

Safety Data Sheet

According to Annex II to REACH - Regulation (EU) 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

Code: 4451MS90-01-
Product name: GEOACRYL 2K - FINITURA WB POLIACRILICA 90 GLOSS WB POLYACRYLIC TOP FINISH 90 GLOSS TRASPARENTE/TRANS

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

Intended use: Water borne 2K polyacrylic

Identified Uses	Industrial	Professional	Consumer
Painting of wood for interior, furnitures and accessories	SU: 18. PROC: 7. AC: 11. PC: 9a.	-	-

1.3. Details of the supplier of the safety data sheet

Name: ALCEA S.p.A.
Full address: Via Piemonte 18
District and Country: 20030 Senago (MI)
Italy

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e-mail address of the competent person responsible for the Safety Data Sheet: Ufficio Tecnico (msds@alcea.com)

Supplier: Ufficio Tecnico (msds@alcea.com)

1.4. Emergency telephone number

For urgent inquiries refer to

Ireland: (+353) 18092566
United Kingdom: 111

ALCEA Technical Office Tel. +39.02-99014-220/221 (from monday to friday 8.00-12.00 a.m./1.00-5.00 p.m.)

CENTRI ANTIVELENI (CAV)
- Osp. Niguarda Ca' Granda
Piazza Ospedale Maggiore, 3 - 20162 - Milano - Tel: 02-66101029
- Az. Osp. Papa Giovanni XXIII
Piazza OMS, 1 - 24127 - Bergamo - Tel: 800883300
- CAV Centro Nazionale di Informazione Tossicologica
Via Salvatore Maugeri, 10 - 27100 - Pavia - Tel: 0382-24444
- Az. Osp. Careggi - U.O. Tossicologia Medica
L.go Brambilla, 3 - 50134 - Firenze - Tel: 055-7947819
- CAV Policlinico A. Gemelli
L.go A. Gemelli, 8 - 00168 - Roma - Tel: 06-3054343
- CAV Policlinico Umberto I
V.le del Policlinico, 155 - 00161 - Roma - Tel: 06-49978000
- CAV "Osp. Pediatrico Bambino Gesù" Dip. Emergenza e Accettazione DEA
Piazza Sant'Onofrio, 4 - 00165 - Roma - Tel: 06-68593726
- Az. Osp. Univ. Foggia
V.le Luigi Pinto, 1 - 71122 - Foggia - Tel: 800183459
- Az. Osp. A. Cardarelli
Via A. Cardarelli, 9 - 80131 - Napoli - Tel: 081-5453333
- Azienda Ospedaliera Integrata Verona
Piazzale Aristide Stefani, 1 - 37126 - Verona - Tel: 800011858

SECTION 2. Hazards identification**2.1. Classification of the substance or mixture**

The product is not classified as hazardous pursuant to the provisions set forth in EC Regulation 1272/2008 (CLP). However, since the product contains hazardous substances in concentrations such as to be declared in section no. 3, it requires a safety data sheet with appropriate information, compliant to (EU) Regulation 2020/878.

Hazard classification and indication: --

2.2. Label elements

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

Hazard pictograms: --

Signal words: --

Hazard statements:

EUH210 Safety data sheet available on request.
EUH208 Contains: Miscela di: 5-cloro-2-metil-2H-isotiazol-3-one [EC no. 247-500-7]; 2-metil-2H-isotiazol-3-one [EC no. 220-239-6] 3:1
May produce an allergic reaction.

Precautionary statements:

P264 Thoroughly wash the contaminated parts after use with soap and water.
P280 Wear protective gloves / protective clothing / eye protection / face protection.
P302+P352 IN CASE OF CONTACT WITH SKIN: wash with plenty of water / soap
P332+P313 If skin irritation occurs: Get medical advice / attention.

Product not intended for uses provided for by Directive 2004/42/EC.

2.3. Other hazards

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

The product does not contain substances with endocrine disrupting properties in concentration \geq 0.1%.

