**	Date of compilation:	14 November 2022	Version:	5				

	Carcinogenicity:	Product not classified as a carcinogen by the National Toxicology Program (NTP), the International Agency for Research on Cancer (IARC), or the Occupational Safety and Health Administration (OSHA).					
	Mutagenicity in-vitro:	No information available					
	Genotoxicity:	No information available					
	Mutagenicity in-vivo:	No information available					
	Germ cell mutagenicity:	No information available					
	Reproductive toxicity:	No information available					
	Summary of evaluation of the CMR properties:	No information available					
11.2.	Information on other hazards:						
11.2.1.	Endocrine disrupting properties:						
	No known endocrine disrupting properties that affect human health.						
11.2.2.	Other information:						
	-						

SECTION 12. Ecologic	SECTION 12. Ecological information								
12.1. Toxicity									
Acute (short-term) toxicity	Dose	Exposure time	Species	Method	Evaluation	Note			
Fish	LC ₅₀	96 hours	Pimephales promelas (fathead minnow)	-	-	9.640 mg/l (2-propanol)			
Crustacea:	EC ₅₀	48 hours	Daphnia magna (water flea)	-	-	13.299 mg/l (2-propanol) 25.4 mg/l (ammonia)			
Algae/aquatic plants:	IC ₅₀	72 hours	Desmodesmus subspicatus (green algae)	-	-	>1.000 mg/l (2-propanol)			
Other organisms	-	-	-	-	-	-			
Chronic (long-term) toxicity	Doza	Exposure time	Species	Method	Evaluation	Note			
Fish	LC ₅₀	96 hours	-	_	-	-			
Crustacea:	EC ₅₀	48 hours	-	-	-	-			



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Trade name	e:		TISSUE MARKING DYES, GREEN								
Product cod	de:	3408-1-X**	k	Date of	f compilation	ո: 14	November	2022	Ve	rsion:	5
Algae/aguati	ic plant	c. IC	72 ho	urs -		_	_				
Algae/aquati	·······										
Other organi	sms	-	-	-		-	-		-		
12.2. Per	rsistenc	e and degrad	dability								
		gradation	adomey								
7.00		egradation ha	alf-lives		Method			Evaluation		N	ote
Marine water		formation av		No ii	nformation av	ailable	No info	rmation a		_	
Fresh water	No in	formation av	ailable	No ii	nformation av	ailable	No info	rmation a	vailable	-	
Air	No in	formation av	ailable	No ii	nformation av	ailable	No info	rmation a	ıvailable	-	
Soil	No in	formation av	ailable	No ii	nformation av	ailable	No info	rmation a	ıvailable	-	
				i			:				
Bio	odegrac	dation									
% Degradat	ion	Time (d	lays)		Method		Evaluation		No	ote	
No informati available		No information	on	No ii avail	nformation able	No i avail	nformation able	-			
12.3. Bio	accumi	ulative poten	tial								
Oc	tanol-w	ater partition	n coeffici	ent (log	Kow)						
Value	Con	centration	рН	°C	Method	t	Evaluati	on	1	Vote	
No information available	No in availa	formation Ible	-	-	No information available	tion	No informat available	ion -			
Bio	concer	ntration Facto	or (BCF)								
Value		Speci	es		Method		Evaluation		No	ote	
No informati available		No information	on	No ir availa	nformation able		o information ailable	-			
Ch	ronic e	cotoxicity									
Valu		Dose		osure ime	Species		Method	Evaluat	ion	Note	
							<u> </u>				



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Trade name:		TISSUE MARKING DYES, GREEN							
Product code:	3408-1-X**	Date of compilation:	14 November 2022	Version:	5				

Produc	ct code:	340)8-1-X**	D	ate of con	npila	ation:	14 No	vember	2022	Version:	ļ
Chronic	toxicity or	n fish	LC ₅₀	No informat	1		ation le	No inform availab		No information available	-	
	toxicity or ea (Daphni		EC ₅₀	No informat available	No tion info		ation	No inform availab	ation	No information available	-	
12.4.	Mobility	in soil	l									
	Known c	r prec	licted distr	ibution ir	n environme	enta	l compa	rtments	:			
	Surface t	ensio	n:									
	Value		°C	Co	oncentratio	n		Metho	od		Note	
	No informat n availab	io ir	lo nformation vailable		information ilable	n	No info availab	ormatio le	n	-		
	Adsorpt	ion / c	desorption							,		
Transpo	ort	-	pefficient constant	lo	g Kow	Ev	aporatio	n rate	М	ethod	Note	
Soil-wa	t∆r :	inform Iable	nation	No in availa	formation able		o informa ailable	ation	No info	ormation -		
Water-a	oir :	inform Iable	nation	No in availa	formation able		o informa ailable	ation	No info	ormation -		
Soil-air		inforn Iable	nation	No in availa	formation able		o informa ailable	ation	No info	ormation - le		
12.5.	Recults	of DRT	and vPvB	accacema	nt							
12.3.	This sub	stance	/mixture c	ontains n	o compone					persistent, bio		e
12.6.	Endocrin	a dicr	upting pro	perties								
12.0.					ontain com	npon	ents cor	nsidered	d to have	endocrine dis	srupting	
	propertie	es acc	ording to I	REACH Ar	ticle 57(f) c	or Co	mmissic	n Dele	gated reg	gulation (EU) 2	2017/2100 or	

The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

12.7.	Other adverse effects
	No information available



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Trade name:		TISSUE MARKING DYES, GREEN						
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13.1.	Waste treatment method	dc				
13.1.	waste treatment method					
13.1.1.	Product/Packaging dis	posal:				
	Submit for disposal to Protection.	the legal person authorized by the Ministry of Environmental and Nature				
13.1.2.	Waste codes/waste de	signations according to Law:				
	Disposal must be mad	e according to official regulations.				
13.1.3.	Waste treatment – rele	evant information:				
	No information availab	ole				
13.1.4.	Sewage disposal – rele	vant information:				
	Waste must not be dis	posed of into the sewage system.				
13.1.5.	Other disposal recomn	Other disposal recommendations:				
	authorized by the mini	product's remains into the sewage system. Submit the remains to the collectors stry in charge. Do not dispose of the packaging into the sewage system. to the collectors authorized by the ministry in charge.				
13.1.6.	Relevant Community provisions:					
	-					
SECTION	N 14. Transport informa	tion				
	Transporting/shipment					
UN num		Not regulated				
UN prop	er shipping name:					
	rt hazard class(es):	-				
Packing		-				
	nental hazards:	-				
Special p	precautions for user:	-				
•	Transporting/shipment	by rail (RID)				
UN num	ber:	Not regulated				
UN prop	er shipping name:					
	rt hazard class(es):					
rranspoi	t Hazara class(cs).					



