

Revision nr 1 Dated 18/01/2023 First compilation Printed on 25/01/2023 Page n. 1/17

Safety Data Sheet

According to Annex II to REACH - Regulation 2020/878 and to Annex II to UK REACH

SECTION 1. Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product name L AQUA PAINT

UFI: 4J90-E0XH-400C-8RNK

1.2. Relevant identified uses of the substance or mixture and uses advised against

Water-diluted enamel paint Intended use

1.3. Details of the supplier of the safety data sheet

NORDIA S.A. 364 Kifisias Av.

15233 Chalandri - Greece

Phone: +30 22950 22225 - Fax: +30 22950 22120

info@marmoline.gr www.marmoline.gr

1.4. Emergency telephone number

For urgent inquiries refer to Poison Centre: 0030 2107793777

SECTION 2. Hazards identification

2.1. Classification of the substance or mixture

The product is classified as hazardous pursuant to the provisions set forth in (EC) Regulation 1272/2008 (CLP) (and subsequent amendments and supplements). The product thus requires a safety datasheet that complies with the provisions of (EU) Regulation 2020/878. Any additional information concerning the risks for health and/or the environment are given in sections 11 and 12 of this sheet.

Hazard classification and indication:

Eye irritation, category 2 H319 Causes serious eye irritation.

2.2. Label elements

Hazard labelling pursuant to EC Regulation 1272/2008 (CLP) and subsequent amendments and supplements.

Hazard pictograms:



Signal words: Warning

Hazard statements:

H319 Causes serious eye irritation.

EUH208 2-Methyl-2H-isothiazol-3-one Contains:

reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H

-isothiazol-3-one [EC no. 220-239-6] (3:1) 1,2-benzisothiazol-3(2H)-one

2,4,7,9-Tetramethyldec-5-yne-4,7-diol

May produce an allergic reaction.

Precautionary statements:

Wear eye protection / face protection. P280

P337+P313 If eye irritation persists: Get medical advice / attention.



Revision nr 1 Dated 18/01/2023 First compilation Printed on 25/01/2023 Page n. 2/17

SECTION 2. Hazards identification .../>>

P264 Wash with plenty of water thoroughly after handling.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.

Continue rinsina.

VOC (Directive 2004/42/EC):

Interior / exterior trim and cladding paints for wood, metal or plastic.

VOC given in g/litre of product in a ready-to-use condition: 129.00 Limit value: 130.00

2.3. Other hazards

On the basis of available data, the product does not contain any PBT or vPvB in percentage ≥ than 0,1%.

The product does not contain substances with endocrine disrupting properties in concentration >= 0.1%.

SECTION 3. Composition/information on ingredients

3.2. Mixtures

Contains:

Identification x = Conc. % Classification (EC) 1272/2008 (CLP)

Dipropylene glycol monomethyl ether

CAS 34590-94-8 $3 \le x < 5$ Substance with a community workplace exposure limit.

252-104-2 EC **INDEX**

REACH Reg. 01-2119450011-60-0000

Polypropylene Glycol

CAS 25322-69-4 $1,5 \le x < 2$ Acute Tox. 4 H302 EC 500-039-8 STA Oral: 500 mg/kg

INDEX

Alcohols, C11-C15-secondary, ethoxylated

CAS 68131-40-8 $1 \le x < 1,5$ Acute Tox. 4 H302, Eye Dam. 1 H318

EC STA Oral: 500 mg/kg

INDEX

2,4,7,9-Tetramethyldec-5-yne-4,7-diol

CAS 126-86-3 $0.2 \le x < 0.3$ Eye Dam. 1 H318, Skin Sens. 1 H317, Aquatic Chronic 3 H412

EC 204-809-1

INDEX

REACH Reg. 01-2119954390-39

Ethanediol

CAS 107-21-1 $0.2 \le x < 0.3$ Acute Tox. 4 H302, STOT RE 2 H373

EC 203-473-3 STA Oral: 500 mg/kg INDEX 603-027-00-1

REACH Reg. 01-2119456816-28

2-BUTOXYETHANOL

CAS 111-76-2 $0.1 \le x < 0.2$ Acute Tox. 4 H302, Acute Tox. 4 H332, Eye Irrit. 2 H319, Skin Irrit. 2 H315

203-905-0 EC LD50 Oral: 1200 mg/kg, STA Inhalation vapours: 11 mg/l INDEX 603-014-00-0

REACH Reg. 01-2119475108-36

2-METHOXY-1-METHYLETHYL ACETATE

CAS $0 \le x < 0,1$ Flam. Liq. 3 H226, STOT SE 3 H336 108-65-6

203-603-9 EC INDEX 607-195-00-7 REACH Reg. 01-2119475791-29

N-butylacetate

FC

CAS 123-86-4 $0 \le x < 0.1$ Flam. Liq. 3 H226, STOT SE 3 H336, EUH066

FC 204-658-1 INDEX 607-025-00-1 REACH Reg. 01-2119485493-29

220-120-9

1,2-benzisothiazol-3(2H)-one

CAS 2634-33-5 $0 \le x < 0.05$ Acute Tox. 2 H330, Acute Tox. 4 H302, Eye Dam. 1 H318, Skin Irrit. 2 H315, Skin

Sens. 1 H317, Aquatic Acute 1 H400 M=1, Aquatic Chronic 2 H411

Skin Sens. 1 H317: ≥ 0,05%

INDEX LD50 Oral: 532 mg/kg, STA Inhalation mists/powders: 0,051 mg/l 613-088-00-6



Revision nr.1 Dated 18/01/2023 First compilation Printed on 25/01/2023 Page n. 3 / 17

SECTION 3. Composition/information on ingredients .../>>

Diethylene glycol monobutyl ether

203-961-6

236-671-3

215-647-6

CAS 112-34-5 $0 \le x < 0,1$ Eye Irrit. 2 H319

INDEX 603-096-00-8 REACH Reg. 01-2119475104-44

Pyrithione zinc

FC

EC

FC.