SECTION 3. Composition/information on ingredients**3.2. Mixtures**

Contains:

Identification	x = Conc. %	Classification (EC) 1272/2008 (CLP)
2-butoxyethanol		
INDEX	603-014-00-0	Acute Tox. 4 H302, Acute Tox. 4 H332, Eye Irrit. 2 H319, Skin Irrit. 2 H315 LD50 Oral: 1200 mg/kg, LC50 Inhalation vapours: 11 mg/l/4h
EC	203-905-0	
CAS	111-76-2	
REACH Reg.	01-2119475108-36-XXXX	
2- (2-BUTOXYETHOXY) ETHANOL		
INDEX	603-096-00-8	Eye Irrit. 2 H319
EC	203-961-6	
CAS	112-34-5	
REACH Reg.	01-2119475104-44-XXXX	

SECTION 3. Composition/information on ingredients ... / >>**Miscela di: 5-cloro-2-metil-2H-isotiazol-3-one [EC no. 247-500-7]; 2-metil-2H-isotiazol-3-one [EC no. 220-239-6] 3:1)**

INDEX 613-167-00-5 0 ≤ x < 0,0015

EC

CAS 55965-84-9

REACH Reg. 01-2120764691-48-XXXX

Acute Tox. 2 H310, Acute Tox. 2 H330, Acute Tox. 3 H301, Skin Corr. 1B H314, Eye Dam. 1 H318, Skin Sens. 1A H317, Aquatic Acute 1 H400 M=100, Aquatic Chronic 1 H410 M=100, EUH071
Skin Corr. 1B H314: ≥ 0,6%, Skin Irrit. 2 H315: ≥ 0,06%, Skin Sens. 1A H317: ≥ 0,0015%, Eye Dam. 1 H318: ≥ 0,6%, Eye Irrit. 2 H319: ≥ 0,06%
LD50 Oral: 64 mg/kg, LD50 Dermal: 87 mg/kg, LC50 Inhalation mists/powders: 0,17 mg/l/4h, STA Inhalation mists/powders: 0,501 mg/l

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

SECTION 4. First aid measures**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.

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

SECTION 6. Accidental release measures ... / >>

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**

Keep away from heat, sparks and naked flames; do not smoke or use matches or lighters. Without adequate ventilation, vapours may accumulate at ground level and, if ignited, catch fire even at a distance, with the danger of backfire. Avoid bunching of electrostatic charges. Do not eat, drink or smoke during use. Remove any contaminated clothes and personal protective equipment before entering places in which people eat. Avoid leakage of the product into the environment.

7.2. Conditions for safe storage, including any incompatibilities

Store only in the original container. Store in a cool and well ventilated place, keep far away from sources of heat, naked flames and sparks and other sources of ignition. 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:

BGR	България	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 Януари 2020г.)
CZE	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 pozdějších předpisů
DEU	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 καρκινογόνους ή μεταλλαξιογόνους 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 opasnim kemikalijama na radu, graničnim vrijednostima izloženosti i biološkim graničnim vrijednostima (NN 1/2021)
ITA	Italia	Decreto Legislativo 9 Aprile 2008, n.81
NLD	Nederland	Arbeidsomstandighedenregeling. Lijst van wettelijke grenswaarden op grond van de artikelen 4.3, eerste lid, en 4.16, eerste lid, van het Arbeidsomstandighedenbesluit
PRT	Portugal	Decreto-Lei n.º 1/2021 de 6 de janeiro, valores-limite de exposição profissional indicativos para os agentes químicos. Decreto-Lei n.º 35/2020 de 13 de julho, proteção dos trabalhadores contra os riscos ligados à exposição durante o trabalho a agentes cancerígenos ou mutagénicos
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 și completarea hotărârii guvernului nr. 1.093/2006
SVK	Slovensko	NARIADENIE 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

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

SVN	Slovenija	neskorših predpisov 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)
TUR	Türkiye	Kimyasal Maddelerle Çalışmalarda Sağlık ve Güvenlik Önlemleri Hakkında Yönetmelik 12.08.2013 / 28733
GBR	United Kingdom	EH40/2005 Workplace exposure limits (Fourth Edition 2020)
EU	OEL EU	Directive (EU) 2022/431; 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.
	TLV-ACGIH	ACGIH 2022

1,2-Benzoisothiazol-3(2H)-one**Predicted no-effect concentration - PNEC**

Normal value in fresh water	4,03	mg/l
Normal value in marine water	0,403	mg/l
Normal value for fresh water sediment	4,99	mg/kg
Normal value for marine water sediment	4,99	mg/kg
Normal value of STP microorganisms	1,03	mg/l
Normal value for the terrestrial compartment	3	mg/kg

Health - Derived no-effect level - DNEL / DMEL

Route of exposure	Effects on consumers				Effects on workers			
	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Inhalation				1,2 mg/m3				6,81 mg/m3
Skin				0,345 mg/kg/d				0,966 mg/kg/d