Trade name:

SAFETY DATA SHEET

TISSUE MARKING DYES, GREEN

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

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Product code:	3408-1-X**	Date of compilation:	14 November 2022	Version:	5
Environmental haza		-			
Special precautions		-			
Transport	ting/shipment by inla	nd waterways (ADN)			
UN number:		Not regulated			
UN proper shipping	g name:	-			
Transport hazard cl	ass(es):	-			
Packing group:		-			
Environmental haza	ards:	-			
Special precautions	for user:	-			
Transport	ting/shipment by sea	(IMDG)			
UN number:		Not regulated			
UN proper shipping	g name:	-			
Transport hazard cl	ass(es):	-			
Packing group:		-			
Environmental haza	ards:	-			
Special precautions	for user:	-			
Transport in bulk a of MARPOL73/78 a	ccording to Annex II nd the IBC code:	-			
Transport	ting/shipment by air (ICAO-TI/IATA-DGR)			
UN number:		Not regulated			
UN proper shipping	ງ name:	-			
Transport hazard cl	ass(es):	-			
Packing group:		-			
Environmental hazards:		-			
Special precautions	for user:	-			
Further information	ı· -				

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



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Trade name:		TISSUE MARKING DYES, GREEN			
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		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
	Other EU regulations:	on the limitation of emissions of volatile organic compounds due to the use of organic solvents in certain paints and varnishes and vehicle refinishing products and amending Directive 1999/13/EC;
		Council Directive 98/24/EC of 7 April 1998 on the protection of the health and safety of workers from the risks related to chemical agents at work;
		Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006;
		REACH Restrictions on the manufacturing, placing on the market and use of certain dangerous substances, mixtures and articles (Annex XVII);
	Information according guideline)	1999/13/EC about limitation of emissions of volatile organic compounds (VOC-
	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 assessn	nent
	-	

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



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Trade name:	TISSUE MARKING DYES, GREEN				
Product code:	3408-1-X**	Date of compilation:	14 November 2022	Version:	5

16.4.		Classification and procedure used to derive the classification for mixture according to Regulation (EC) 1272/2008 (CLP)				
Classifi	cation		Classification procedure			
_			-			
16.5.	Rele	vant H statements (nu	mber and full text)			
		221	Flammable gas.			
		225	Highly flammable liquid and vapour.			
		314	Causes severe skin burns and eye damage.			
	11.	315	Causes skin irritation.			
	H:	319	Causes serious eye irritation.			
		331	Toxic if inhaled.			
		336	May cause drowsiness or dizziness.			
		400	Very toxic to aquatic life.			
16.6.	Trair	ning advice:	-			
167	16.7. Further information:		"X" in the product code marks different volumes (different packaging of the product)			
16.7.			We are not responsible for consequences in case of failure to comply with instructions for use or improper use of the product described in this material safety data sheet.			

ANNEX: Exposure	scenario resultin	g to Chemical	I safety assess	ment

-



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Trade name:	TISSUE MARKING DYES, RED				
Product code:	3408-4-X**	Date of compilation:	14 November 2022	Version:	5

1.1.	Product identifier					
	Trading name:	TISSUE MARKING DYES, RED			ED	
	Chemical name:	-				
	Product code:	3408-4-	X**			
1.2.	Relevant identified us	ses of the	substa	nce or mixt	ure and uses advised against	
	Uses:			For markir	ng and orientation of tissue samples.	
	Uses advised against:			Only the id	dentified uses are advised.	
	Reason why uses advised against:		nst:	The product is intended for use only as an <i>in vitro</i> diagnostic medical device anfd there is no reason to use it for other purposes.		
1.3.	Details of the supplier of the safety data sheet					
	Supplier:		BioGr	BioGnost Ltd.		
	Address:		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 Dire		ie Direc	torate:	112	
	Medical information:				+385 1 2348 342	
	Other information:				-	

SECTIO	ON 2. Hazards identification			
2.1.	Classification of the substan	nce or mixture		
2.1.1.	Classification according to F	Regulation (EC) N	o 1272/2008 (CLP)	
	Hazard class and cat	tegory code:		Hazard statement*:
	Skin Irr. 2		H315	
	Eye Irr. 2		H319	
2.1.2.	Additional information			
	-			
*For the	e full text of H and EUH phrase	es see Section 16.		
2.2.	Label elements			
	Product identification: TISSUE MARKING DYES, RED			
	Identification number: -			
	Authorisation number:	Authorisation number: -		



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Trade name:	TISSUE MARKING DYES, RED				
Product code:	3408-4-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. P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P302+P352 IF ON SKIN: Wash with plenty of soap and water. P337+P313 If eye irritation persists: Get medical advice/attention.
	Supplemetal hazard information (EU):	-
2.3.	Other hazards	
		oting properties. tains no components considered to be either persistent, bioaccumulative sistent 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)			
67-63-0/ 200-661-7/ 603-117-00-0	-	<4	propan-2-ol	Flam. Liq. 2; H225 Eye Irr. 2; H319 STOT SE 3; H336			
7664-41-7 231-635-3/ 007-001-00-5	-	<1	ammonia	Flam. Gas 2; H221 Skin Corr. 1B; H314 Acute Tox. 3; H331 Aquatic Acute 1; H400			

S	SECTION 4. First aid measures				
4	1.1.	Description of first aid mea	asures		
		General notes:	Move out of dangerous area. Show this safety data sheet to the doctor and first responders.		



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Trade name:	TISSUE MARKING DYES, RED					
Product code:	3408-4-X**	Date of compilation:	14 November 2022	Version:	5	

	Treat symptomatically.				
4.3.	Indication of any immedi	ate medical attention and special treatment needed			
	Following ingestion:	No information available.			
	Following eye contact:	No information available.			
	Following skin contact:	No information available.			
	Following inhalation:	No information available.			
4.2.	Most important symptoms and effects, both acute and delayed				
	Self-protection of the first aider	-			
	Following ingestion:	Never give anything by mouth to an unconscious person. Rinse mouth with water.			
	Following eye contact:	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation occurs and persists: Get medical advice.			
	Following skin contact:	Wash off with soap and plenty of water. If irritation occurs and persists: Get medical advice.			
	Following inhalation:	If breathed in, move person into fresh air. If not breathing, give artificial respiration. Get medical advice.			

SECTIO	CTION 5. Firefighting measures				
5.1.	Extinguishing media				
	Suitable extinguishing media:	Use dry chemical, CO ₂ , water spray (FOG) or foam.			
	Unsuitable extinguishing media:	Avoid solid water stream as it may scatter and spread fire.			
5.2.	Special hazards arising from the su	bstance or mixture			
	Hazardous by products of fire:	Use water spray to cool fire exposed container surfaces and to protect personnel. Thermal decomposition can produce carbon monoxide (highly toxic) and carbon dioxide (an asphyxiant at sufficient concentrations).			
5.3.	Advice for firefighters				
	Use a self-contained open-circuit compressed air breathing apparatus and fireproof clothing. Cool closed containers exposed to fire with water spray or vapor.				
5.4.	Additional information				
	3 ,	Heating may cause container cracking due to increase in pressure. Remove sources of heat and ignition. Do not contaminate the environment with extinguishing media.			

