AQUIMAX FLAMESHIELD FR CLEAR BASECOAT

HEALTH AND SAFETY DATA SHEET
According to Annex II to REACH -Regulation 2020/878 and to Annex II to UK REACH
Revised Date: 24/04/2024
Version: 4

1. PRODUCT AND COMPANY IDENTIFICATION

1.1	Product Code	AFS3500
	Product name	AQUIMAX FLAMESHEILD FR CLEAR BASECOAT
1.2	Relevant identified uses of the substance or mixture and uses advised against	Water-based top coat, interior, for industrial and professional uses Industrial: PROC: 10, 13, 7. PC: 9a. Professional: PROC: 10, 11, 13. PC: 9a. All uses not mentioned among recommended uses.
1.3	Name, Address, Telephone Number of the chemical manufacturer	Ultrimax Coatings Ltd Shaw Lane Industrial Estate, Ogden Road, Doncaster, DN2 4SE 01302 856666
1.4	Emergency phone number	01302 856666

2. HAZARD(S) IDENTIFICATION

2.1	Classification of the substance or mixture CLP Regulation (EC) No 1272/2008	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.
2.2	Label elements CLP Regulation (EC) No 1272/2008	N/A
	Hazard Statements	Mixture of: 5-chloro-2-methyl-2h-isothiazol-3-one and 2-methyl-2h-isothiazol-3-one methyl- 2H- isothiazol- 3-one (3:1) May produce an allergic reaction.
	Precautionary statements	VOC(Directive 2004/42/EC) : One - pack performance coatings. voe given in g/litre of product in a ready-to-use condition : 60,69 Limit value: 140,00

2.2	Supplementary information	May produce an allergic reaction.
	Substances that contribute to the classification	Mixture of: 5-chloro-2-methyl-2h-isothiazol-3-one and 2-methyl-2h-isothiazol-3-one methyl- 2H- isothiazol- 3-one (3:1)
	Additional Labelling	-
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 %.

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1	Substances	Not applicable (N/A)
3.2	Mixtures	Polyisocyanate
	Chemical description	
	Components	In accordance with Annex II of Regulation (EC) No 1907/2006 (point 3), the product contains: contains Identification **X = Conc. %** **classification (EC) 127/2008 (CLP)** **2-(2-BUTOXYETHOXY)ETHANOL** INDEX 603-096-00-8 2 ≤ x < 2,5 **Eye Irrit. 2 H319** EC 203-961-6 CAS 112-34-5 REACH Reg. 01-2119475104-44 Classification (EC) 1272/2008 (CLP) **Mixture of: 5-chloro-2-methyl-2h-isothiazol-3-one and 2-methyl-2h-isothiazol-3-one methyl- 2H- isothiazol- 3-one (3:1)** INDEX 613 - 167 - 00 - 5 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** EC 911 - 418 - 6 CAS 55965 - 84 - 9 REACH Reg. 01 - 2120764691 - 48 **Skin Corr. 1C 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: >53 mg/kg, LD50 Dermal: >87 mg/kg, LC50 Inhalation mists/powders: 0,31 mg/l/4h** The full wording of hazard (H) phrases is given in section 16 of the sheet.

4. FIRST-AID MEASURES

4.1	Description of first aid measures	The symptoms resulting from intoxication can appear after exposure, therefore, in case of doubt, seek medical attention for direct exposure to the chemical product or persistent discomfort, showing the SDS of this product.
	By 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.
	By skin contact	Remove contaminated clothing. Rinse skin with a shower immediately. Get medical advice/attention.
	By eye contact	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.
	By ingestion / aspiration	Have the subject drink as much water as possible. Get medical advice/attention. Do not induce vomiting unless explicitly authorised by a doctor.
4.2	Most important symptoms / effects, acute and delayed	Specific information on symptoms and effects caused by the product are unknown.
4.3	Indication of immediate medical attention and special treatment needed, if necessary	Not applicable (N/A)

5. FIRE-FIGHTING MEASURES

5.1	Extinguishing media	SUITABLE EXTINGUISHING EQUIPMENT
	Suitable extinguishing media	The extinguishing equipment should be of the conventional kind: carbon dioxide, foam, powder and water spray.
		UNSUITABLE EXTINGUISHING EQUIPMENT
	Unsuitable extinguishing media	None in particular.
5.2	Specific hazards arising from the chemical	HAZARDS CAUSED BY EXPOSURE IN THE EVENT OF FIRE Do not breathe combustion products.