2-methoxypropanol**Threshold Limit Value**

Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	mg/m3	ppm	
TLV-ACGIH		369				

AMMONIACA**Threshold Limit Value**

Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	mg/m3	ppm	
OEL	EU	14	20	36	50	

Predicted no-effect concentration - PNEC

Normal value in fresh water	0,0011	mg/l
Normal value in marine water	0,011	mg/l

Health - Derived no-effect level - DNEL / DMEL

Route of exposure	Effects on consumers				Effects on workers			
	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Inhalation						36 mg/m3		14 mg/m3
Skin						6,8 mg/kg/d		

TRIETHANOLAMINE**Threshold Limit Value**

Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	mg/m3	ppm	
TLV	CZE	5	0,805	10	1,16	SKIN
AGW	DEU	1				INHAL
MAK	DEU	1				INHAL
VLA	ESP	5				
TGG	NLD	5				
MV	SVN	5				INHAL
TLV-ACGIH		5				

SECTION 8. Exposure controls/personal protection ... / >>**2-PHENOXYETHANOL****Threshold Limit Value**

Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	mg/m3	ppm	
AGW	DEU	5,7	1	5,7 (C)	1 (C)	
MAK	DEU	5,7	1	5,7	1	
NDS/NDSch	POL	230				
MV	SVN	110	20	110	20	SKIN

3-BUTOXY-2-PROPANOL**Threshold Limit Value**

Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	mg/m3	ppm	
TLV	CZE	270	49,14	550	100,1	SKIN

2-DIMETHYLAMINOETHANOL**Threshold Limit Value**

Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	mg/m3	ppm	
GVI/KGVI	HRV	7,4	2	22	6	
WEL	GBR	7,4	2	22	6	

Predicted no-effect concentration - PNEC

Normal value in fresh water	0,0661	mg/l
Normal value in marine water	0,00661	mg/l
Normal value for fresh water sediment	0,0529	mg/kg
Normal value for marine water sediment	NEA	
Normal value for water, intermittent release	0,0661	mg/l
Normal value of STP microorganisms	10	mg/l
Normal value for the terrestrial compartment	0,0177	mg/kg

Health - Derived no-effect level - DNEL / DMEL

Route of exposure	Effects on consumers				Effects on workers			
	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Inhalation								7,4 mg/m3
Skin								1,04 mg/kg/d

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

1-METHOXY-2-PROPANOL

Threshold Limit Value

Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m ³	ppm	mg/m ³	ppm	
TLV	BGR	375	100	568	150	SKIN
TLV	CZE	270	72,09	550	146,85	SKIN
AGW	DEU	370	100	740	200	
MAK	DEU	370	100	740	200	
VLA	ESP	375	100	568	150	SKIN
VLEP	FRA	188	50	375	100	SKIN
TLV	GRC	360	100	1080	300	
AK	HUN	375		568		SKIN
GVI/KGVI	HRV	375	100	568	150	
VLEP	ITA	375	100	568	150	SKIN
TGG	NLD	375		563		SKIN
VLE	PRT	375	100	568	150	
NDS/NDSch	POL	180		360		SKIN
TLV	ROU	375	100	568	150	SKIN
NPEL	SVK	375	100	568	150	SKIN
MV	SVN	375	100	568	150	SKIN
ESD	TUR	375	100	568	150	SKIN
WEL	GBR	375	100	560	150	SKIN
OEL	EU	375	100	568	150	SKIN
TLV-ACGIH		184	50	368	100	

Predicted no-effect concentration - PNEC

Normal value in fresh water	10	mg/l
Normal value in marine water	VND	
Normal value for fresh water sediment	41,6	mg/kg
Normal value for marine water sediment	4,17	mg/kg
Normal value for water, intermittent release	VND	
Normal value of STP microorganisms	100	mg/l
Normal value for the food chain (secondary poisoning)	VND	
Normal value for the terrestrial compartment	2,47	mg/kg
Normal value for the atmosphere	VND	

Health - Derived no-effect level - DNEL / DMEL

Route of exposure	Effects on consumers				Effects on workers			
	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Oral	VND	VND	VND	3,3 mg/kg/d	VND	VND	VND	VND
Inhalation	VND	VND	VND	43,9 mg/m ³	553,5 mg/m ³	VND	VND	369 mg/m ³
Skin	VND	VND	VND	18,1 mg/kg/d	VND	VND	VND	50,6 mg/kg/d

