SAFETY DATA SHEET

This safety data sheet was created pursuant to the requirements of: The REACH etc. (Amendment etc.) (EU Exit) Regulations 2020 and The Chemicals (Health and Safety) and Genetically Modified Organisms (Contained Use) (Amendment etc.) (EU Exit) Regulations 2019 No. 720

Issuing Date 21-Dec-2021 **Revision Date** 16-Dec-2022 **Revision Number** 2

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

1.1. Product identifier

Product Name Permaglo 30

Synonyms None

Pure substance/mixture Mixture

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

Recommended use Embalming chemical

Uses advised against Use only for intended applications

1.3. Details of the supplier of the safety data sheet

Manufacturer
The MazWell Group Ltd.
Units 11/14-15 Ardglen Industrial Estate
Whitchurch, Hampshire
RG28 7BB, United Kingdom
+44 (0)1256-893883
+44 (0)1256-893868
enquiries@themazwellgroup.com

Supplier
MazWell Australia Pty Ltd
Unit 5-29 Governor Macquarie Drive, Chipping Norton,
NSW, 2170, Australia
02 8214 4655 (Mon-Fri 8.30am-4.30pm AEST)

For further information, please contact
E-mail address info@themazwellgroup.com.au

1.4. Emergency telephone number

Emergency telephone +61 (0)2 8214 4655 (Mon-Fri 8.30am-4.30pm AEST)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Flammable liquids	Category 3 - (H226)
Acute toxicity - Oral	Category 3 - (H301)
Acute toxicity - Dermal	Category 3 - (H311)
Acute toxicity - Inhalation (Dusts/Mists)	Category 4 - (H332)
Skin corrosion/irritation	Category 1 Sub-category B - (H314)

Serious eye damage/eye irritation	Category 1 - (H318)
Skin sensitisation	Category 1 - (H317)
Germ cell mutagenicity	Category 2 - (H341)
Carcinogenicity	Category 1B - (H350)
Specific target organ toxicity — single exposure	Category 2 Category 3 - (H371, H335)

2.2. Label elements

Contains Formaldehyde, Methanol, Trisodium 2-(carboxylatomethyl(2-hydroxyethyl)amino)ethyliminodi(acetate), C9-11 Alcohol ethoxylate

Signal word
Danger

Hazard statements
H301 - Toxic if swallowed.
H311 - Toxic in contact with skin.
H314 - Causes severe skin burns and eye damage.
H317 - May cause an allergic skin reaction.
H332 - Harmful if inhaled.
H335 - May cause respiratory irritation.
H341 - Suspected of causing genetic defects.
H350 - May cause cancer.
H371 - May cause damage to organs.
H226 - Flammable liquid and vapour.

Precautionary statements
P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P260 - Do not breathe dust/fume/gas/mist/vapours/spray.
P273 - Avoid release to the environment.
P280 - Wear protective gloves/protective clothing/eye protection/face protection.
P303 + P361 + P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].
P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310 - Immediately call a POISON CENTER or doctor.
P331 - Do NOT induce vomiting.
P370 + P378 - In case of fire: Use dry chemical, CO2, water spray or alcohol-resistant foam to extinguish.
P391 - Collect spillage.
P403 + P233 - Store in a well-ventilated place. Keep container tightly closed.

Unknown acute toxicity

Unknown aquatic toxicity Contains 0.00328 % of components with unknown hazards to the aquatic environment.

Additional information
This product requires child resistant fastenings if supplied to the general public. This product requires tactile warnings if supplied to the general public.

2.3. Other hazards

No information available.

SECTION 3: Composition/information on ingredients

3.1 Substances

Not applicable

3.2 Mixtures

Chemical name	Weight-%	EC No (EU Index No)	UK REACH registration number	Classification according to GB CLP (SI 2020/1567 as amended)	Specific concentration limit (SCL)	M-Factor	M-Factor (long-term)
Formaldehyde 50-00-0	25 - <30	(605-001-00-5) 200-001-8	-	Acute Tox. 3 (H301) Acute Tox. 3 (H311) Acute Tox. 3 (H331) Skin Corr. 1B (H314) Skin Sens. 1 (H317) Muta. 2 (H341) Carc. 1B (H350)	Eye Irrit. 2 :: 5%<=C<25% Skin Corr. 1B :: C>=25% Skin Irrit. 2 :: 5%<=C<25% Skin Sens. 1 :: C>=0.2% STOT SE 3 :: C>=5%	-	-
Methanol 67-56-1	5 - <10	200-659-6	-	Flam. Liq. 2 (H225) Acute Tox. 3 (H301) Acute Tox. 3 (H311) Acute Tox. 3 (H331) STOT SE 1 (H370)	STOT SE 1 :: C>=10% STOT SE 2 :: 3%<=C<10%	-	-
Propylene Glycol 57-55-6	1 - <5	200-338-0	-	-	-	-	-
Sodium hydroxide 1310-73-2	<0.025	(011-002-00-6) 215-185-5	-	Skin Corr. 1A (H314)	Eye Irrit. 2 :: 0.5%<=C<2% Skin Corr. 1A :: C>=5% Skin Corr. 1B :: 2%<=C<5% Skin Irrit. 2 :: 0.5%<=C<2%	-	-