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



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

SECTIO	SECTION 7. Handling and storage					
7.1.	Precautions for safe handling					
7.1.1.	Protection measures					
	Measures to prevent fire:		Use in well ventilated storage rooms. Refer to the manufacturer's recommendations.			
	Measures to prevent aerosol and dust generation	n:	Secure proper ventilation.			
	Measures to protect the environment:		Prevent spilling into the sewage system and waterways.			
	Other measures:		-			
7.1.2.	Advice on general occupational hygiene:					
	Do not eat, drink or smoke in the workspace. Th	oroughly w	rash 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 containers in a 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 contain tightly closed.					



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

SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION							
8.1. Control parameters							
Substance		CAS No		Occupational exposure limit values/short term values			Biological limit values
				ppm	mg/m³		
Isopropanol		67-63	3-0	400/500	999/1.250		-
Ammonia		7664-4	11-7	20/50	14/36		-
Substance: -							
EC No: -		CAS No:	-				
DNEL							
				Industrial			
Pouts of oversure	. Acu	te effect	ect Acute effect		Chronic effect		Chronic effect
Route of exposure	÷.	local	cal system		local		systemic
Oral	-		-		-		-
Inhalation	36 mg		47.6 mg	_	14 mg/ m³ (ammonia)		500 mg/m ³ (propan-2-ol) 47.6 mg/ m ³ (ammonia)
Dermal -			6.8 mg/kg bw/day (ammonia)		-		888 mg/kg bw/day (propan-2-ol) 6.8 mg/kg bw/day (ammonia)
Critical physical pa	arameters:	solubility, fl	ammabil	ity, corrosivity:	-		1
				Consumer	i i		
Doube of supersum	Acu	te effect	Ac	ute effect	Chronic e	ffect	Chronic effect
Route of exposure	e.	local	S	ystemic	local		systemic



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Trade na	ame:		TI	ISSUE MARKING DYES, RED						
Product	code:	3408-4-X**	Date of co	mpilation:	14 November 2022	Version: 5				
Oral		-	6.8 mg/kg (ammonia)	-	-	26 mg/kg bw/day (propan-2-ol) 6.8 mg/kg bw/day (ammonia)				
Inhalation	า	-	-		-	89 mg/m³ (propan-2-ol)				
Dermal		-	6.8 mg/kg (ammonia)	-	-	319 mg/kg (propan-2-ol) 6.8 mg/kg bw/day (ammonia)				
PNEC										
Environm	ental pro	otection target		PNEC						
Fresh wat	ter			No info	rmation available					
Freshwate	er sedime	ents		No info	rmation available					
Marine w	ater			No info	rmation available					
Marine se	ediments			No info	No information available					
Food cha	in			No info	No information available					
Microorg	anisms ir	n sewage treatmen	t	No info	rmation available					
Soil (agric	cultural)			No info	rmation available					
Air				No info	No information available					
	:									
8.2.	Expos	ure controls								
8.2.1.	Appro	priate engineering	controls							
		ance/mixture relate vent exposure duri		Use personal protective equipment. Do not eat, drink or smoke in the workspace.						
	Struct	ural measures to p ure:	revent	No information available						
	Organ expos	isational measures ure:	to prevent	Organization of work in order to reduce other worker's influence during work process.						
	Techn expos	ical measures to pr ure:	revent	Secure proper workspace ventilation in order to keep concentration levels in air below permitted levels.						
8.2.2.	Persor	nal protection equi	pment:							
8.2.2.1.	Eye ar	ING TACE DIOTECTION.			ses tested and approved such as EN 166(EU).	d under appropriate				
8.2.2.2.	Skin p	kin protection:								
	Hand	protection:	ection: H pr		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.					



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	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				
			See Section 6		
	Structural measures to prevent exposure:	Use	modern equipment.		
	Organisational measures to prevent exposure:		ot the work process to the required working conditions of the splace.		
	Technical measures to prevent exposure:	See :	Section 6		

Information on basic phy	ysical and chemical properties	
	Value	Method
Physical state:	liquid	No information available
Colour:	red	No information available
Odour/odour threshold:	faint ammonia	No information available
Melting point / freezing point:	No information available	No information available
Boiling point or initial bo	S INO Information available	No information available
Flammability:	No information available	No information available
Lower and upper explos limit:	No information available	No information available
Flash point:	> 93.3 °C	No information available
Auto-ignition temperatu	re: No information available	No information available
Decomposition tempera	ture: No information available	No information available
рН:	8.5 -10.0	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	1.02 - 1.14 (20°C)	No information available



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Trade name:		TISSUE MARKING DYES, RED				
Product code:	3408-4-X**	Date of compilation:	14 November 2022	Version:	5	

	Relative vapour density:	No information available	No information available
	Particle characteristics:	No information available	No information available
9.2.	Other information		
	-		

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

SECTION 11. Toxicological information									
11.1.	Informati	Information on toxicological effects							
	Acute to	xicity:							
Route of exposure		Method	Species	Effect Dos LD ₅₀ /LC ATE _m	se C ₅₀ or	Exposur time	е	Results	
Oral:		No information available	rat	LD	50	No informati available	•	5.840 mg/kg (2-propanoll)	
Dermal:		No information available	rabbit	LD	50	No information available		12.800 mg/kg (2-propanol)	
Inhalatio	n:	No information available	IC _{EO}		50	8 h (isopropar 4 h (ammoni		37.5 mg/l (2-propanol) 9.850 mg/m³ air (ammonia)	
	Specific target organ toxicity - single exposure (STOT-SE):								
		Specific effects				get organ		Note	
Oral:		No information avail	able		-		-		



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Γ	1						Pag	ge 9 of 17	
Trade name:				TISSUE MAR	KING DYES, RE	D			
Product code:	3408-	4-X**	Date of	compilation:	14 November	2022		Version:	5
Dermal:	No in	formatio	n available		-		_		
Inhalation:	No in	formatio	n available		-		-		
Δsnira	ation hazar	.q.		_					
7.0011	acion nazar	<u>u.</u>							
Irritat	ion and co	rrosion							
		Exp	oosure time	Species	Evaluation	M	lethod	Note	9
Skin corrosion/i	rritation:	No availa	information able	rabbit	-	-		mild skin irritation	
Serious irritation	n to eyes:	No availa	information able	rabbit	24 h	-		eye irritati	ion
	ization								
Skin sensitizatio	n: M	ay cause	e an allergic sk	in reaction.					
Respiratory sensitization:	Al	llergic pe	ersons may dis	play irritation.					
C				ا معالمان ماما					
Oral exposure:	toms relati		-	al, and toxicologi	ause discomfort if	f swall	owed.		
Dermal exposur	·e:			mptoms. May ca					
Inhalation expo			No known specific symptoms. Aerosols/vapor may cause respiratory system irritation.						
Eye exposure:			No known specific symptoms. May cause mild eye irritation.						
		:			·				
Repea	ated dose 1	toxicity (subacute, sub	chronic, chronic)					
	Dos	se	Exposure time	Species	Method	Eval	uation	Note	
Subacute oral	No infor available		No information available	No information available	No information available		rmation lable	No informat available	
Subacute dermal	No infor available		No information available	No information available	No information available		rmation lable	No informat available	
Subacute inhalation	No information available		No information available	No information available	No information available	_	rmation lable	No informat available	
Subchronic oral	No infor available		No information available	No information available	No information available		rmation lable	No informat available	



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Subchronic dermal	No information available	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	No information available
Chronic oral	No information available	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	No information available
Chronic inhalation	No information available	No information available	No information available	No information available	No information available	No information available

Specific target	organ toxicity -	repeated exposure	(STOT-RF)
Specific farder	Ordan toxicity -	Tebeated exposure	(SIUI-KE).