EC

EC

CAS 13463-41-7 0 ≤ x < 0,01 Repr. 1B H360D, Acute Tox. 2 H330, Acute Tox. 3 H301, STOT RE 1 H372, Eye

Dam. 1 H318, Aquatic Acute 1 H400 M=1000, Aquatic Chronic 1 H410 M=10

LD50 Oral: 221 mg/kg, LC50 Inhalation mists/powders: 0,14 mg/l/4h

INDEX

REACH Reg. 01-2119511196-46

AMMONIA

CAS 1336-21-6 0 ≤ x < 0,01 Skin Corr. 1B H314, Eye Dam. 1 H318, STOT SE 3 H335, Aquatic Acute 1 H400

M=1, Classification note according to Annex VI to the CLP Regulation: B

STOT SE 3 H335: ≥ 5%

INDEX 007-001-01-2 REACH Reg. 01-2119488876-14

reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H -isothiazol-3-one [EC no. 220-239-6] (3:1)

CAS 55965-84-9 0 ≤ x < 0,0015 Acute Tox. 2 H310, Acute Tox. 2 H330, Acute Tox. 3 H301, Skin Corr. 1C H314,

Eye Dam. 1 H318, Skin Sens. 1A H317, Aquatic Acute 1 H400 M=100, Aquatic

Chronic 1 H410 M=100, EUH071

611-341-5 Skin Corr. 1C H314: ≥ 0,6%, Skin Irrit. 2 H315: ≥ 0,06%, Skin Sens. 1A H317: ≥

0,0015%, Eye Dam. 1 H318: ≥ 0,6%

INDEX 613-167-00-5 LD50 Oral: 66 mg/kg, LD50 Dermal: >141 mg/kg, STA Inhalation mists/powders:

0,051 mg/l

2-Methyl-2H-isothiazol-3-one

CAS 2682-20-4 0 ≤ x < 0,0015 Acute Tox. 2 H330, Acute Tox. 3 H301, Acute Tox. 3 H311, Skin Corr. 1B H314,

Eye Dam. 1 H318, Skin Sens. 1A H317, Aquatic Acute 1 H400 M=10, Aquatic

Chronic 1 H410 M=1, EUH071 Skin Sens. 1A H317: ≥ 0,0015%

INDEX LD50 Oral: 285 mg/kg, STA Dermal: 300 mg/kg, STA Inhalation mists/powders:

0,051 mg/l

The full wording of hazard (H) phrases is given in section 16 of the sheet.

SECTION 4. First aid measures

220-239-6

4.1. Description of first aid measures

EYES: Remove contact lenses, if present. Wash immediately with plenty of water for at least 30-60 minutes, opening the eyelids fully. Get medical advice/attention.

SKIN: Remove contaminated clothing. Rinse skin with a shower immediately. Get medical advice/attention.

INGESTION: Have the subject drink as much water as possible. Get medical advice/attention. Do not induce vomiting unless explicitly authorised by a doctor.

INHALATION: Get medical advice/attention immediately. Remove victim to fresh air, away from the accident scene. If the subject stops breathing, administer artificial respiration. Take suitable precautions for rescue workers.

4.2. Most important symptoms and effects, both acute and delayed

Specific information on symptoms and effects caused by the product are unknown.

4.3. Indication of any immediate medical attention and special treatment needed

Information not available

SECTION 5. Firefighting measures

5.1. Extinguishing media

SUITABLE EXTINGUISHING EQUIPMENT

The extinguishing equipment should be of the conventional kind: carbon dioxide, foam, powder and water spray.

UNSUITABLE EXTINGUISHING EQUIPMENT

None in particular.

5.2. Special hazards arising from the substance or mixture

HAZARDS CAUSED BY EXPOSURE IN THE EVENT OF FIRE

Do not breathe combustion products.



Revision nr.1 Dated 18/01/2023 First compilation Printed on 25/01/2023 Page n. 4 / 17

SECTION 5. Firefighting measures .../>>

5.3. Advice for firefighters

GENERAL INFORMATION

Use jets of water to cool the containers to prevent product decomposition and the development of substances potentially hazardous for health. Always wear full fire prevention gear. Collect extinguishing water to prevent it from draining into the sewer system. Dispose of contaminated water used for extinction and the remains of the fire according to applicable regulations.

SPECIAL PROTECTIVE EQUIPMENT FOR FIRE-FIGHTERS

Normal fire fighting clothing i.e. fire kit (BS EN 469), gloves (BS EN 659) and boots (HO specification A29 and A30) in combination with self-contained open circuit positive pressure compressed air breathing apparatus (BS EN 137).

SECTION 6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Block the leakage if there is no hazard.

Wear suitable protective equipment (including personal protective equipment referred to under Section 8 of the safety data sheet) to prevent any contamination of skin, eyes and personal clothing. These indications apply for both processing staff and those involved in emergency procedures.

6.2. Environmental precautions

The product must not penetrate into the sewer system or come into contact with surface water or ground water.

6.3. Methods and material for containment and cleaning up

Collect the leaked product into a suitable container. Evaluate the compatibility of the container to be used, by checking section 10. Absorb the remainder with inert absorbent material.

Make sure the leakage site is well aired. Contaminated material should be disposed of in compliance with the provisions set forth in point 13.

6.4. Reference to other sections

Any information on personal protection and disposal is given in sections 8 and 13.

SECTION 7. Handling and storage

7.1. Precautions for safe handling

Before handling the product, consult all the other sections of this material safety data sheet. Avoid leakage of the product into the environment. Do not eat, drink or smoke during use. Remove any contaminated clothes and personal protective equipment before entering places in which people eat

7.2. Conditions for safe storage, including any incompatibilities

Store only in the original container. Store the containers sealed, in a well ventilated place, away from direct sunlight. Keep containers away from any incompatible materials, see section 10 for details.

7.3. Specific end use(s)

Information not available

SECTION 8. Exposure controls/personal protection

8.1. Control parameters

Regulatory References:

DEU

BGF	Вългария	НАРЕДБА № 13 ОТ 30 ДЕКЕМВРИ 2003 Г. ЗА ЗАЩИТА НА РАБОТЕЩИТЕ ОТ РИСКОВЕ,
		СВЪРЗАНИ С ЕКСПОЗИЦИЯ НА ХИМИЧНИ АГЕНТИ ПРИ РАБОТА (изм. ДВ. бр.5 от 17 Януари2020г.)
CZI	Česká Republika	Nařízení vlády č. 41/2020 Sb. Nařízení vlády, kterým se mění nařízení vlády č. 361/2007 Sb., kterým se
		stanoví podmínky ochrany zdraví při práci, ve znění pozděiších předpisů

Deutschland Technischen Regeln für Gefahrstoffe (TRGS 900) - Liste der Arbeitsplatzgrenzwerte und Kurzzeitwerte.