Full text of H- and EUH-phrases: see section 16

This product does not contain candidate substances of very high concern at a concentration >= 0.1% (UK REACH Article 59)

SECTION 4: First aid measures

4.1. Description of first aid measures

General advice Show this safety data sheet to the doctor in attendance. Immediate medical attention is required. IF exposed or concerned: Get medical advice/attention.

Inhalation Remove to fresh air. If breathing has stopped, give artificial respiration. Get medical attention immediately. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. If breathing is difficult, (trained personnel should) give oxygen. Delayed pulmonary edema may occur. Get immediate medical

attention.

Eye contact Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Keep eye wide open while rinsing. Do not rub affected area. Get immediate medical attention. Remove contact lenses, if present and easy to do. Continue rinsing.

Skin contact Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Get immediate medical attention. May cause an allergic skin reaction.

Ingestion Do NOT induce vomiting. Rinse mouth. Never give anything by mouth to an unconscious person. Get immediate medical attention.

Self-protection of the first aider Remove all sources of ignition. Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination. Use personal protective equipment as required. See section 8 for more information. Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation. Avoid contact with skin, eyes or clothing. Avoid breathing vapours or mists.

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

Symptoms Burning sensation. Itching. Rashes. Hives. Coughing and/ or wheezing. Difficulty in breathing.

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

Note to doctors Product is a corrosive material. Use of gastric lavage or emesis is contra-indicated. Possible perforation of stomach or esophagus should be investigated. Do not give chemical antidotes. Asphyxia from glottal edema may occur. Marked decrease in blood pressure may occur with moist rales, frothy sputum, and high pulse pressure. May cause sensitisation in susceptible persons. Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable Extinguishing Media Dry chemical. Carbon dioxide (CO2). Water spray. Alcohol resistant foam.

Unsuitable extinguishing media Do not use a solid water stream as it may scatter and spread fire.

5.2. Special hazards arising from the substance or mixture

Specific hazards arising from the chemical Risk of ignition. Keep product and empty container away from heat and sources of ignition. In the event of fire, cool tanks with water spray. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations. The product causes burns of eyes, skin and mucous membranes. Thermal decomposition can lead to release of irritating gases and vapours. Product is or contains a sensitiser. May cause sensitisation by skin contact.

Hazardous combustion products Carbon oxides. Hydrocarbons.

5.3. Advice for firefighters

Special protective equipment and precautions for fire-fighters Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions Evacuate personnel to safe areas. Use personal protective equipment as required. See section 8 for more information. Avoid contact with skin, eyes or clothing. Ensure adequate

ventilation. Keep people away from and upwind of spill/leak. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Pay attention to flashback. Take precautionary measures against static discharges. All equipment used when handling the product must be grounded. Do not touch or walk through spilled material. Attention! Corrosive material. Avoid breathing vapours or mists.

Other information Ventilate the area. Refer to protective measures listed in Sections 7 and 8.

For emergency responders Use personal protection recommended in Section 8.

6.2. Environmental precautions

Environmental precautions Refer to protective measures listed in Sections 7 and 8. Prevent further leakage or spillage if safe to do so. Prevent product from entering drains. Should not be released into the environment. Do not allow to enter into soil/subsoil.

6.3. Methods and material for containment and cleaning up

Methods for containment Stop leak if you can do it without risk. Do not touch or walk through spilled material. A vapour suppressing foam may be used to reduce vapours. Dyke far ahead of spill to collect run-off water. Keep out of drains, sewers, ditches and waterways. Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal.

Methods for cleaning up Take precautionary measures against static discharges. Dam up. Soak up with inert absorbent material. Pick up and transfer to properly labelled containers.

Prevention of secondary hazards Clean contaminated objects and areas thoroughly observing environmental regulations.