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

CMR effects (carcinogenicity, mutagenicity, reproductive toxicity)



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Trade name:	TISSUE MARKING DYES, RED							
Product code:	3408-4-X**	Date of compilation:	14 November 2022	Version:	5			

	Carcinogenicity:	Product not classified as a carcinogen by the National Toxicology Program (NTP), the International Agency for Research on Cancer (IARC), or the Occupational Safety and Health Administration (OSHA).
	Mutagenicity in-vitro:	No information available
	Genotoxicity:	No information available
	Mutagenicity in-vivo:	No information available
	Germ cell mutagenicity:	No information available
	Reproductive toxicity:	No information available
	Summary of evaluation of the CMR properties:	No information available
11.2.	Information on other hazards:	
11.2.1.	Endocrine disrupting properties:	
	No known endocrine disrupting properties that affect human health.	
11.2.2.	Other information:	
	-	

SECTION 12. Ecologic	SECTION 12. Ecological information						
12.1. Toxicity							
Acute (short-term) toxicity	Dose	Exposure time	Species	Method	Evaluation	Note	
Fish	LC ₅₀	96 hours	Pimephales promelas (fathead minnow)	-	-	9.640 mg/l (2-propanol)	
Crustacea:	EC ₅₀	48 hours	Daphnia magna (water flea)	-	-	13.299 mg/l (2-propanol) 25.4 mg/l (ammonia)	
Algae/aquatic plants:	IC ₅₀	72 hours	Desmodesmus subspicatus (green algae)	-	-	>1.000 mg/l (2-propanol)	
Other organisms	-	-	-	-	-	-	
Chronic (long-term) toxicity	Doza	Exposure time	Species	Method	Evaluation	Note	
Fish	LC ₅₀	96 hours	-	-	-	-	
Crustacea:	EC ₅₀	48 hours	-	-	-	-	



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Trade name	:	TISSUE MARKING DYES, RED								
Product cod	de:	3408-4-X*	k	Date of	compilation:	14 ۱	November 2	022	Version:	5
Algae/aquati		ts: IC ₅₀	72 hc	ours -		-	-		-	
Other organi	sms	-	-	-		-	-		-	
		ce and degra	adability							
Abı		egradation	16.11							
	D	egradation h	nalf-lives		Method			Evaluation		Note
Marine water	No i	nformation a	available	Noi	nformation ava	ailable	No infor	rmation avai	lable	-
Fresh water	No i	nformation a	available	No i	nformation ava	ailable	No infor	mation avai	lable	-
Air	No i	nformation a	available	No i	nformation ava	ailable	No infor	mation avai	lable	-
Soil	No i	nformation a	available	No i	nformation ava	ailable	No infor	mation avai	lable	-
Bio	degra	dation				i				
% Degradati		Time (Method		Evaluation		Note	
No information	on	No informat available	ion		No information No information available available		nformation	-		
available		available		avaii	abic	avano				
12.3. Bio	accum	nulative pote	ntial							
Oct	:anol-v	water partition	on coeffic	ient (log	Kow)					
Value	Cor	ncentration	рН	°C	Method	I	Evaluatio	n	Note	
No		nformation	-	-	- No information N		No information -			
information available	avail	lable			available		available			
available										
			<u> </u>		1					
Bio	conce	entration Fac	tor (BCF)							
Value		Spe	cies		Method		Evaluation		Note	
No informati	on	No informat	ion		nformation		information	_		
available		available		avail	able	ava	ailable			
CL	ronia	ocotovicity								
Cni	OHIC (ecotoxicity	Eve	nocuro		9 9 9 9 9 9 9				
Valu	e	Dose	a :	posure time	Species		Method	Evaluation	ı N	ote



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	name:			•	TISSUE	MARKING D	YES, RED			
Produ	ct code:	3408	3-4-X**	Date of o	compila	ntion: 14 No	ovember 2	2022	Version:	5
Chronic toxicity on fish LC ₅₀		LC ₅₀	No No information available available		ole avail	mation able	No information available	-		
	c toxicity ea (Daph		EC ₅₀	No information available	No inform availab		mation able	No information available	-	
12.4.	Mobil	ity in soil								
	1			ibution in enviro	onmenta	al compartmer	ts:			
	Surfac	ce tensio	n:							
	Val	ue	°C	Concent	ration	Met	hod		Note	
	No inform n avai	natio ir	lo nformation vailable				nformation able -			
	016		efficient	log Kow	l E	vaporation rate	e M	ethod	Note	
Soil-wa	air N	Henry's No inform vailable No inform vailable No inform vailable	nation	No informat available No informat available No informat available	tion N av tion N av	vaporation rate lo information vailable lo information vailable lo information vailable	No info availab No info availab	ormation ole ormation ole ormation	Note	
Soil-wa Water- Soil-air	air A a	No inform vailable No inform vailable No inform vailable	nation nation	No informat available No informat available No informat available	tion N av tion N av	lo information vailable lo information vailable lo information lo information	No info availab No info availab No info	ormation ole ormation ole ormation		
Soil-wa Water- Soil-air	air a Result	No inform vailable No inform vailable No inform vailable so of PBT ubstance	and vPvB	No informat available No informat available No informat	tion N articon N articon N articon N articon	lo information vailable lo information vailable lo information vailable vailable s considered to	No info availab No info availab No info availab	ormation ale ormation ale ormation ale ormation ale ormation ale	- - oaccumulativ	ve
Soil-wa Water- Soil-air 12.5.	Result This si and to	No inform ivailable No inform ivailable No inform ivailable ts of PBT ubstance pxic (PBT)	and vPvB	No informat available No informat available No informat available assessment ontains no com ersistent and ve	tion N articon N articon N articon N articon	lo information vailable lo information vailable lo information vailable vailable s considered to	No info availab No info availab No info availab	ormation ale ormation ale ormation ale ormation ale ormation ale	- - oaccumulativ	ve
Soil-wa	Result This so and to The su prope	No informatival able No inform	and vPvB and	No informat available No informat available No informat available assessment ontains no com ersistent and ve	tion Nation Nation Nation Nation Nation Nation Nation Nation National Natio	lo information vailable lo information vailable lo information vailable s considered to ccumulative (vienents consider ommission De	No info availab No info availab No info availab be either PvB) at leve	persistent, bid els of 0.1% or	oaccumulativ	
Soil-wa Water- Soil-air 12.5.	Result This so and to The su prope Comm	No informatival able No inform	and vPvB and	No informat available No informat available No informat available assessment ontains no comersistent and ve	tion Nation Nation Nation Nation Nation Nation Nation Nation National Natio	lo information vailable lo information vailable lo information vailable s considered to ccumulative (vienents consider ommission De	No info availab No info availab No info availab be either PvB) at leve	persistent, bid els of 0.1% or	oaccumulativ	