MAK- und BAT-Werte-Liste 2020, Ständige Senatskommission zur Prüfung gesundheitsschädlicher

Arbeitsstoffe, Mitteilung 56

ESP España Límites de exposición profesional para agentes químicos en España 2021

FRA France Valeurs limites d'exposition professionnelle aux agents chimiques en France. ED 984 - INRS

GRC Ελλάδα Π.Δ. 26/2020 (ΦΕΚ 50/Α` 6.3.2020) Εναρμόνιση της ελληνικής νομοθεσίας προς τις διατάξεις των

οδηγιών 2017/2398/ΕΕ, 2019/130/ΕΕ και 2019/983/ΕΕ «για την τροποποίηση της οδηγίας 2004/37/ΕΚ "σχετικά με την προστασία των εργαζομένων από τους

κινδύνους που συνδέονται με την έκθεση σε

EPY 11.0.5 - SDS 1004.14



Revision nr.1 Dated 18/01/2023 First compilation Printed on 25/01/2023 Page n. 5 / 17

SECTION 8. Exposure controls/personal protection .../>>

		καρκινογόνους ή μεταλλαξιγόνους παράγοντες κατά την εργασία"»
HUN	Magyarország	Az innovációért és technológiáért felelős miniszter 5/2020. (II. 6.) ITM rendelete a kémiai kóroki tényezők hatásának kitett munkavállalók egészségének és biztonságának védelméről
HRV	Hrvatska	Pravilnik o izmjenama i dopunama Pravilnika o zaštiti radnika od izloženosti opasnimkemikalijama na radu, graničnim vrijednostima izloženosti i biološkim graničnim vrijednostima (NN 1/2021)
ITA	Italia	Decreto Legislativo 9 Aprile 2008, n.81
POL	Polska	Rozporządzenie ministra rozwoju, pracy i technologii z dnia 18 lutego 2021 r. Zmieniające
		rozporządzenie w sprawie najwyższych dopuszczalnych stężeń i natężeń czynników szkodliwych dla zdrowia w środowisku pracy
ROU	România	Hotărârea nr. 53/2021 pentru modificarea hotărârii guvernului nr. 1.218/2006, precum și pentru modificarea si completarea hotărârii guvernului nr. 1.093/2006
SVK	Slovensko	NARIADENIÉ VLÁDY Slovenskej republiky z 12. augusta 2020, ktorým sa mení a dopĺňa nariadenie vlády Slovenskej republiky č. 356/2006 Z. z. o ochrane zdravia zamestnancov pred rizikami súvisiacimi s expozíciou karcinogénnym a mutagénnym faktorom pri práci v znení neskorších predpisov
SVN	Slovenija	Pravilnik o varovanju delavcev pred tveganji zaradi izpostavljenosti kemičnim snovem pri delu (Uradni list RS, št. 100/01, 39/05, 53/07, 102/10, 43/11 – ZVZD-1, 38/15, 78/18 in 78/19)
GBR	United Kingdom	EH40/2005 Workplace exposure limits (Fourth Edition 2020)
EU	OEL EU	Directive (EU) 2019/1831; Directive (EU) 2019/130; Directive (EU) 2019/983; Directive (EU) 2017/2398; Directive (EU) 2017/164; Directive 2009/161/EU; Directive 2006/15/EC; Directive 2004/37/EC; Directive

2000/39/EC; Directive 98/24/EC; Directive 91/322/EEC.

ACGIH 2020 TLV-ACGIH

	Dipropylene glycol monomethyl ether										
Threshold Limit V	'alue			., ,,							
Туре	Country	TWA/8h		STEL/15m	iin	Remarks / Obs	servations				
	•	mg/m3	ppm	mg/m3	ppm						
TLV	BGR	308	50			SKIN					
TLV	CZE	270	43,74	550	89,1	SKIN					
AGW	DEU	310	50	310	50						
MAK	DEU	310	50	310	50						
VLA	ESP	308	50			SKIN					
VLEP	FRA	308	50			SKIN					
TLV	GRC	600	100	900	150						
AK	HUN	308									
GVI/KGVI	HRV	308	50			SKIN					
VLEP	ITA	308	50			SKIN					
NDS/NDSCh	POL	240		480		SKIN					
TLV	ROU	308	50			SKIN					
NPEL	SVK	308	50			SKIN					
MV	SVN	308	50			SKIN					
WEL	GBR	308	50			SKIN					
OEL	EU	308	50			SKIN					
Predicted no-effe			;								
Normal value in							19	mg/l			
Normal value in							1,9	mg/l			
Normal value for							70,2	mg/kg			
Normal value for							7,02	mg/kg			
Normal value for			ise				190	mg/l			
Normal value of							4168	mg/l			
Normal value for							2,74	mg/kg			
Health - Derived n											
		ects on consu				Effects on worke					
Route of exposi	ure Ac	ute local Acu		Chronic local	Chronic syste	en Aic ute local	Acute	Chronic lo			
		sys	temic				systemic		systemic		
Oral				VND	36 mg/kg bw/d						
Inhalation				VND	37,2 mg/m3			VND	308 mg/m3		
Skin				VND	121 mg/kg bw/d			VND	283 mg/kg bw/d		



NORDIA S.A

L AQUA PAINT

Revision nr.1 Dated 18/01/2023 First compilation Printed on 25/01/2023 Page n. 6/17

SECTION 8. Exposure controls/personal protection .../>>

				Eth	anediol		
reshold Limit \	/alue						
Туре	Country	TWA/8h		STEL/15	min	Remarks / Observations	
		mg/m3	ppm	mg/m3	ppm		
TLV	BGR	52	20	104	40	SKIN	
TLV	CZE	50	19,4	100	38,8	SKIN	
AGW	DEU	26	10	52	20	SKIN	
MAK	DEU	26	10	52	20	SKIN	
VLA	ESP	52	20	104	40	SKIN	
VLEP	FRA	52	20	104	40	SKIN	
TLV	GRC	125	50	125	50		
AK	HUN	52		104		SKIN	
GVI/KGVI	HRV	52	20	104	40	SKIN	
VLEP	ITA	52	20	104	40	SKIN	
NDS/NDSCh	POL	15		50		SKIN	
TLV	ROU	52	20	104	40	SKIN	
NPEL	SVK	52	20	104	40	SKIN	
MV	SVN	52	20	104	40	SKIN	
WEL	GBR	52	20	104	40	SKIN	
OEL	EU	52	20	104	40	SKIN	
TLV-ACGIH			25	-	50		
TLV-ACGIH				10		INHAL	