6.4. Reference to other sections

Reference to other sections See section 8 for more information. See section 13 for more information.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling Use personal protection equipment. Avoid breathing vapours or mists. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use grounding and bonding connection when transferring this material to prevent static discharge, fire or explosion. Use spark-proof tools and explosion-proof equipment. Keep in an area equipped with sprinklers. Use according to package label instructions. Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. Take off contaminated clothing and wash it before reuse. In case of insufficient ventilation, wear suitable respiratory equipment. Handle product only in closed system or provide appropriate exhaust ventilation. Do not eat, drink or smoke when using this product. Remove contaminated clothing and shoes.

General hygiene considerations Do not eat, drink or smoke when using this product. Contaminated work clothing should not be allowed out of the workplace. Regular cleaning of equipment, work area and clothing is recommended. Wash hands before breaks and immediately after handling the product. Avoid contact with skin, eyes or clothing. Wear suitable gloves and eye/face protection. Remove and wash contaminated clothing and gloves, including the inside, before re-use.

7.2. Conditions for safe storage, including any incompatibilities

Storage Conditions Containers which are opened must be carefully resealed and kept upright to prevent leakage. Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from heat, sparks, flame and other sources of ignition (i.e., pilot lights, electric motors and static electricity). Keep in properly labelled containers. Do not store near combustible materials. Keep in an area equipped with sprinklers. Store in accordance with the particular national regulations. Store in accordance with local regulations. Keep out of the reach of children. Store locked up. Protect from moisture. Store away from other materials.

7.3. Specific end use(s)

Specific use(s) The identified uses for this product are detailed in Section 1.2.

Risk Management Methods (RMM) The information required is contained in this Safety Data Sheet.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure Limits

Chemical name	United Kingdom
Formaldehyde 50-00-0	TWA: 2 ppm TWA: 2.5 mg/m³ STEL: 2 ppm STEL: 2.5 mg/m³
Methanol 67-56-1	TWA: 200 ppm TWA: 266 mg/m³ STEL: 250 ppm STEL: 333 mg/m³ Sk*
Propylene Glycol 57-55-6	TWA: 150 ppm TWA: 474 mg/m³ TWA: 10 mg/m³ STEL: 450 ppm STEL: 1422 mg/m³ STEL: 30 mg/m³
Sodium hydroxide 1310-73-2	STEL: 2 mg/m³

Biological occupational exposure limits This product, as supplied, does not contain any hazardous materials with biological limits established by the region specific regulatory bodies.

Derived No Effect Level (DNEL) - Workers

Chemical name	Oral	Dermal	Inhalation
Formaldehyde 50-00-0		240 mg/kg bw/day [4] [6] 37 µg/cm2 [5] [6]	9 mg/m³ [4] [6] 0.375 mg/m³ [5] [6] 0.75 mg/m³ [5] [7]
Methanol 67-56-1		20 mg/kg bw/day [4] [6] 20 mg/kg bw/day [4] [7]	130 mg/m³ [4] [6] 130 mg/m³ [4] [7] 130 mg/m³ [5] [6] 130 mg/m³ [5] [7]
Propylene Glycol 57-55-6			168 mg/m³ [4] [6] 10 mg/m³ [5] [6]
Sodium benzoate 532-32-1		62.5 mg/kg bw/day [4] [6]	3 mg/m³ [4] [6] 0.1 mg/m³ [5] [6]
Sodium salicylate 54-21-7		0.373 mg/kg bw/day [4] [6]	1.32 mg/m³ [4] [6]
Trisodium 2-(carboxylatomethyl(2-hydroxyethyl)amino)ethyliminodi(acetate) 139-89-9			88 mg/m³ [4] [6] 10 mg/m³ [5] [6]
Sodium acetate 127-09-3		12 mg/kg bw/day [4] [6] 72 mg/kg bw/day [4] [7]	1057.9 mg/m³ [4] [6] 6347.36 mg/m³ [4] [7]
C9-11 Alcohol ethoxylate 68439-46-3		2080 mg/kg bw/day [4] [6]	294 mg/m³ [4] [6]
Sodium hydroxide			1 mg/m³ [5] [6]

Chemical name	Oral	Dermal	Inhalation
1310-73-2			
4-(2,6,6-Trimethylcyclohex-1-ene-1-yl) -but-3-ene-2-one 14901-07-6		2.191252632 mg/kg bw/day [4] [6]	2.498028 mg/m³ [4] [6]
Benzyl acetate 140-11-4		2.5 mg/kg bw/day [4] [6]	9 mg/m³ [4] [6]
Linalool 78-70-6		2.5 mg/kg bw/day [4] [6] 5 mg/kg bw/day [4] [7] 3 mg/cm2 [5] [6] 3 mg/cm2 [5] [7]	2.8 mg/m³ [4] [6] 16.5 mg/m³ [4] [7]
Piperonal 120-57-0		2.5 mg/kg bw/day [4] [6]	17.6 mg/m³ [4] [6]
1,3,4,6,7,8-hexahydro-4,6,6,7,8,8-hex amethylindeno[5,6-c]pyran 1222-05-5		60 mg/kg bw/day [4] [6]	22 mg/m³ [4] [6]

[4] Systemic health effects.
[5] Local health effects.
[6] Long term.
[7] Short term.