SOLVENT NAPHTHA (PETROLEUM), LIGHT AROM

Health - Derived no-effect level - DNEL / DMEL

Route of exposure	Effects on consumers				Effects on workers			
	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Oral			11	11 mg/kg/d				
Inhalation				32 mg/m ³		150		150 mg/m ³
Skin				11 mg/kg/d				25 mg/kg/d

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

2,6-DI-TERZ.BUTIL-P-CRESOLO

Threshold Limit Value

Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	mg/m3	ppm	
TLV	BGR	10		50		
AGW	DEU	10				Ceiling (Peak): 40 mg/m3
VLA	ESP	10				
VLEP	FRA	10				
TLV	GRC	10				
WEL	GBR	10		30		

Predicted no-effect concentration - PNEC

Normal value in fresh water	199	mg/l
Normal value in marine water	2	mg/l
Normal value for fresh water sediment	996	mg/kg
Normal value for marine water sediment	996	mg/kg
Normal value of STP microorganisms	0,17	mg/l
Normal value for the terrestrial compartment	4769	mg/kg

Health - Derived no-effect level - DNEL / DMEL

Route of exposure	Effects on consumers			Effects on workers				
	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Inhalation				0,78 mg/m3				4,4 mg/m3
Skin				1,7 mg/kg bw/d				4,7 mg/kg bw/d

Sodium Lauryl Sulfate

Predicted no-effect concentration - PNEC

Normal value in fresh water	0,0958	mg/l
Normal value in marine water	0,0096	mg/l
Normal value for fresh water sediment	3,37	mg/kg/d
Normal value for marine water sediment	0,337	mg/kg/d
Normal value for water, intermittent release	0,036	mg/l
Normal value of STP microorganisms	1084	mg/l
Normal value for the terrestrial compartment	0,616	mg/kg/d

Health - Derived no-effect level - DNEL / DMEL

Route of exposure	Effects on consumers			Effects on workers				
	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Oral				24 mg/kg bw/d				
Inhalation				85 mg/m3				285 mg/m3
Skin				2440 mg/kg bw/d				4060 mg/kg bw/d

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

2-(2-BUTOXYETHOXY)ETHANOL

Threshold Limit Value

Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m ³	ppm	mg/m ³	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	
TGG	NLD	50		100		SKIN
VLE	PRT	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	
ESD	TUR	67,5	10	101,2	15	
WEL	GBR	67,5	10	101,2	15	
OEL	EU	67,5	10	101,2	15	
TLV-ACGIH		66	10			

Predicted no-effect concentration - PNEC

Normal value in fresh water	1,1	mg/l
Normal value in marine water	0,11	mg/l
Normal value for fresh water sediment	4,4	mg/kg
Normal value for marine water sediment	0,44	mg/kg
Normal value for water, intermittent release	11	mg/l
Normal value of STP microorganisms	200	mg/l
Normal value for the food chain (secondary poisoning)	56	mg/kg
Normal value for the terrestrial compartment	0,4	mg/kg
Normal value for the atmosphere	VND	

Health - Derived no-effect level - DNEL / DMEL

Route of exposure	Effects on consumers				Effects on workers			
	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Oral	VND	VND	VND	5 mg/kg/d	VND	VND	VND	VND
Inhalation	60,7 mg/m ³	VND	40,5 mg/m ³	40,5 mg/m ³	101,2 mg/m ³	VND	67,5 mg/m ³	67,5 mg/m ³
Skin	VND	VND	VND	50 mg/kg/d	VND	VND	VND	50 mg/kg/d

SECTION 8. Exposure controls/personal protection ... / >>**2-BUTOXYETHANOL****Threshold Limit Value**

Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m ³	ppm	mg/m ³	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
TGG	NLD	100		246		SKIN
VLE	PRT	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
ESD	TUR	98	20	246	50	SKIN
WEL	GBR	123	25	246	50	SKIN
OEL	EU	98	20	246	50	SKIN
TLV-ACGIH		97	20			

Predicted no-effect concentration - PNEC

Normal value in fresh water	8,8	mg/l
Normal value in marine water	0,88	mg/l
Normal value for fresh water sediment	34,6	mg/kg
Normal value for marine water sediment	3,46	mg/kg
Normal value for water, intermittent release	9,1	mg/l
Normal value of STP microorganisms	463	mg/l
Normal value for the food chain (secondary poisoning)	20	mg/kg

Health - Derived no-effect level - DNEL / DMEL

Route of exposure	Effects on consumers				Effects on workers			
	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Oral		26,7 mg/kg/d		6,3 mg/kg/d				
Inhalation	426 mg/m ³	147 mg/m ³		59 mg/m ³		1,091 mg/m ³		98 mg/kg
Skin		89 mg/kg/d		75 mg/kg/d		89 mg/kg/d		125 mg/kg/d

Legend:

(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 ; LOW = low hazard ; MED = medium hazard ; HIGH = high hazard.