				2-BUTO	KYETHANOL			
hreshold Limit \	/alue							
Туре	Country	TWA/8h		STEL/15	min	Remarks / Observations		
		mg/m3	ppm	mg/m3	ppm			
TLV	BGR	98	20	246	50	SKIN		
TLV	CZE	100	20,4	200	40,8	SKIN		
AGW	DEU	49	10	98 (C)	20 (C)	SKIN		
MAK	DEU	49	10	98	20	SKIN	Hinweis	
VLA	ESP	98	20	245	50	SKIN		
VLEP	FRA	49	10	246	50	SKIN		
TLV	GRC	120	25					
AK	HUN	98		246		SKIN		
GVI/KGVI	HRV	98	20	246	50	SKIN		
VLEP	ITA	98	20	246	50	SKIN		
NDS/NDSCh	POL	98		200		SKIN		
TLV	ROU	98	20	246	50	SKIN		
NPEL	SVK	98	20	246	50	SKIN		
MV	SVN	98	20	246	50	SKIN		
WEL	GBR	123	25	246	50	SKIN		
OEL	EU	98	20	246	50	SKIN		
TLV-ACGIH		97	20					

2-METHOXY-1-METHYLETHYL ACETATE												
Threshold Limit V	/alue											
Туре	Country	TWA/8h		STEL/15	min	Remarks / Observations						
		mg/m3	ppm	mg/m3	ppm							
TLV	BGR	275	50	550	100	SKIN						
TLV	CZE	270	49,14	550	100,1	SKIN						
AGW	DEU	270	50	270	50							
MAK	DEU	270	50	270	50							
VLA	ESP	275	50	550	100	SKIN						
VLEP	FRA	275	50	550	100	SKIN						
TLV	GRC	275	50	550	100							
AK	HUN	275		550								
GVI/KGVI	HRV	275	50	550	100	SKIN						
VLEP	ITA	275	50	550	100	SKIN						
NDS/NDSCh	POL	260		520		SKIN						
TLV	ROU	275	50	550	100	SKIN						
NPEL	SVK	275	50	550	100	SKIN						
MV	SVN	275	50	550	100	SKIN						
WEL	GBR	274	50	548	100	SKIN						
OEL	EU	275	50	550	100	SKIN						



Revision nr.1 Dated 18/01/2023 First compilation Printed on 25/01/2023 Page n. 7 / 17

SECTION 8. Exposure controls/personal protection/>>

				N-but	ylacetate				
hreshold Limit V	'alue								
Type	Country	TWA/8h		STEL/15n	nin	Remarks / C	Observations		
		mg/m3	ppm	mg/m3	ppm				
TLV	BGR	710		950					
TLV	CZE	950	196,65	1200	248,4				
AGW	DEU	300	62	600 (C)	124 (C)				
VLEP	FRA	710	150	940	200				
TLV	GRC	710	150	950	200				
AK	HUN	241		723					
GVI/KGVI	HRV	241	50	723	150				
NDS/NDSCh	POL	240		720					
NPEL	SVK	241	50	723	150				
MV	SVN	300	62	600	124				
WEL	GBR	724	150	966	200				
OEL	EU	241	50	723	150				
TLV-ACGIH			50		150				
redicted no-effe	ct concentra	ation - PNEC	;						
Normal value in	fresh water						0,18	mg/l	
Normal value in	marine wate	er					0,018	mg/l	
Normal value for	r fresh wate	r sediment					0,981	mg/kg	
Normal value for	or marine wa	ter sediment					0,0981	mg/kg	
Normal value for	or water, inte	rmittent relea	se				0,36	mg/l	
Normal value of	f STP microo	organisms					35,6	mg/l	
Normal value for	r the terresti	rial compartn	nent				0,0903	mg/kg	
lealth - Derived r	o-effect lev	el - DNEL / I	OMEL						
	Effe	cts on consu	ımers			Effects on wo	rkers		
Route of expos	ure Acu	te local Acu	ıte	Chronic local	Chronic sy	sten Aic ute local	Acute	Chronic Id	calChronic
		sys	temic				systemic		systemic
Inhalation	859	,7 859	9,7	102,34	102,34	960	960	480	480
	mg/	m3 ma	/m3	mg/m3	mg/m3	mg/m3	mg/m3	mg/m3	mg/m3

Diethylene glycol monobutyl ether											
Threshold Limit V	'alue										
Type	Country	TWA/8h		STEL/15m	nin	Remarks / Observations					
		mg/m3	ppm	mg/m3	ppm						
TLV	BGR	67,5	10	101,2	15						
TLV	CZE	70	10,36	100	14,8						
AGW	DEU	67	10	100,5 (C)	15 (C)	Hinweis					
MAK	DEU	67	10	100,5	15	Hinweis					
VLA	ESP	67,5	10	101,2	15						
VLEP	FRA	68	10	101,2	15						
TLV	GRC	67,5	10	101,2	15						
AK	HUN	67,5		101,2							
GVI/KGVI	HRV	67,5	10	101,2	15						
VLEP	ITA	67,5	10	101,2	15						
NDS/NDSCh	POL	67		100							
TLV	ROU	67,5	10	101,2	15						
NPEL	SVK	67,5	10	101,2	15						
MV	SVN	67,5	10	101,2	15						
WEL	GBR	67,5	10	101,2	15						
OEL	EU	67,5	10	101,2	15						

				AM	IMONIA							
Threshold Limit Value												
Type	Country	TWA/8h		STEL/15i	min	Remarks / Observations						
		mg/m3	ppm	mg/m3	ppm							
OEL	EU	14	20	36	50							

Leaend:

(C) = CEILING; INHAL = Inhalable Fraction; RESP = Respirable Fraction; THORA = Thoracic Fraction. VND = hazard identified but no DNEL/PNEC available; NEA = no exposure expected; NPI = no hazard identified.

8.2. Exposure controls

As the use of adequate technical equipment must always take priority over personal protective equipment, make sure that the workplace is well aired through effective local aspiration.



Revision nr.1 Dated 18/01/2023 First compilation Printed on 25/01/2023 Page n. 8 / 17

SECTION 8. Exposure controls/personal protection .../>>

When choosing personal protective equipment, ask your chemical substance supplier for advice.

Personal protective equipment must be CE marked, showing that it complies with applicable standards.

Provide an emergency shower with face and eye wash station.

HAND PROTECTION

Protect hands with category III work gloves (see standard EN 374).

The following should be considered when choosing work glove material: compatibility, degradation, failure time and permeability.

The work gloves' resistance to chemical agents should be checked before use, as it can be unpredictable. The gloves' wear time depends on the duration and type of use.

SKIN PROTECTION

Wear category I professional long-sleeved overalls and safety footwear (see Regulation 2016/425 and standard EN ISO 20344). Wash body with soap and water after removing protective clothing.

EYE PROTECTION

Wear airtight protective goggles (see standard EN 166).