5. FIRE-FIGHTING MEASURES CONTINUED

5.3	Advice for firefighters	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 compressed air breathing apparatus (BS EN 137).

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 materials 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.

7. HANDLING AND STORAGE

7.1	Precautions for safe handing	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)	See the exposure scenarios attached to this safety datasheet.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1	Control Parameters (United Kingdom)	EH40/2005 Workplace exposure limits (Fourth Edition 2020)
	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.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION CONTINUED

8.1	Threshold Limit Value						
	2-(2-BUTOXYETHOXY)ETHANOL						
	Type	Country	TWA/8h	ppm	STEL/15min	ppm	Remarks / Observations
	OEL	EU	67,5 mg/ m3	10	101,2 mg/m3	15	-
	WEL	GBR	67,5 mg/m3	10	101,2 mg/3	15	-
	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/klg		
		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			0,32 mg/kg		

8. EXPOSURE CONTROLS / PERSONAL PROTECTION CONTINUED

8.1 Health - Derived no-effect level - DNEL / DMEL

Effects on consumer

Route of exposure	Acute Local	Acute systematic	Chronic Local	Chronic systematic
oral		NPI	1,25	1,25 mg/kg/ bw/d
Inhalation	LOW	NPI	LOW	NPI
Skin	NPI	NPI	NPI	NPI

Effects on workers

Route of exposure	Acute Local	Acute systematic	Chronic Local	Chronic systematic
oral				
Inhalation	101,2 mg/m3	NPI	67,5 mg/m3	NPI
Skin	NPI	NPI	LOW	NPI

8. EXPOSURE CONTROLS / PERSONAL PROTECTION CONTINUED

8.1	Threshold Limit Value						
	1,2-PROPANEDIOL						
	Type	Country	TWA/8h	ppm	STEL/15min	ppm	Remarks / Observations
	WEL	GBR	10 mg/m3				Particulates
	Predicted no-effect concentration - PNEC	Normal value in fresh water			260 mg/l		
		Normal value in marine water			26 mg/l		
		Normal value for fresh water sediment			572 mg/kg		
		Normal value for marine water sediment			57,2 mg/kg		
		Normal value for water, intermittent release			183 mg/l		
		Normal value of STP microorganisms			183 mg/l		
		Normal value for the food chain (secondary poisoning)			20000 mg/l		
		Normal value for the terrestrial compartment			50 mg/kg		

8. EXPOSURE CONTROLS / PERSONAL PROTECTION CONTINUED

8.1 Health - Derived no-effect level - DNEL / DMEL

Effects on consumer

Route of exposure	Acute Local	Acute systematic	Chronic Local	Chronic systematic
oral				85 mg/kg bw/d
Inhalation			10 mg/m3	50 mg/m3
Skin				213 mg/kg bw/d

Effects on workers

Route of exposure	Acute Local	Acute systematic	Chronic Local	Chronic systematic
oral				
Inhalation			10 mg/m3	168 mg/m3
Skin				

8. EXPOSURE CONTROLS / PERSONAL PROTECTION CONTINUED

<table>
<tr><td rowspan="11">8.1</td><td colspan="7">Threshold Limit Value</td></tr>
<tr><td colspan="7">Mixture of: 5-chloro-2-methyl-2h-isothiazol-3-one and 2-methyl-2h-isothiazol-3-one methyl- 2H- isothiazol- 3-one (3:1)</td></tr>
<tr><td>Type</td><td>Country</td><td>TWA/8h</td><td>ppm</td><td>STEL/15min</td><td>ppm</td><td>Remarks / Observations</td></tr>
<tr><td>AGW</td><td>DEU</td><td>0,2</td><td></td><td></td><td></td><td></td></tr>
<tr><td>MV</td><td>SVN</td><td>0,05</td><td></td><td></td><td></td><td></td></tr>
<tr><td rowspan="7">Predicted no-effect concentration - PNEC</td><td colspan="3">Normal value in fresh water</td><td colspan="3">0,00339 mg/l</td></tr>
<tr><td colspan="3">Normal value in marine water</td><td colspan="3">0,00339 mg/l</td></tr>
<tr><td colspan="3">Normal value for fresh water sediment</td><td colspan="3">0,027 mg/kg</td></tr>
<tr><td colspan="3">Normal value for marine water sediment</td><td colspan="3">0,027 mg/kg</td></tr>
<tr><td colspan="3">Normal value for water, intermittent release</td><td colspan="3">0,00339 mg/l</td></tr>
<tr><td colspan="3">Normal value of STP microorganisms</td><td colspan="3">0,23 mg/l</td></tr>
<tr><td colspan="3">Normal value for the terrestrial compartment</td><td colspan="3">0,01 mg/kg</td></tr>
</table>