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Trade name:	TISSUE MARKING DYES, RED							
Product code:	3408-4-X**	Date of compilation:	14 November 2022	Version:	5			

13.1.	Waste treatment method	S			
13.1.1.	Product/Packaging disp	oosal:			
	Submit for disposal to t Protection.	the legal person authorized by the Ministry of Environmental and Nature			
13.1.2.	Waste codes/waste des	ignations according to Law:			
	Disposal must be made	according to official regulations.			
13.1.3.	Waste treatment – relev	vant information:			
	No information availab	le			
13.1.4.	Sewage disposal – relev	vant information:			
	Waste must not be disp	posed 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 pr				
	-				
SECTION	N 14. Transport informat	ion			
	Transporting/shipment b	by road (ADR)			
UN num	ber:	Not regulated			
UN prop	er shipping name:	-			
Transpoi	rt hazard class(es):	-			
Packing	group:	-			
Environn	nental hazards:	-			
Special p	precautions for user:	-			
	Transporting/shipment b	y rail (RID)			
UN num	ber:	Not regulated			
UN prop	er shipping name:	-			
Transpoi	rt hazard class(es):	-			
Packing	group:	-			



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Trade name:	TISSUE MARKING DYES, RED								
Product code:	3408-4-X**	Date of compilation:	14 November 2022	Version:	5				

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

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



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	Other EU regulations:	Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC; Directive 2004/42/CE of the European Parliament and of the Council of 21 April 2004 on the limitation of emissions of volatile organic compounds due to the use of organic solvents in certain paints and varnishes and vehicle refinishing products and amending Directive 1999/13/EC; Council Directive 98/24/EC of 7 April 1998 on the protection of the health and safety of workers from the risks related to chemical agents at work; Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006;
		REACH Restrictions on the manufacturing, placing on the market and use of certain dangerous substances, mixtures and articles (Annex XVII);
	Information according 1 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 assessm	nent
	-	

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



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Trade name:	TISSUE MARKING DYES, RED					
Product code:	3408-4-X** Date of compilation:		14 November 2022	Version:	5	

16.4.	Classification and procedure used to derive the classification for mixture according to Regulation (EC) 1272/2008 (CLP)			
Classific	cation		Classification procedure	
_			-	
16.5.	Rele	vant H statements (nu	mber and full text)	
	H:	221 225 314 315 319 331 336 400	Flammable gas. Highly flammable liquid and vapour. Causes severe skin burns and eye damage. Causes skin irritation. Causes serious eye irritation. Toxic if inhaled. May cause drowsiness or dizziness. Very toxic to aquatic life.	
16.6.	Trair	ning advice:	-	
16.7.	Further information:		"X" in the product code marks different volumes (different packaging of the product) We are not responsible for consequences in case of failure to comply with instructions for use or improper use of the product described in this material safety data sheet.	

ANNEX: Exposure scenario resulting to Chemical safety assessment
-



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Trade name:	TISSUE MARKING DYES, YELLOW					
Product code:	3408-2-X**	Date of compilation:	14 November 2022	Version:	5	

1.1.	Product identifier					
	Trading name:	TISSUE I	ISSUE MARKING DYES, YELLOW			
	Chemical name:	-				
	Product code:	3408-2-	X**			
1.2.	Relevant identified	uses of the	substa	ance or mixtu	re and uses advised against	
	Uses:			For marking	and orientation of tissue samples.	
	Uses advised again	st:		Only the ide	entified uses are advised.	
	Reason why uses advised against:		nst:	The product is intended for use only as an <i>in vitro</i> diagnostic medical device and there is no reason to use it for other purposes.		
1.3.	Details of the supplier of the safety data sheet					
	Supplier: Bi		BioG	ioGnost Ltd.		
	Address:		Medj	Medjugorska 59, Zagreb		
	Telephone number	•	+385 1 2409997			
	Telefax:		+385	+385 1 2404039		
	e-mail of competer	nt person:	msds	msds@biognost.hr		
	National contact: -		-			
1.4.	Emergency telephone numbers					
	National Protection and Rescue Direc		ctorate:	112		
	Medical information:			+385 1 2348 342		
	Other information:					

SECTIO	ON 2. Hazards identification					
2.1.	Classification of the substance or mixture					
2.1.1.	Classification according to	Regulation (EC) No 1	1272/2008 (CLP)			
	Hazard class and ca	tegory code:	Hazard statement*:			
	Skin Irr. 2		H315			
	Eye Irr. 2		H319			
2.1.2.	Additional information					
	-					
*For the	e full text of H and EUH phrase	es see Section 16.				
2.2.	Label elements					
	Product identification:	TISSUE MARKING	G DYES, YELLOW			
	Identification number:	-				
	Authorisation number:	-				



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Trade name:		IG DYES, YELLOW			
Product code:	3408-2-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. P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P302+P352 IF ON SKIN: Wash with plenty of soap and water. P337+P313 If eye irritation persists: Get medical advice/attention.
	Supplemetal hazard information (EU):	-
2.3.	Other hazards	
		ting properties. tains no components considered to be either persistent, bioaccumulative istent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

SECTION 3. Co	SECTION 3. Composition/information on ingredients					
CAS/ EC/ Index number	REACH Registration No	Weight % content (or range)	Identification name	Classification according to Regulation (EC) No 1272/2008 (CLP)		
67-63-0/ 200-661-7/ 603-117-00-0	-	<4	propan-2-ol	Flam. Liq. 2; H225 Eye Irr. 2; H319 STOT SE 3; H336		
7664-41-7 231-635-3/ 007-001-00-5	-	<1	ammonia	Flam. Gas 2; H221 Skin Corr. 1B; H314 Acute Tox. 3; H331 Aquatic Acute 1; H400		

SECTIO	SECTION 4. First aid measures				
4.1.	Description of first aid measures				
	General notes:	Move out of dangerous area. Show this safety data sheet to the doctor and first responders.			