RESPIRATORY PROTECTION

If the threshold value (e.g. TLV-TWA) is exceeded for the substance or one of the substances present in the product, use a mask with a type A filter whose class (1, 2 or 3) must be chosen according to the limit of use concentration. (see standard EN 14387). In the presence of gases or vapours of various kinds and/or gases or vapours containing particulate (aerosol sprays, fumes, mists, etc.) combined filters are required. Respiratory protection devices must be used if the technical measures adopted are not suitable for restricting the worker's exposure to the threshold values considered. The protection provided by masks is in any case limited.

If the substance considered is odourless or its olfactory threshold is higher than the corresponding TLV-TWA and in the case of an emergency, wear open-circuit compressed air breathing apparatus (in compliance with standard EN 137) or external air-intake breathing apparatus (in compliance with standard EN 138). For a correct choice of respiratory protection device, see standard EN 529.

ENVIRONMENTAL EXPOSURE CONTROLS

The emissions generated by manufacturing processes, including those generated by ventilation equipment, should be checked to ensure compliance with environmental standards.

SECTION 9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

Properties Value Information

Appearance liquid
Colour as showed in color folder

Odour

Melting point / freezing point

Initial boiling point

Flammability

Lower explosive limit

Upper explosive limit

Flash point

Not available

Auto-ignition temperature Not available
pH Not available
Kinematic viscosity 180-220 s (Ford Cup No 4).

Solubility
Partition coefficient: n-octanol/water
Vapour pressure
Density and/or relative density
Relative vapour density
Particle characteristics
Not available
Not available
Not applicable

9.2. Other information

9.2.1. Information with regard to physical hazard classes

Information not available

9.2.2. Other safety characteristics

Information not available

SECTION 10. Stability and reactivity

10.1. Reactivity

There are no particular risks of reaction with other substances in normal conditions of use.

Dipropylene glycol monomethyl ether



Revision nr.1 Dated 18/01/2023 First compilation Printed on 25/01/2023 Page n. 9 / 17

SECTION 10. Stability and reactivity .../>>

Forms peroxides with: air.

Ethanediol

In the air absorbs moisture. Decomposes at temperatures above 200°C/392°F.

2-BUTOXYETHANOL

Decomposes under the effect of heat.

2-METHOXY-1-METHYLETHYL ACETATE

Stable in normal conditions of use and storage.

With the air it may slowly develop peroxides that explode with an increase in temperature.

N-butylacetate

Decomposes on contact with: water.

AMMONIA

Corrodes: aluminium,iron,zinc,copper,copper alloys.

10.2. Chemical stability

The product is stable in normal conditions of use and storage.

10.3. Possibility of hazardous reactions

No hazardous reactions are foreseeable in normal conditions of use and storage.

Dipropylene glycol monomethyl ether

May react violently with: strong oxidising agents.

Ethanediol

Risk of explosion on contact with: perchloric acid.May react dangerously with: chlorosulphuric acid,sodium hydroxide,sulphuric acid,phosphorus pentasulphide,chromium (III) oxide,chromyl chloride,potassium perchlorate,potassium dichromate,sodium peroxide,aluminium.Forms explosive mixtures with: air.

2-BUTOXYETHANOL

May react dangerously with: aluminium, oxidising agents. Forms peroxides with: air.

2-METHOXY-1-METHYLETHYL ACETATE

May react violently with: oxidising substances, strong acids, alkaline metals.

N-butylacetate

Risk of explosion on contact with: strong oxidising agents. May react dangerously with: alkaline hydroxides, potassium tert-butoxide. Forms explosive mixtures with: air.

Diethylene glycol monobutyl ether

May react with: oxidising substances. May form peroxides with: oxygen. Develops hydrogen on contact with: aluminium. May form explosive mixtures with: air.

AMMONIA

Risk of explosion on contact with: strong acids,iodine. May react dangerously with: strong bases.

10.4. Conditions to avoid

None in particular. However the usual precautions used for chemical products should be respected.

Dipropylene glycol monomethyl ether

Avoid exposure to: sources of heat. Possibility of explosion.

Ethanediol

Avoid exposure to: sources of heat,naked flames.

2-BUTOXYETHANOL

Avoid exposure to: sources of heat,naked flames.

N-butylacetate

Avoid exposure to: moisture, sources of heat, naked flames.

Diethylene glycol monobutyl ether

Avoid exposure to: air.

10.5. Incompatible materials

2-METHOXY-1-METHYLETHYL ACETATE

Incompatible with: oxidising substances, strong acids, alkaline metals.

N-butylacetate

Incompatible with: water, nitrates, strong oxidants, acids, alkalis, zinc.

Diethylene glycol monobutyl ether

Incompatible with: oxidising substances, strong acids, alkaline metals.

AMMONIA

Incompatible with: silver, silver salts, lead, lead salts, zinc, zinc salts, hydrochloric acid, nitric acid, oleum, halogens, acrolein, nitromethane, acrylic acid.

10.6. Hazardous decomposition products

Ethanediol

May develop: hydroxyacetaldehyde,glyoxal,acetaldehyde,methane,carbon monoxide,hydrogen.

2-BUTOXYETHANOL



Revision nr.1 Dated 18/01/2023 First compilation Printed on 25/01/2023 Page n. 10 / 17

SECTION 10. Stability and reactivity .../>>

May develop: hydrogen.
Diethylene glycol monobutyl ether
May develop: hydrogen.
AMMONIA

May develop: nitric oxide.

SECTION 11. Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Metabolism, toxicokinetics, mechanism of action and other information

2-METHOXY-1-METHYLETHYL ACETATE

The main route of entry is the skin, whereas the respiratory route is less important due to the low vapour pressure of the product.

Information on likely routes of exposure

Ethanediol

WORKERS: inhalation; contact with the skin.

POPULATION: inhalation of ambient air; contact with the skin of products containing the substance.

2-METHOXY-1-METHYLETHYL ACETATE WORKERS: inhalation; contact with the skin.

N-butylacetate

WORKERS: inhalation; contact with the skin.

Diethylene glycol monobutyl ether

WORKERS: inhalation; contact with the skin.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Ethanediol

Ingestion initially stimulates the central nervous system; later replaced by a phase of depression. There may be kidney damage, with anuria and uremia. Over-exposure symptoms are: vomiting, drowsiness, difficulty in breathing, convulsions. The lethal dose for humans is approx. 1.4 ml/kg.

2-METHOXY-1-METHYLETHYL ACETATE

Above 100 ppm causes irritation of the eye, nose and oropharynx mucous membranes. At 1000 ppm, disturbance of equilibrium and severe eye irritation can be noticed. Clinical and biological examinations carried out on exposed volunteers revealed no anomalies. Acetate produces greater skin and eye irritation with direct contact. No chronic effects on humans have been reported (INCR, 2010).