8. EXPOSURE CONTROLS / PERSONAL PROTECTION CONTINUED

8.1 Health - Derived no-effect level - DNEL / DMEL

Effects on consumer

Route of exposure	Acute Local	Acute systematic	Chronic Local	Chronic systematic
oral		0,11 mg/ kg bw/d		0,09 mg/kg bw/d
Inhalation	0,02 mg/m3		0,04 mg/3	50 mg/m3

Effects on workers

Route of exposure	Acute Local	Acute systematic	Chronic Local	Chronic systematic
oral				
Inhalation	0,04 mg/m3		0,02 mg/m3	

8. EXPOSURE CONTROLS / PERSONAL PROTECTION CONTINUED

8.1

Threshold Limit Value

PENTAERYTHRITOL

Type	Country	TWA/8h	ppm	STEL/15min	ppm	Remarks / Observations
TLV-ACGIH	DEU	10 mg/m3				

Predicted no-effect concentration - PNEC	Normal value in fresh water	4 mg/l
	Normal value in marine water	0,2 mg/l
	Normal value of STP microorganisms	50 mg/l

Effects on consumer

Route of exposure	Acute Local	Acute systematic	Chronic Local	Chronic systematic
oral				5 mg/kg bw/d
Inhalation				8,7 mg/m3
Skin				5 mg/kg bw/d

Effects on workers

Route of exposure	Acute Local	Acute systematic	Chronic Local	Chronic systematic
oral				
Inhalation				11,8 mg/m3
Skin				10 mg/kg bw/d

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Take the normal precautions for handling chemicals and apply an adequate standard of workplace hygiene. Users must assess the risks in their workplace and adopt:
- Primary collective protective measures such as adequate natural ventilation and local extraction
- Personal protective equipment to manage the combination of residual risks
Personal protective equipment varies according to the possible exposure and hazardousness of the working conditions, so the final choice depends on the risk assessment.

8.2	Exposure controls	Hand protection	Use category III chemical resistant gloves according to the EN 374 standard Brief contact (splash protection) - non-exhaustive list Suitable material: NITRILE RUBBER (NBR) Glove thickness: greater than 0.4 mm Breakthrough time: from 30 to 60 minutes Breakthrough index: at least 2 The gloves must be replaced if there are signs of deterioration. In any case, users must assess the risks to determine the most suitable type of glove for the conditions of use.
		Skin protection	Wear work clothes and safety footwear that complies with EN ISO 20344
		Eye protection	Wear safety glasses (UNI EN ISO 16321-1)
		Respiratory protection	Use a mask with EN140 and/or EN136 approval, with an ABEK type filter (EN 14387)
		Environmental exposure controls	The emissions generated by manufacturing processes, including those generated by ventilation equipment, should be checked to ensure compliance with environmental standards. For information on controlling environmental exposure, see the exposure scenarios attached to this safety datasheet.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1	Information on basic physical and chemical properties	For complete information see the product datasheet	
	Appearance	Physical state at 20°C	Liquid
		Appearance	N/A
		Colour	N/A
		Odour	N/A
		Odour Threshold	N/A*
	Volatility	Boiling point at atmospheric pressure	195°C
		Vapour pressure at 25°C	165 Pa
		Vapour pressure at 50°C	822,58 Pa (0.82 kPa)
		Evaporation rate at 25°C	N/A*
	Product description	Density at 25°C	1108,1 kg/m^3
		Relative density at 25°C	1,108
		Dynamic viscosity at 25°C	200 cP
		Kinematic viscosity at 25°C	N/A*
		Kinematic viscosity at 40°C	N/A*
		Concentration	N/A*
		pH	N/A*
		Vapour density at 25 ºC	N/A*
		Partition coefficient n-octanol/water 25 ºC	N/A*
		Solubility in water at 25 ºC	N/A*
		Solubility properties	N/A*
		Decomposition temperature	N/A*
		Melting point/freezing point	N/A*
	Flammability	Flash point	Non flammable (>60°C)
		Flammability (solid, gas)	N/A*
		Autoignition temperature	430°C
		Lower flammability limit	N/A*
		Upper flammability limit	N/A*
	Particle characteristics	Median equivalent diameter	N/A
9.2	Other information Information with regard to physical hazard classes	Explosive properties	N/A*
		Oxidising properties	N/A*
		Corrosive to metals	N/A*
		Heat of combustion	N/A*
		Aerosols-total percentage (by mass) of flammable components	N/A
	Other safety characteristics	Surface tension at 25°C	N/A*
		Refraction index	N/A*