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Trade name:	TISSUE MARKING DYES, YELLOW				
Product code:	3408-2-X**	Date of compilation:	14 November 2022	Version:	5

4.3.	Indication of any immediate medical attention and special treatment needed Treat symptomatically.		
	Following ingestion:	No information available.	
	Following eye contact:	No information available.	
	Following skin contact:	No information available.	
	Following inhalation:	No information available.	
4.2.	Most important symptoms and effects, both acute and delayed		
	Self-protection of the first aider	-	
	Following ingestion:	Never give anything by mouth to an unconscious person. Rinse mouth with water.	
	Following eye contact:	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation occurs and persists: Get medical advice.	
	Following skin contact:	Wash off with soap and plenty of water. If irritation occurs and persists: Get medical advice.	
	Following inhalation:	If breathed in, move person into fresh air. If not breathing, give artificial respiration. Get medical advice.	

SECTIO	SECTION 5. Firefighting measures				
5.1.	Extinguishing media				
	Suitable extinguishing media:	Use dry chemical, CO ₂ , water spray (FOG) or foam.			
	Unsuitable extinguishing media:	Avoid solid water stream as it may scatter and spread fire.			
5.2.	. Special hazards arising from the substance 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. Co-containers exposed to fire with water spray or vapor.				
5.4.	Additional information				
	Heating may cause container cracking due to increase in pressure. Remove sources of heat and ignition. Do not contaminate the environment with extinguishing media.				

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



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Trade name:	TISSUE MARKING DYES, YELLOW				
Product code:	3408-2-X**	Date of compilation:	14 November 2022	Version:	5

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

SECTIO	SECTION 7. Handling and storage					
7.1.	Precautions for safe handling					
7.1.1.	Protection measures					
	Measures to prevent fire:		Use in well ventilated storage rooms. Refer to the manufacturer's recommendations.			
	Measures to prevent aerosol and dust generation	n:	Secure proper ventilation.			
	Measures to protect the environment:	Prevent spilling into the sewage system and waterways.				
	Other measures:		-			
7.1.2.	Advice on general occupational hygiene:					
	Do not eat, drink or smoke in the workspace. The	oroughly w	ash hands after work and before eating.			
7.2.	Conditions for safe storage, including any incom	patibilities				
	Technical measures and storage conditions:	well venti	ghtly closed and upright set containers in a lated storage rooms at temperatures rom 15 to 25 °C.			
	Packaging materials:	ackaging materials: Manufact				
	Requirements for storage rooms and vessels:	Keep awa	y from food and drink. Keep the containers osed.			



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Trade name:	TISSUE MARKING DYES, YELLOW				
Product code:	3408-2-X**	Date of compilation:	14 November 2022	Version:	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. Control pa	rameter	'S						
Substance		CAS No		Occupational exposure limit values/short term values			Biological limit values	
				ppm	mg/ı	m³		
Isopropanol		67-63	-0	400/500	999/1.	.250	-	
Ammonia		7664-4	1-7	20/50	14/3	36	-	
Substance: -								
EC No: -		CAS No:	_					
DNEL								
Industrial								
Route of exposure:	Acu	Acute effect Acu		ute effect	Chronic effect		Chronic effect	
Noute of exposure.		local	systemic		local		systemic	
Oral	-		-		-		-	
Inhalation	36 mg		47.6 mg	•	14 mg/ m³ (ammonia)		500 mg/m ³ (propan-2-ol) 47.6 mg/ m ³ (ammonia)	
Dermal	-		6.8 mg, (ammo	/kg bw/day nia)	/day _		888 mg/kg bw/day (propan-2-ol) 6.8 mg/kg bw/day (ammonia)	
Critical physical parameters: solubility, flammability, corrosivity:								
				Consumer				
Route of exposure:		te effect local		ute effect ystemic	Chro	onic effect local	Chronic effect systemic	



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Trade na	ame:	TISSUE MARKING DYES, YELLOW						
Product	code:	3408-2-X**	Date of c	ompilatio	n: 14 Novemb	per 2022 Version: 5		
Oral		-	6.8 mg/kg (ammonia)	-	-	26 mg/kg bw/day (propan-2-ol) 6.8 mg/kg bw/day (ammonia)		
Inhalation	า	_			_	89 mg/m³ (propan-2-ol)		
Dermal	·	-	6.8 mg/kg (ammonia)	•	-	319 mg/kg (propan-2-ol) 6.8 mg/kg bw/day (ammonia)		
PNEC								
Environm	ental prote	ection target		PNEC				
Fresh wat	ter			No info	ormation available			
Freshwate	er sedimen	its		No info	ormation available			
Marine w	ater			No info	ormation available			
Marine se	ediments			No information available				
Food cha	Food chain			No information available				
Microorg	anisms in s	sewage treatment		No information available				
Soil (agric	cultural)			No info	ormation available			
Air				No information available				
8.2.	Exposur	e controls						
8.2.1.	Approp	riate engineering c	ontrols					
		ce/mixture related ent exposure during		Use personal protective equipment. Do not eat, drink or smoke in the workspace.				
	Structur exposur	ral measures to pre re:	vent	No information available				
	Organis exposur	ational measures t e:	o prevent	Organization of work in order to reduce other worker's influence during work process.				
	Technica exposur	•		Secure proper workspace ventilation in order to keep concentration levels in air below permitted levels.				
8.2.2.	Persona	onal protection equipment:						
8.2.2.1.	Eye and	d tace protection.		Safety glasses tested and approved under appropriate standards such as EN 166(EU).				
8.2.2.2.	Skin pro	otection:						
	Hand pr	rotection:		protective	gloves have to s	tant gloves. The selected atisfy the specifications of EU he standard EN 374 derived from		



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Trade name:	TISSUE MARKING DYES, YELLOW				
Product code:	3408-2-X**	Date of compilation:	14 November 2022	Version:	5

	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 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 S	Section 6

Information on basic physica	l and chemical properties	
	Value	Method
Physical state:	liquid	No information available
Colour:	yellow	No information available
Odour/odour threshold:	faint ammonia	No information available
Melting point / freezing point:	No information available	No information available
Boiling point or initial boiling point and boiling range:	No information available	No information available
Flammability:	No information available	No information available
Lower and upper explosion limit:	No information available	No information available
Flash point:	> 93.3 °C	No information available
Auto-ignition temperature:	No information available	No information available
Decomposition temperature	: No information available	No information available
pH:	8.5 -10.0	No information available
Kinematic viscosity:	No information available	No information available
Solubility:	No information available	No information available
Partition coefficient noctanol/water (log value):	No information available	No information available
Vapour pressure:	No information available	No information available
Density and/or relative density	1.02 - 1.14 (20°C)	No information available



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	Relative vapour density:	No information available	No information available
	Particle characteristics:	No information available	No information available
9.2.	Other information		
	-		