N-butylacetate

In humans, the substance's vapours cause irritation of the eyes and nose. In the event of repeated exposure, skin irritation, dermatitis (dryness and cracking of the skin) and keratitis appear.

Diethylene glycol monobutyl ether

May be absorbed by inhalation, ingestion and skin contact; is irritating for the skin and especially for the eyes. May cause damage to the spleen. At room temperature the danger of inhalation is unlikely, due to the low vapour pressure of the substance.

Interactive effects

N-butylacetate

A case of acute intoxication been reported involving a 33 year old worker while cleaning a tank with a preparation containing xylenes, butyl acetate and ethylene glycol acetate. The person had irritation of the conjunctiva and upper respiratory tract, drowsiness and motor coordination disorders, which disappeared within 5 hours. The symptoms are attributed to poisoning by mixed xylenes and butyl acetate, with a possible synergistic effect responsible for the neurological effects. Cases of vacuolar keratitis are reported in workers exposed to a mixture of butyl acetate and isobutanol vapours, but with uncertainty concerning the responsibility of a particular solvent (INRC, 2011).

ACUTE TOXICITY

ATE (Inhalation) of the mixture: Not classified (no significant component)

ATE (Oral) of the mixture: >2000 mg/kg

ATE (Dermal) of the mixture: Not classified (no significant component)

Dipropylene glycol monomethyl ether

 LD50 (Oral):
 > 5000 mg/kg Rat

 LD50 (Dermal):
 9510 mg/kg Rabbit



Revision nr.1 Dated 18/01/2023 First compilation Printed on 25/01/2023 Page n. 11 / 17

SECTION 11. Toxicological information .../>>

Polypropylene Glycol

LD50 (Oral): > 2000 mg/kg Rat - Fischer 344

STA (Oral): 500 mg/kg estimate from table 3.1.2 of Annex I of the CLP

(figure used for calculation of the acute toxicity estimate of the mixture)

LD50 (Dermal): > 3000 mg/kg Rabbit - New Zeland white

Alcohols, C11-C15-secondary, ethoxylated

STA (Oral): 500 mg/kg estimate from table 3.1.2 of Annex I of the CLP

(figure used for calculation of the acute toxicity estimate of the mixture)

Ethanediol

LD50 (Oral): > 2000 mg/kg Rat

STA (Oral): 500 mg/kg estimate from table 3.1.2 of Annex I of the CLP

(figure used for calculation of the acute toxicity estimate of the mixture)

LD50 (Dermal): 9530 mg/kg Rabbit

2-BUTOXYETHANOL

LD50 (Oral): 1200 mg/kg Guinea pig LC50 (Inhalation vapours): 2,2 mg/l/4h Rat

STA (Inhalation vapours): 11 mg/l estimate from table 3.1.2 of Annex I of the CLP

(figure used for calculation of the acute toxicity estimate of the mixture)

2-METHOXY-1-METHYLETHYL ACETATE

LD50 (Oral): 8530 mg/kg Rat LD50 (Dermal): > 5000 mg/kg Rat

N-butylacetate

LD50 (Oral): > 6400 mg/kg Rat LD50 (Dermal): > 5000 mg/kg Rabbit LC50 (Inhalation vapours): 21,1 mg/l/4h Rat

1,2-benzisothiazol-3(2H)-one

 LD50 (Oral):
 532 mg/kg Rat

 LD50 (Dermal):
 > 2000 mg/kg Rat

 LC50 (Inhalation mists/powders):
 4 mg/l/4h Rat

STA (Inhalation mists/powders): 0,051 mg/l estimate from table 3.1.2 of Annex I of the CLP

(figure used for calculation of the acute toxicity estimate of the mixture)

Diethylene glycol monobutyl ether

 LD50 (Oral):
 3384 mg/kg Rat

 LD50 (Dermal):
 2700 mg/kg Rabbit

Pyrithione zinc

LD50 (Oral): 221 mg/kg

LD50 (Dermal): > 5000 mg/kg RAT-- Male, Female

LC50 (Inhalation mists/powders): 0,14 mg/l/4h

AMMONIA

LD50 (Oral): 350 mg/kg Rat

reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H -isothiazol-3-one [EC no. 220-239-6] (3:1)

LD50 (Oral): 66 mg/kg Rat LD50 (Dermal): > 141 mg/kg Rat

2-Methyl-2H-isothiazol-3-one

LD50 (Oral): 285 mg/kg Rat LD50 (Dermal): > 2000 mg/kg Rat

STA (Dermal): 300 mg/kg estimate from table 3.1.2 of Annex I of the CLP

(figure used for calculation of the acute toxicity estimate of the mixture)

SKIN CORROSION / IRRITATION

Does not meet the classification criteria for this hazard class

SERIOUS EYE DAMAGE / IRRITATION

Causes serious eye irritation

RESPIRATORY OR SKIN SENSITISATION



Revision nr.1 Dated 18/01/2023 First compilation Printed on 25/01/2023 Page n. 12 / 17

SECTION 11. Toxicological information .../>>

May produce an allergic reaction.

Contains:

2-Methyl-2H-isothiazol-3-one

reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H -isothiazol-3-one [EC no. 220-239-6] (3:1)

1,2-benzisothiazol-3(2H)-one

2,4,7,9-Tetramethyldec-5-yne-4,7-diol

Respiratory sensitization

Information not available

Skin sensitization

Information not available

GERM CELL MUTAGENICITY

Does not meet the classification criteria for this hazard class

CARCINOGENICITY

Does not meet the classification criteria for this hazard class

Ethanedio

Available studies have shown no carcinogenic potential. In a carcinogenicity study lasting two years, carried out by the US National Toxicology Program (NTP), in which ethylene glycol was administered in the feed, "no evidence of carcinogenic activity" in male and female B6C3F1 mice was observed (NTP, 1993).

REPRODUCTIVE TOXICITY

Does not meet the classification criteria for this hazard class

Adverse effects on sexual function and fertility

Information not available

Adverse effects on development of the offspring

Information not available

Effects on or via lactation

Information not available

STOT - SINGLE EXPOSURE

Does not meet the classification criteria for this hazard class

Target organ

Information not available

Route of exposure

Information not available

STOT - REPEATED EXPOSURE

Does not meet the classification criteria for this hazard class

Target organ

Information not available

Route of exposure

Information not available

ASPIRATION HAZARD



Revision nr.1 Dated 18/01/2023 First compilation Printed on 25/01/2023 Page n. 13 / 17

SECTION 11. Toxicological information .../>>

Does not meet the classification criteria for this hazard class

11.2. Information on other hazards

Based on the available data, the product does not contain substances listed in the main European lists of potential or suspected endocrine disruptors with human health effects under evaluation.