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1	Information on basic physical and chemical properties	Properties	Value
		Appearance	Liquid
		Colour	Larch
		Odour	Almost odourless
		Melting point /freezing point	Not available
		initial boiling point	> 65°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	7,0-9,0
		Kinematic viscosity	Not available
		Solubility	Soluble in water
		Partition coefficient n-octanol/water	Not available
		Vapour pressure	Not available
		Density and/or relative density	1,2
		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)	59,56 %
		VOC (Directive 2004/42/EC)	5,06 % - 60,69 g/litres
		Explosive properties	Not applicable
		Oxidising properties	Not applicable

10. STABILITY AND REACTIVITY

PENTAERYTHRITOL - Incompatible materials: strong oxidising agents, strong acids, acylic chlorides, anhydrides		
10.1	Reactivity	There are no particular risks of reaction with other substances in normal conditions of use.
2-(2-BUTOXYETHOXY)ETHANOL Forms peroxides with: air. 1,2-PROPANEDIOL - Hygroscopic. Stable in normal conditions of use and storage.		
10.2	Chemical stability	The product is stable in normal conditions of use and storage.
2-(2-BUTOXYETHOXY)ETHANOL: Stable in normal conditions of use and storage. Avoid exposure to: air, heat, light.		
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.	
	1,2-PROPANEDIOL:May react dangerously with: acid chlorides, acid anhydrides, oxidising agents.	
10.4	Condition to avoid	May react dangerously with: acid chlorides, acid anhydrides, oxidising agents.
2-(2-BUTOXYETHOXY)ETHANOL: Avoid exposure to: air.		
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.	
	1,2-PROPANEDIOL: May develop: carbon oxides.	

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 1272/2008	
	Metabolism, 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) of the mixture:	Not classified (no significant component)
	ATE (Oral) of the mixture:	Not classified (no significant component)
	ATE (Dermal) of the mixture:	Not classified (no significant component)
	2-(2-BUTOXYETHOXY)ETHANOL	
	LD50 (Dermal):	2764 mg/kg coniglio
	LD50 (Oral):	2410 mg/kg ratto
	1,2-PROPANEDIOL	
	LD50 (Dermal):	> 2000 mg/kg
	LD50 (Oral):	> 20000 mg/kg
	LC50 (Inhalation mists/powders):	317,042 mg/l/2h
	Mixture of: 5-chloro-2-methyl-2h-isothiazol-3-one and 2-methyl-2h-isothiazol-3-one methyl- 2H- isothiazol- 3-one (3:1)	
	LD50 (Dermal):	> 87 mg/kg
	LD50 (Oral):	> 53 mg/kg ratto
	LC50 (Inhalation mists/powders):	0,31 mg/l/4h
	Polyphosphoric acids, ammonium salts	
	LD50 (Oral):	4740 mg/kg

11. TOXICOLOGICAL INFORMATION CONTINIUED

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	PENTAERYTHRITOL	
	LD50 (Dermal):	< 10000 mg/kg coniglio
	LD50 (Oral):	> 5, 15 mg/l/4h
	SKIN CORROSION / IRRITATION	Does not meet the classification criteria for this hazard class
	Respiratory or skin sensation	May produce an allergic reaction. Contains: mixture of 5-chloro-2-2-methyl-2hisothiazol-3-one and 2-methyl-2h-isothiazol-3-one methyl- 2H- isothiazol- 3-one (3:1)
	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 for this hazard class
	Reproductive toxicity	Does not meet the classification criteria for this hazard
	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 organs	Information not available
	Route of exposure	Information not available
	Aspiration hazard	Does not meet the classification criteria for this hazard
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 disrupters with human health effects under evaluation

12. ECOLOGICAL INFORMATION

The experimental information related to the eco-toxicological properties of the product itself is not available
Harmful to aquatic life with long lasting effects.