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

SECTIO	N 11. Toxi	cological information	1						
11.1.	Informati	ion on toxicological eff	ects						
	Acute to	cicity:							
Route o		Method	Species	Effect Dos LD ₅₀ /LC ATE _{mi}	se C ₅₀ or	Exposur time	9	Results	
Oral:		No information available	rat	LDs	LD ₅₀		on e	5.840 mg/kg (2-propanoll)	
Dermal:		No information available	rabbit	LDg	50	No informatio available		12.800 mg/kg (2-propanol)	
Inhalatio	on:	No information available	rat	LC ₅	LC ₅₀ (isopr			37.5 mg/l (2-propanol) 9.850 mg/m³ air (ammonia)	
	Specific	target organ toxicity - s	single exposure (S	TOT-SE):					
		Spec	ific effects		Targ	get organ		Note	
Oral:		No information availa	able		_		-		



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Trade name:			-	ΓISSUE MARKII	NG DYES, YELI	LOW		
Product code:	3408	3-2-X**	Date o	of compilation:	14 Novembe	er 2022	Version:	5
Dermal:			n available		-	-		
Inhalation:	No in	formatio	n available		-	-		
Aspira	ation haza	rd:		_				
Irritati	ion and co	rrocion						
IIIItati	ion and cc		oosure time	Species	Evaluation	Method	Note	
		No	information	Species	Lvaluation	Method	mild skin	
Skin corrosion/irritation:				rabbit	-	-	irritation	
Serious irritation	Serious irritation to eyes:		information	rabbit	24 h	_	eye irritatio	'n
ava			able	iabbit	47 II	_	eye ii iialio	11
	tization							
Skin sensitizatio	on: N	lay cause	e an allergic sk	in reaction.				
Respiratory sensitization:	А	llergic pe	ersons may dis	play irritation.				
SCHSHIZATION.								
Symp	toms relat	ed to ph	ysical, chemica	al, and toxicologic	cal properties			
Oral exposure:		No kno	own specific sy	mptoms. May cau	use discomfort it	swallowed.		
Dermal exposur	e:	No kno	own specific sy	mptoms. May cau	use discomfort.			
Inhalation expo	sure:	No kno	own specific sy	mptoms. Aerosol	s/vapor may cau	se respiratory	system irritati	ion.
Eye exposure:		No kno	own specific sy	mptoms. May cau	use mild eye irrit	ation.		
Repea	ated dose	toxicity (subacute, sub	chronic, chronic)				
	Do	se	Exposure time	Species	Method	Evaluation	Note	
	No infor	mation	No	No	No	No	No	
Subacute oral	available		information available	information available	information available	information available	information available	on
			No	No	No	No	No	
Subacute	No infor		information	information	information	information	information	on
dermal	available	2	available	available	available	available	available	
Subacute	No infor	mation	No	No	No No		No	
inhalation	available	9	information available	information available	information available	information available	information available	on
	N		No	No	No	No	No	
Subchronic oral	No infor		information	information	information	information	information	on
		-	available	available	available	available	available	



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Subchronic dermal	No information available	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	No information available
Chronic oral	No information available	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	No information available
Chronic inhalation	No information available	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	No information available
Subacute dermal	No information available	No information available	No information available
Subacute inhalation	No information available	No information available	No information available
Subchronic oral	No information available	No information available	No information available
Subchronic dermal	No information available	No information available	No information available
Subchronic inhalation	No information available	No information available	No information available
Chronic oral	No information available	No information available	No information available
Chronic dermal	No information available	No information available	No information available
Chronic inhalation	No information available	No information available	No information available

CMR effects (carcinogenicity, mutagenicity, reproductive toxicity)



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Product code:	3408-2-X**	Date of compilation:	14 November 2022	Version:	5

	Carcinogenicity:	Product not classified as a carcinogen by the National Toxicology Program (NTP), the International Agency for Research on Cancer (IARC), or the Occupational Safety and Health Administration (OSHA).
	Mutagenicity in-vitro:	No information available
	Genotoxicity:	No information available
	Mutagenicity in-vivo:	No information available
	Germ cell mutagenicity:	No information available
	Reproductive toxicity:	No information available
	Summary of evaluation of the CMR properties:	No information available
11.2.	Information on other hazards:	
11.2.1.	Endocrine disrupting properties:	
	No known endocrine disrupting properties that affect human health.	
11.2.2.	Other information:	
	-	

SECTION 12. Ecologic	al informa	ition				
12.1. Toxicity						
Acute (short-term) toxicity	Dose	Exposure time	Species	Method	Evaluation	Note
Fish	LC ₅₀	96 hours	Pimephales promelas (fathead minnow)	-	-	9.640 mg/l (2-propanol)
Crustacea:	EC ₅₀	48 hours	Daphnia magna (water flea)	-	-	13.299 mg/l (2-propanol) 25.4 mg/l (ammonia)
Algae/aquatic plants:	IC ₅₀	72 hours	Desmodesmus subspicatus (green algae)	-	-	>1.000 mg/l (2-propanol)
Other organisms	-	-	-	-	-	-
Chronic (long-term) toxicity	Doza	Exposure time	Species	Method	Evaluation	Note
Fish	LC ₅₀	96 hours	-	_	-	-
Crustacea:	EC ₅₀	48 hours	-	-	-	-



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Trade name	:			TI	SSUE MARK	ING D	YES, YELLO)W		
Product cod	le:	3408-2-X*	*	Date of	compilation	: 14	November	2022	,	Version: 5
Algae/aquation	c plant	ts: IC ₅₀	72 hou	ırs -		-	-		-	
Other organis	sms	-	-	-		-	-		-	
		ce and degra	dability							
Abi	otic de	egradation		1						i
	D	egradation h	alf-lives		Method			Evalua	ation	Note
Marine water	No ir	nformation a	vailable	No information available			No info	rmatior	n availab	le -
Fresh water	No ir	nformation a	vailable	No ir	nformation av	ailable	No info	rmatior	n availab	le -
Air	No ir	nformation a	vailable	No ir	nformation av	ailable	No info	rmatior	n availab	le -
Soil	No ir	No information available		No ir	nformation av	ailable	No info	rmatior	n availab	le -
Bio	degra	dation								
% Degradati	on	Time (d	days)		Method		Evaluation			Note
No information	No information No information available available			No ir availa	nformation able	No in	formation ble	-		
	:			·		•		:		
12.3. Bio:	accum	ulative poter	ntial							
Oct	anol-v	vater partitio	n coeffici	ent (log l	(ow)					
Value	Con	centration	рН	°C	Method		Evaluati	on		Note
No		nformation	-	-	No informat		No informat	ion	-	
information available	availa	able			available		available			
avaliable										
Bio	conce	ntration Fact	or (BCF)							
Value		Spec			Method		Evaluation			Note
No information	on	No informati		No ir	formation	No	information			
available		available		availa	ble	ava	ilable	-		
1										
Chr	onic e	cotoxicity			I		:			
Valu	е	Dose		osure me	Species	N	Method	Evalu	ıation	Note