SECTION 12. Ecological information

12.1. Toxicity

AMMONIA

LC50 - for Fish 47 mg/l/96h Channa punctata EC50 - for Crustacea 20 mg/l/48h Daphnia magna

Dipropylene glycol monomethyl ether

LC50 - for Fish > 1000 mg/l/96h Poecilia retiaculata EC50 - for Algae / Aquatic Plants 6999 mg/l/72h Skeletonema costatum

Polypropylene Glycol

LC50 - for Fish > 100 mg/l/96h Danio rerio EC50 - for Crustacea 105,8 mg/l/48h Daphnia magna

EC50 - for Algae / Aquatic Plants > 100 mg/l/72h Desmodesmus subspicatus

2,4,7,9-Tetramethyldec-5-yne-4,7-diol

EC50 - for Algae / Aquatic Plants 112 mg/l/72h Skeletonema costatum

reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H -isothiazol-3-one [EC no. 220-239-6] (3:1)

LC50 - for Fish 0,22 mg/l/96h Rainbow trout EC50 - for Crustacea 0,1 mg/l/48h Daphnia

EC50 - for Algae / Aquatic Plants 0,048 mg/l/72h Pseudokircheriella subcapitata

Chronic NOEC for Fish 0,098 mg/l Rainbow trout

Chronic NOEC for Crustacea 0,0012 mg/l Pseudokircheriella subcapitata

Chronic NOEC for Algae / Aquatic Plants 0,004 mg/l Daphnia

1,2-benzisothiazol-3(2H)-one

LC50 - for Fish 6,4 mg/l/96h Ranbow trout EC50 - for Crustacea 32 mg/l/48h Daphnia

EC50 - for Algae / Aquatic Plants 8,4 mg/l/72h Scendesmus subspicatus

12.2. Persistence and degradability

AMMONIA

Degradability: information not available

Dipropylene glycol monomethyl ether

Solubility in water 1000 - 10000 mg/l

Rapidly degradable

2-METHOXY-1-METHYLETHYL ACETATE

Solubility in water > 10000 mg/l

Rapidly degradable

Polypropylene Glycol

Solubility in water 1000 - 10000 mg/l

Rapidly degradable

Diethylene glycol monobutyl ether

Solubility in water 1000 - 10000 mg/l

Rapidly degradable

2-BUTOXYETHANOL

Solubility in water 1000 - 10000 mg/l

Rapidly degradable



Revision nr 1 Dated 18/01/2023 First compilation Printed on 25/01/2023 Page n. 14 / 17

SECTION 12. Ecological information .../>

Ethanediol

Solubility in water 1000 - 10000 mg/l

Rapidly degradable

N-butylacetate

Solubility in water 1000 - 10000 mg/l

2-Methyl-2H-isothiazol-3-one Rapidly degradable

reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H -isothiazol-3-one [EC no. 220-239-6] (3:1)

Rapidly degradable

12.3. Bioaccumulative potential

Dipropylene glycol monomethyl ether

Partition coefficient: n-octanol/water 0.0043 BCF < 100 -

2-METHOXY-1-METHYLETHYL ACETATE

Partition coefficient: n-octanol/water 1,2

Polypropylene Glycol

Partition coefficient: n-octanol/water 0,01

Diethylene glycol monobutyl ether

Partition coefficient: n-octanol/water

2-BUTOXYETHANOL

Partition coefficient: n-octanol/water 0,81

Ethanediol

Partition coefficient: n-octanol/water -1.36

N-butylacetate

Partition coefficient: n-octanol/water 2,3 BCF 15.3

2-Methyl-2H-isothiazol-3-one

Partition coefficient: n-octanol/water -0,32 Log Kow

reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H -isothiazol-3-one [EC no. 220-239-6] (3:1)

Partition coefficient: n-octanol/water 0,75 Log Kow

BCF 3,6

1,2-benzisothiazol-3(2H)-one

Partition coefficient: n-octanol/water 0.4 **BCF** 6,95

12.4. Mobility in soil

Polypropylene Glycol

Partition coefficient: soil/water < 1,25

N-butylacetate

Partition coefficient: soil/water < 3

12.5. Results of PBT and vPvB assessment

On the basis of available data, the product does not contain any PBT or vPvB in percentage ≥ than 0,1%.

12.6. Endocrine disrupting properties

Based on the available data, the product does not contain substances listed in the main European lists of potential or suspected endocrine disruptors with environmental effects under evaluation.





Revision nr.1 Dated 18/01/2023 First compilation Printed on 25/01/2023 Page n. 15 / 17

SECTION 12. Ecological information .../>>

12.7. Other adverse effects

Information not available

SECTION 13. Disposal considerations

13.1. Waste treatment methods

Reuse, when possible. Product residues should be considered special hazardous waste. The hazard level of waste containing this product should be evaluated according to applicable regulations.

Disposal must be performed through an authorised waste management firm, in compliance with national and local regulations.

CONTAMINATED PACKAGING

Contaminated packaging must be recovered or disposed of in compliance with national waste management regulations.

SECTION 14. Transport information

The product is not dangerous under current provisions of the Code of International Carriage of Dangerous Goods by Road (ADR) and by Rail (RID), of the International Maritime Dangerous Goods Code (IMDG), and of the International Air Transport Association (IATA) regulations.

14.1. UN number or ID number

Not applicable

14.2. UN proper shipping name

Not applicable

14.3. Transport hazard class(es)

Not applicable

14.4. Packing group

Not applicable

14.5. Environmental hazards

Not applicable

14.6. Special precautions for user

Not applicable

14.7. Maritime transport in bulk according to IMO instruments

Information not relevant

SECTION 15. Regulatory information

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

Seveso Category - Directive 2012/18/EU: None

Restrictions relating to the product or contained substances pursuant to Annex XVII to EC Regulation 1907/2006

Product
Point 3 - 40
Contained substance

Regulation (EU) 2019/1148 - on the marketing and use of explosives precursors

Not applicable



Revision nr.1 Dated 18/01/2023 First compilation Printed on 25/01/2023 Page n. 16 / 17

SECTION 15. Regulatory information .../>>

Substances in Candidate List (Art. 59 REACH)

On the basis of available data, the product does not contain any SVHC in percentage ≥ than 0,1%.

Substances subject to authorisation (Annex XIV REACH)

None

Substances subject to exportation reporting pursuant to Regulation (EU) 649/2012:

None

Substances subject to the Rotterdam Convention:

None

Substances subject to the Stockholm Convention:

None

Healthcare controls

Workers exposed to this chemical agent must not undergo health checks, provided that available risk-assessment data prove that the risks related to the workers' health and safety are modest and that the 98/24/EC directive is respected.