12.1	Toxicity	**Identification**		**Concentration**	**Species**	**Genus**
	Acute toxicity	2-(2-BUTOXYETHOXY)ETHANOL	LC50	1300 mg/l/96h	Lepomis macrochirus	Fish
			EC50	> 100 mg/l/48h	Daphnia magna	Crustacea
		1,2-PROPANEDIOL	LC50	40613 mg/l/96h	Onchorynchus mykiss	Fish
			EC50	18340 mg/l/48h	Ceriodaphnia dubia	Crustacean
			NOEC	13020 mg/I 7 d,	Ceriodaphnia dubia	Crustacean
		Mixture of: 5-chloro-2-methyl-2h-isothiazol-3-one and 2-methyl-2h-isothiazol-3-one methyl-2H- isothiazol- 3-one (3:1)	LC50	0,3 mg/l/96h	Danio rerio	Fish
			EC50	0,16 mg/l/48h	Daphnia magna	Crustacea
			EC50	0,0379 mg/l/72h	Pseudokirchneriella subcapitata - growth rate	Algae
			NOEC	0,098 mg/I	Oncorhynchus mykiss (28 d)	Fish
			NOEC	0,004 mg/I	Daphnia magna (21d)	Crustacea
			Noec	0,032 mg/I	Pseudokirchneriella subcapitata	Algae
		Polyphosphoric acids, ammonium salts	LC50	> 500 mg/l/96h	Danio rerio	Fish
		PENTAERYTHRITOL	LC50	> 100 mg/l/96h	Oryzias latipes	Fish
			EC 50	> 1000 mg/l/72h	pseudokirchneriella subcapitata	Algae
			NOEC	1000 mg/I	daphnia magna	Crustacea

12. ECOLOGICAL INFORMATION - CONTINUED

12.2	Persistence and degradability	2-(2-BUTOXYETHOXY)ETHANOL	
		Solubility in water - Rapidly degradable	1000 - 10000 mg/I
		1,2-PROPANEDIOL	
		Solubility in water - Rapidly degradable	1000 - 10000 mg/I
		Mixture of: 5-chloro-2-methyl-2h-isothiazol-3-one and 2-methyl-2h-isothiazol-3-one methyl-2H- isothiazol- 3-one (3:1) :	
		NOT rapidly degradable	
		PENTAERYTHRITOL :	
		Rapidly degradable	

12. ECOLOGICAL INFORMATION - CONTINUED

12.3	Bioaccumulative potential	2-(2-BUTOXYETHOXY)ETHANOL	
		Partition coefficient:	n-octanol/water
		1,2-PROPANEDIOL	
		Partition coefficient:	n-octanol/water : -1,07
		BCF	0,09
		Mixture of: 5-chloro-2-methyl-2h-isothiazol-3-one and 2-methyl-2h-isothiazol-3-one methyl-2H- isothiazol- 3-one (3:1) :	
		Partition coefficient:	n-octanol/water: 0,75
		PENTAERYTHRITOL	
		Partition coefficient:	n-octanol/water: -1,7
12.4	Mobility in soil	2-(2-BUTOXYETHOXY)ETHANOL	
		Partition coefficient:	soil/water: 10
		1,2-PROPANEDIOL	
		Partition coefficient:	soil/water: 0,46
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 2: 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	

13. DISPOSAL CONSIDERATIONS

13.1	Waste treatment methods	For disposal or recovery in EU countries , use the relevant waste code (EWC code) identified in the European Waste Catalogue. The producer of the waste must assign the EWC code according to the sector and type of process. Disposal must be carried out by an authorised waste management company. After the producer of the waste has assigned the EWC code, the contaminated packaging must be sent for recovery or disposal in compliance with the European waste management regulations. Disposal must be carried out by an authorised waste management company. For waste disposal or recovery in countries outside the EU, comply with the national or local regulations in force. For disposal or recovery of contaminated packaging in countries outside the EU, comply with the national or local regulations in force. Waste transportation may be subject to regulations on transportation of hazardous goods.