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	name:			TI	SSUE N	ИARKIN	IG DYE	S, YELL	w		
Produ	ct code:	340)8-2-X**	Date of	compi	lation:	14 No	vember	2022	Version:	5
Chronic toxicity on fish Chronic toxicity on crustacea (Daphnia)		LC ₅₀	available availal		ilable ava		ation lle ation	No information available No information	nformation - vailable		
crustac	ea (Daph	nnia)		available	availak	ole	availab	le	available		
12.4.	Mobili	ity in soil									
				bution in envir	onment	al compa	artments	:			
	Surfac	e tensior ue	n: °C	Concent	ration		Metho	nd		Note	
	No inform n avai	N natio ir	lo nformation vailable	No inform available		No inf availab	formation		-		
T		•	lesorption pefficient	L W						NI-1-	
Soil-wa	ort Nater air a	A/D co Henry's No inform vailable No inform vailable	pefficient constant nation	No information available No information available No information available	tion N av tion N	vaporati lo inform vailable lo inform vailable	nation	No info availab No info availab	ormation le	Note	
Transpo Soil-wa Water- Soil-air	ort ater air A	A/D co Henry's No inform vailable No inform	pefficient constant nation	No information available No information information in the second	tion N ar tion N ar tion N	lo inform vailable lo inform	nation	No info availab No info availab	ormation le ormation le ormation		
Soil-wa Water- Soil-air	ort Ater air A Result This su	A/D co Henry's No inform vailable No inform vailable so inform vailable	pefficient constant nation nation and vPvB a	No informar available No informar available No informar available available	tion N artion N artion N artion N artion ponents	lo inform vailable lo inform vailable lo inform vailable	nation nation nation	No info availab No info availab No info availab	ormation le ormation le ormation le	- - ioaccumulativ	re
Soil-wa Water- Soil-air	ort Ater air A Result This su	A/D co Henry's No inform vailable No inform vailable so inform vailable	pefficient constant nation nation and vPvB a	No information available No information available No information available assessment	tion N artion N artion N artion N artion ponents	lo inform vailable lo inform vailable lo inform vailable	nation nation nation	No info availab No info availab No info availab	ormation le ormation le ormation le	- - ioaccumulativ	re
Soil-wa Water- Soil-air 12.5.	ort ater air A Result This st and to	A/D co Henry's No information	pefficient constant nation nation and vPvB a /mixture co, or very pupting pro	No informar available No informar available No informar available available assessment ontains no comersistent and ver	tion N artion N are	lo inform vailable lo inform vailable lo inform vailable s conside ccumulat	nation nation nation ered to b tive (vPvI	No info availab No info availab No info availab	ormation ole ormation ole ormation ole persistent, bels of 0.1% o	ioaccumulativ	re
Soil-wa Water- Soil-air 12.5.	Result This su and to	A/D con Henry's No information	efficient constant nation nation and vPvB a /mixture co), or very p upting pro /mixture do ording to F	No information available No information available No information information available assessment contains no comersistent and ve	tion N artion N artion N artion N artion N artion of the composition o	lo inform vailable lo inform vailable lo inform vailable s conside ccumulat	nation nation nation ered to b tive (vPvl	No info availab No info availab No info availab e either B) at leve	persistent, bels of 0.1% o	ioaccumulativ r higher.	
Soil-wa	Result This st and to Endoc The st prope Comm	A/D con Henry's No information	efficient constant nation nation and vPvB a mixture constant prompting prompting prompting to Fegulation (No informar available No informar available No informar available assessment ontains no comersistent and verses perties perties pes not contain	tion N artion N artion N artion N artion N artion of the composition o	lo inform vailable lo inform vailable lo inform vailable s conside ccumulat	nation nation nation ered to b tive (vPvl	No info availab No info availab No info availab e either B) at leve	persistent, bels of 0.1% o	ioaccumulativ r higher.	



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SECTION	13. Disposal considerati	ons		
	Waste treatment methods			
13.1.1.	Product/Packaging disposal:			
	Submit for disposal to the Protection.	ne legal person authorized by the Ministry of Environmental and Nature		
10.10				
13.1.2.		gnations according to Law:		
	Disposal must be made	according to official regulations.		
13.1.3.	Waste treatment – relev	ant information:		
	No information available			
13.1.4.	Sewage disposal – releva	ant information:		
	Waste must not be dispo	osed of into the sewage system.		
13.1.5.	Other disposal recomme	endations:		
	Do not dispose of the product's remains into the sewage system. Submit the remains to the col authorized by the ministry in charge. Do not dispose of the packaging into the sewage system. Submit the packaging to the collectors authorized by the ministry in charge.			
13.1.6.	Relevant Community pro	ovisions:		
	-			
SECTION	14. Transport information	on		
	Transporting/shipment by	y road (ADR)		
UN numb	oer:	Not regulated		
UN prope	er shipping name:	-		
Transport	: hazard class(es):	-		
Packing g	roup:	-		
Environm	ental hazards:	-		
Special p	recautions for user:	-		
	Transporting/shipment by	y rail (RID)		
UN numb	oer:	Not regulated		
UN prope	er shipping name:	-		
Transport	: hazard class(es):	-		
Packing g	roup:	-		



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Environmental hazards:	-
Special precautions for user:	-
Transporting/shipment by inla	nd waterways (ADN)
UN number:	Not regulated
UN proper shipping name:	-
Transport hazard class(es):	-
Packing group:	-
Environmental hazards:	-
Special precautions for user:	-
Transporting/shipment by sea	(IMDG)
UN number:	Not regulated
UN proper shipping name:	-
Transport hazard class(es):	-
Packing group:	-
Environmental hazards:	-
Special precautions for user:	-
Transport in bulk according to Annex II of MARPOL73/78 and the IBC code:	-
Transporting/shipment by air ((ICAO-TI/IATA-DGR)
UN number:	Not regulated
UN proper shipping name:	-
Transport hazard class(es):	-
Packing group:	-
Environmental hazards:	-
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			
	Authorisation and/or restrictions on use			
	Authorisations:	-		
	Restrictions:	-		



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

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



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16.4.	Classification and procedure used to derive the classification for mixture according to Regulation (EC) 1272/2008 (CLP)				
Classific	cation		Classification procedure		
_			-		
16.5.	Rele	vant H statements (nu	mber and full text)		
		221	Flammable gas.		
		225	Highly flammable liquid and vapour.		
		314	Causes severe skin burns and eye damage.		
	11.	315	Causes skin irritation.		
	H:	319	Causes serious eye irritation.		
		331	Toxic if inhaled.		
		336	May cause drowsiness or dizziness.		
		400	Very toxic to aquatic life.		
16.6.	Train	ing advice:	-		
	16.7. Further information:		"X" in the product code marks different volumes (different packaging of the product)		
16.7.			We are not responsible for consequences in case of failure to comply with instructions for use or improper use of the product described in this material safety data sheet.		

ANNEX: Exposure s	scenario resulting	to Chemical	I safety assessme	nt

-