VOC (Directive 2004/42/EC):

Interior / exterior trim and cladding paints for wood, metal or plastic.

15.2. Chemical safety assessment

A chemical safety assessment has not been performed for the preparation/for the substances indicated in section 3.

SECTION 16. Other information

Text of hazard (H) indications mentioned in section 2-3 of the sheet:

Flam. Liq. 3 Flammable liquid, category 3

Repr. 1B Reproductive toxicity, category 1B

Acute Toxic 2

Acute Tox. 2 Acute toxicity, category 2
Acute Tox. 3 Acute toxicity, category 3

STOT RE 1 Specific target organ toxicity - repeated exposure, category 1

Skin Corr. 1B Skin corrosion, category 1B
Eye Dam. 1 Serious eye damage, category 1
Eye Irrit. 2 Eye irritation, category 2

STOT SE 3 Specific target organ toxicity - single exposure, category 3

Skin Sens. 1A Skin sensitization, category 1A

Aquatic Acute 1 Hazardous to the aquatic environment, acute toxicity, category 1
Aquatic Chronic 1 Hazardous to the aquatic environment, chronic toxicity, category 1

H226Flammable liquid and vapour.H360DMay damage the unborn child.H310Fatal in contact with skin.

H330 Fatal if inhaled.H301 Toxic if swallowed.

H372 Causes damage to organs through prolonged or repeated exposure.

H314 Causes severe skin burns and eye damage.

H318 Causes serious eye damage.
H319 Causes serious eye irritation.
H335 May cause respiratory irritation.
H317 May cause an allergic skin reaction.
H336 May cause drowsiness or dizziness.

H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.

EUH071 Corrosive to the respiratory tract.

LEGEND:

- ADR: European Agreement concerning the carriage of Dangerous goods by Road
- ATE: Acute Toxicity Estimate
- CAS: Chemical Abstract Service Number
- CE50: Effective concentration (required to induce a 50% effect)
- CE: Identifier in ESIS (European archive of existing substances)
- CLP: Regulation (EC) 1272/2008
- DNEL: Derived No Effect Level
- EmS: Emergency Schedule
- GHS: Globally Harmonized System of classification and labeling of chemicals



Revision nr.1 Dated 18/01/2023 First compilation Printed on 25/01/2023 Page n. 17 / 17

SECTION 16. Other information .../>>

- IATA DGR: International Air Transport Association Dangerous Goods Regulation
- IC50: Immobilization Concentration 50%
- IMDG: International Maritime Code for dangerous goods
- IMO: International Maritime Organization
- INDEX: Identifier in Annex VI of CLP
- LC50: Lethal Concentration 50%
- LD50: Lethal dose 50%
- OEL: Occupational Exposure Level
- PBT: Persistent bioaccumulative and toxic as REACH Regulation
- PEC: Predicted environmental Concentration
- PEL: Predicted exposure level
- PNEC: Predicted no effect concentration
- REACH: Regulation (EC) 1907/2006
- RID: Regulation concerning the international transport of dangerous goods by train
- TLV: Threshold Limit Value
- TLV CEILING: Concentration that should not be exceeded during any time of occupational exposure.
- TWA: Time-weighted average exposure limit
- TWA STEL: Short-term exposure limit
- VOC: Volatile organic Compounds
- vPvB: Very Persistent and very Bioaccumulative as for REACH Regulation
- WGK: Water hazard classes (German).

GENERAL BIBLIOGRAPHY

- 1. Regulation (EC) 1907/2006 (REACH) of the European Parliament
- 2. Regulation (EC) 1272/2008 (CLP) of the European Parliament
- 3. Regulation (EU) 2020/878 (II Annex of REACH Regulation)
- 4. Regulation (EC) 790/2009 (I Atp. CLP) of the European Parliament
- 5. Regulation (EU) 286/2011 (II Atp. CLP) of the European Parliament
- 6. Regulation (EU) 618/2012 (III Atp. CLP) of the European Parliament
- 7. Regulation (EU) 487/2013 (IV Atp. CLP) of the European Parliament
- 8. Regulation (EU) 944/2013 (V Atp. CLP) of the European Parliament
- 9. Regulation (EU) 605/2014 (VI Atp. CLP) of the European Parliament
- 10. Regulation (EU) 2015/1221 (VII Atp. CLP) of the European Parliament
- 11. Regulation (EU) 2016/918 (VIII Atp. CLP) of the European Parliament
- 12. Regulation (EU) 2016/1179 (IX Atp. CLP)
- 13. Regulation (EU) 2017/776 (X Atp. CLP)
- 14. Regulation (EU) 2018/669 (XI Atp. CLP)
- 15. Regulation (EU) 2019/521 (XII Atp. CLP)
- 16. Delegated Regulation (UE) 2018/1480 (XIII Atp. CLP)
- 17. Regulation (EU) 2019/1148
- 18. Delegated Regulation (UE) 2020/217 (XIV Atp. CLP)
- 19. Delegated Regulation (UE) 2020/1182 (XV Atp. CLP)
- 20. Delegated Regulation (UE) 2021/643 (XVI Atp. CLP)
- 21. Delegated Regulation (UE) 2021/849 (XVII Atp. CLP)
- The Merck Index. 10th Edition
- Handling Chemical Safety
- INRS Fiche Toxicologique (toxicological sheet)
- Patty Industrial Hygiene and Toxicology
- N.I. Sax Dangerous properties of Industrial Materials-7, 1989 Edition
- IFA GESTIS website
- ECHA website
- Database of SDS models for chemicals Ministry of Health and ISS (Istituto Superiore di Sanità) Italy

Note for users:

The information contained in the present sheet are based on our own knowledge on the date of the last version. Users must verify the suitability and thoroughness of provided information according to each specific use of the product.

This document must not be regarded as a guarantee on any specific product property.

The use of this product is not subject to our direct control; therefore, users must, under their own responsibility, comply with the current health and safety laws and regulations. The producer is relieved from any liability arising from improper uses.

Provide appointed staff with adequate training on how to use chemical products.

CALCULATION METHODS FOR CLASSIFICATION

Chemical and physical hazards: Product classification derives from criteria established by the CLP Regulation, Annex I, Part 2. The data for evaluation of chemical-physical properties are reported in section 9.

Health hazards: Product classification is based on calculation methods as per Annex I of CLP, Part 3, unless determined otherwise in Section 11. Environmental hazards: Product classification is based on calculation methods as per Annex I of CLP, Part 4, unless determined otherwise in Section 12