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.

HAND PROTECTION

Protect hands with category III work gloves.

The following should be considered when choosing work glove material (see standard EN 374): 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

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

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	colourless	
Odour	not available	
Melting point / freezing point	not available	
Initial boiling point	100 °C	
Flammability	not available	
Lower explosive limit	not available	
Upper explosive limit	not available	
Flash point	> 60 °C	
Auto-ignition temperature	not available	
Decomposition temperature	not available	
pH	7,5-8,5	
Kinematic viscosity	>20,5 mm ² /sec (40°C)	
Solubility	not available	
Partition coefficient: n-octanol/water	not available	
Vapour pressure	not available	
Density and/or relative density	1,038	
Relative vapour density	not available	
Particle characteristics	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

Total solids (250°C / 482°F)	38,17 %		
VOC (Directive 2010/75/EU)	6,01 %	-	62,38 g/litre
VOC (volatile carbon)	3,04 %	-	31,54 g/litre

SECTION 10. Stability and reactivity**10.1. Reactivity**

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

2-BUTOXYETHANOL

Decomposes under the effect of heat.

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.

2-(2-BUTOXYETHOXY)ETHANOL

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

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

2-BUTOXYETHANOL

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

10.4. Conditions to avoid

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

2-(2-BUTOXYETHOXY)ETHANOL

Avoid exposure to: air.

2-BUTOXYETHANOL

Avoid exposure to: sources of heat, naked flames.

10.5. Incompatible materials

2-(2-BUTOXYETHOXY)ETHANOL

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

10.6. Hazardous decomposition products

2-(2-BUTOXYETHOXY)ETHANOL

May develop: hydrogen.

2-BUTOXYETHANOL

May develop: hydrogen.

SECTION 11. Toxicological information

In the absence of experimental data for the product itself, health hazards are evaluated according to the properties of the substances it contains, using the criteria specified in the applicable regulation for classification.

It is therefore necessary to take into account the concentration of the individual hazardous substances indicated in section 3, to evaluate the toxicological effects of exposure to the product.

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008Metabolism, toxicokinetics, mechanism of action and other information

Information not available

Information on likely routes of exposure

2-(2-BUTOXYETHOXY)ETHANOL

WORKERS: inhalation; contact with the skin.

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

2-(2-BUTOXYETHOXY)ETHANOL

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

Information not available

ACUTE TOXICITY

ATE (Inhalation - mists / powders) of the mixture:	> 5 mg/l
ATE (Inhalation - vapours) of the mixture:	> 20 mg/l
ATE (Oral) of the mixture:	>2000 mg/kg
ATE (Dermal) of the mixture:	Not classified (no significant component)

Miscela di: 5-cloro-2-metil-2H-isotiazol-3-one [EC no. 247-500-7]; 2-metil-2H-isotiazol-3-one [EC no. 220-239-6] 3:1)

LD50 (Dermal):	87 mg/kg Rabbit
LD50 (Oral):	64 mg/kg Rat
LC50 (Inhalation mists/powders):	0,17 mg/l/4h Rat

2-(2-BUTOXYETHOXY)ETHANOL

LD50 (Dermal):	2700 mg/kg Rabbit
LD50 (Oral):	3384 mg/kg Rat

2-BUTOXYETHANOL

LD50 (Dermal):	> 2000 mg/kg Cavia
LD50 (Oral):	1200 mg/kg Guinea pig
LC50 (Inhalation vapours):	11 mg/l/4h Rat

SECTION 11. Toxicological information ... / >>SKIN CORROSION / IRRITATION

Does not meet the classification criteria for this hazard class

SERIOUS EYE DAMAGE / IRRITATION

Does not meet the classification criteria for this hazard class

RESPIRATORY OR SKIN SENSITISATION

May produce an allergic reaction.