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

15. REGULATORY INFORMATION

<table>
<tr><td rowspan="12">15.1</td><td colspan="3">Safety, health and environmental regulations/legislation specific for the substance or mixture</td></tr>
<tr><td>Seveso Category - Directive 2012/18/EU:</td><td colspan="2">None</td></tr>
<tr><td colspan="3">Restrictions relating to the product or contained substances pursuant to Annex XVII to EC Regulation 1907/2006</td></tr>
<tr><td colspan="3">FORMALDEHYDE
REACH Reg.: 01-2119488953-20-XXXX</td></tr>
<tr><td rowspan="2">Point: 40</td><td colspan="2">Contained substance</td></tr>
<tr><td>Point: 75</td><td>Point: 72</td></tr>
<tr><td>Regulation (EU) 2019/1148 - on the marketing and use of explosives precursors</td><td colspan="2">not applicable</td></tr>
<tr><td>Substances in Candidate List (Art. 59 REACH)</td><td colspan="2">On the basis of available data, the product does not contain any SVHC in percentage ≥ than 0, 1 %.</td></tr>
<tr><td>Substances subject to authorisation (Annex XIV REACH)</td><td colspan="2">None</td></tr>
<tr><td>Substances subject to exportation reporting pursuant to Regulation (EU) 649/2012:</td><td colspan="2">None</td></tr>
<tr><td>Substances subject to the Rotterdam Convention:</td><td colspan="2">None</td></tr>
<tr><td>Substances subject to the Stockholm Convention:</td><td colspan="2">None</td></tr>
<tr><td>Healthcare controls</td><td colspan="2">Information not available</td></tr>
<tr><td>voe (Directive 2004/42/EC) :</td><td colspan="2">One - pack performance coatings.</td></tr>
<tr><td>15.2</td><td>Chemical safety assessment</td><td colspan="2">A chemical safety assessment has been performed for the following contained substances 2-(2-BUTOXYETHOXY)ETHANOL</td></tr>
</table>

16. OTHER INFORMATION

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

16	Acute Tox. 2	Acute toxicity, category 2
	Acute Tox. 3	Acute toxicity, category 3
	Skin Corr. 1C	Skin corrosion, category 1 C
	Eye lrrit. 2	Eye 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.
	H314	Causes severe skin burns and eye damage.
	H319	Causes serious eye 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:	
	PC 9a	Coatings and paints, thinners, paint removers
	PROC 10	Roller application or brushing

16. OTHER INFORMATION CONTINUED

16	Use descriptor system:	
	PROC 11	Non industrial spraying
	PROC 13	Treatment of articles by dipping and pouring
	PROC 7	Industrial spraying
	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%

16. OTHER INFORMATION CONTINUED

16	LEGEND	
	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
	TWA STEL:	Short-term exposure limit
	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	

16. OTHER INFORMATION CONTINUED

16	GENERAL BIBLIOGRAPHY
	3. Regulation (EU) 2020/878 (II Annex of REACH Regulation)
	4. Regulation (EC) 790/2009 (I Alp. CLP) of the European Parliament
	5. Regulation (EU) 286/2011 (II Atp. CLP) of the European Parliament
	6. Regulation (EU) 618/2012 (Ill Atp. CLP) of the European Parliament
	7. Regulation (EU) 487/2013 (IV Alp. CLP) of the European
	8. Regulation (EU) 944/2013 (V Alp. CLP) of the European Parliament
	9. Regulation (EU) 605/2014 (VI Alp. CLP) of the European Parliament
	10. Regulation (EU) 2015/1221 (VII Alp. CLP) of the European Parliament
	11. Regulation (EU) 2016/918 (VIII Alp. CLP) of the European Parliament
	12. Regulation (EU) 2016/1179 (IX Alp. CLP)
	13. Regulation (EU) 2017/776 (X Alp. CLP)
	14. Regulation (EU) 2018/669 (XI Alp. CLP)
	15. Regulation (EU) 2019/521 (XII Alp. CLP)
	16. Delegated Regulation (UE) 2018/1480 (XIII Alp. CLP)
	17. Regulation (EU) 2019/1148
	18. Delegated Regulation (UE) 2020/217 (XIV Alp. CLP)
	19. Delegated Regulation (UE) 2020/1182 (XV Alp. CLP)
	20. Delegated Regulation (UE) 2021/643 (XVI Alp. CLP)
	21. Delegated Regulation (UE) 2021/849 (XVII Alp. CLP)

16. OTHER INFORMATION CONTINUED

16	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	
	FA GESTIS website	
	ECHA website	
	Database of SOS models for chemicals - Ministry of Health and ISS (Istituto Superiore di Sanita) - 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.
	Changes to previous review:	The following sections were modified: 01 / 02 / 03 / 09 / 11 / 12 / 16.
	Exposure Scenarios	
	Substance	2-(2-BUTOXYETHOXY)ETHANOL
	Scenario Title	BUTYL DIGL YCOL
	Revision nr.	1
	File	EN_CAS 112-34-5_ 1.pdf