Contains:

Miscela di: 5-cloro-2-metil-2H-isotiazol-3-one [EC no. 247-500-7]; 2-metil-2H-isotiazol-3-one [EC no. 220-239-6] 3:1)

GERM CELL MUTAGENICITY

Does not meet the classification criteria for this hazard class

CARCINOGENICITY

Does not meet the classification criteria for this hazard class

REPRODUCTIVE TOXICITY

Does not meet the classification criteria for this hazard class

STOT - SINGLE EXPOSURE

Does not meet the classification criteria for this hazard class

STOT - REPEATED EXPOSURE

Does not meet the classification criteria for this hazard class

ASPIRATION HAZARD

Does not meet the classification criteria for this hazard class Viscosity: >20,5 mm²/sec (40°C)

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

Use this product according to good working practices. Avoid littering. Inform the competent authorities, should the product reach waterways or contaminate soil or vegetation.

12.1. Toxicity

Miscela di: 5-cloro-2-metil-2H-isotiazol-3-one [EC no. 247-500-7]; 2-metil-2H-isotiazol-3-one [EC no. 220-239-6] 3:1)

LC50 - for Fish	0,22 mg/l/96h Oncorhynchus mykiss
EC50 - for Crustacea	0,16 mg/l/48h Daphnia magna
Chronic NOEC for Fish	0,098 mg/l Oncorhynchus mykiss
Chronic NOEC for Crustacea	0,004 mg/l Daphnia magna
Chronic NOEC for Algae / Aquatic Plants	0,0012 mg/l Pseudokirchneriella subcapitata

2-BUTOXYETHANOL

LC50 - for Fish	1474 mg/l/96h Oncorhynchus mykiss
EC50 - for Crustacea	1550 mg/l/48h Daphnia magna
EC50 - for Algae / Aquatic Plants	1840 mg/l/72h Pseudokirchneriella subcapitata
Chronic NOEC for Fish	> 100 mg/l Brachydanio rerio
Chronic NOEC for Crustacea	100 mg/l Daphnia magna

12.2. Persistence and degradability

SECTION 12. Ecological information ... / >>

2-(2-BUTOXYETHOXY)ETHANOL
Solubility in water 1000 - 10000 mg/l
Rapidly degradable

2-BUTOXYETHANOL
Solubility in water 1000 - 10000 mg/l
Rapidly degradable

12.3. Bioaccumulative potential

Miscela di: 5-cloro-2-metil-2H-isotiazol-3-one [EC no. 247-500-7]; 2-metil-2H-isotiazol-3-one [EC no. 220-239-6] 3:1)
Partition coefficient: n-octanol/water -0,71 Log Kow

2-(2-BUTOXYETHOXY)ETHANOL
Partition coefficient: n-octanol/water 1

2-BUTOXYETHANOL
Partition coefficient: n-octanol/water 0,81

12.4. Mobility in soil

Information not available

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 \geq 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.

12.7. Other adverse effects

Information not available

SECTION 13. Disposal considerations**13.1. Waste treatment methods**

Reuse, when possible. Neat product residues should be considered special non-hazardous waste.
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

SECTION 15. Regulatory information ... / >>

Information not available

German regulation on the classification of substances hazardous to water (AwSV, vom 18. April 2017)

WGK 3: Severe hazard to waters

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:

Acute Tox. 2	Acute toxicity, category 2
Acute Tox. 3	Acute toxicity, category 3
Acute Tox. 4	Acute toxicity, category 4
Skin Corr. 1B	Skin corrosion, category 1B
Eye Irrit. 2	Eye irritation, category 2
Skin Irrit. 2	Skin irritation, category 2
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
H310	Fatal in contact with skin.
H330	Fatal if inhaled.
H301	Toxic if swallowed.
H302	Harmful if swallowed.
H332	Harmful if inhaled.
H314	Causes severe skin burns and eye damage.
H319	Causes serious eye irritation.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
EUH071	Corrosive to the respiratory tract.
EUH210	Safety data sheet available on request.

Use descriptor system:

AC	11	Wood articles
PC	9a	Coatings and paints, thinners, paint removers
PROC	7	Industrial spraying
SU	18	Manufacture of furniture

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
- 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

SECTION 16. Other information ... / >>

- 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)
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14. Regulation (EU) 2018/669 (XI Atp. CLP)
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16. Delegated Regulation (UE) 2018/1480 (XIII Atp. CLP)
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- 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.