Derived No Effect Level (DNEL) - General Public

Chemical name	Oral	Dermal	Inhalation
Formaldehyde 50-00-0	4.1 mg/kg bw/day [4] [6]	12 µg/cm2 [5] [6]	3.2 mg/m³ [4] [6] 0.1 mg/m³ [5] [6]
Methanol 67-56-1	4 mg/kg bw/day [4] [6] 4 mg/kg bw/day [4] [7]	4 mg/kg bw/day [4] [6] 4 mg/kg bw/day [4] [7]	26 mg/m³ [4] [6] 26 mg/m³ [4] [7] 26 mg/m³ [5] [6] 26 mg/m³ [5] [7]
Propylene Glycol 57-55-6			50 mg/m³ [4] [6] 10 mg/m³ [5] [6]
Sodium benzoate 532-32-1	16.6 mg/kg bw/day [4] [6]		1.5 mg/m³ [4] [6] 0.06 mg/m³ [5] [6]
Sodium salicylate 54-21-7	0.133 mg/kg bw/day [4] [6]		0.232 mg/m³ [4] [6]
Trisodium 2-(carboxylatomethyl(2-hydroxyethyl)a mino)ethyliminodi(acetate) 139-89-9	12 mg/kg bw/day [4] [6]		22 mg/m³ [4] [6] 2.5 mg/m³ [5] [6]
Sodium acetate 127-09-3	6 mg/kg bw/day [4] [6] 36 mg/kg bw/day [4] [7]	36 mg/kg bw/day [4] [6] 36 mg/kg bw/day [4] [7]	521.73 mg/m³ [4] [6] 3103.45 mg/m³ [4] [7]
C9-11 Alcohol ethoxylate 68439-46-3	25 mg/kg bw/day [4] [6]		87 mg/m³ [4] [6]
Sodium hydroxide 1310-73-2			1 mg/m³ [5] [6]
4-(2,6,6-Trimethylcyclohex-1-ene-1-yl) -but-3-ene-2-one 14901-07-6	4.382505263 mg/kg bw/day [4] [6]		0.6214 mg/m³ [4] [6]
Benzyl acetate 140-11-4	1.3 mg/kg bw/day [4] [6]		2.2 mg/m³ [4] [6]
Linalool 78-70-6	0.2 mg/kg bw/day [4] [6] 1.2 mg/kg bw/day [4] [7]	2.5 mg/kg bw/day [4] [6] 2.5 mg/kg bw/day [4] [7] 1.5 mg/cm2 [5] [6] 1.5 mg/cm2 [5] [7]	0.7 mg/m³ [4] [6] 4.1 mg/m³ [4] [7]
Piperonal 120-57-0	1.25 mg/kg bw/day [4] [6]		4.3 mg/m³ [4] [6]
1,3,4,6,7,8-hexahydro-4,6,6,7,8,8-hex amethylindeno[5,6-c]pyran	3.8 mg/kg bw/day [4] [6]		6.5 mg/m³ [4] [6]

Chemical name	Oral	Dermal	Inhalation
1222-05-5			

[4] Systemic health effects.
[5] Local health effects.
[6] Long term.
[7] Short term.

Predicted No Effect Concentration (PNEC)

Chemical name	Freshwater	Freshwater (intermittent release)	Marine water	Marine water (intermittent release)	Air
Formaldehyde 50-00-0	0.44 mg/L	4.44 mg/L	0.44 mg/L		
Methanol 67-56-1	20.8 mg/L	1540 mg/L	2.08 mg/L		
Propylene Glycol 57-55-6	260 mg/L	183 mg/L	26 mg/L		
Sodium benzoate 532-32-1	0.13 mg/L	305 µg/L	0.013 mg/L		
Sodium salicylate 54-21-7	41.3 µg/L		4.13 µg/L		
Trisodium 2-(carboxylatomethyl(2-hydroxyethyl)amino)ethyliminodi(acetate) 139-89-9	0.256 mg/L	1 mg/L	25.6 µg/L	0.1 mg/L	
C9-11 Alcohol ethoxylate 68439-46-3	0.10379 mg/L	0.014 mg/L	0.10379 mg/L		
4-(2,6,6-Trimethylcyclohex-1-ene-1-yl)-but-3-ene-2-one 14901-07-6	0.00146 mg/L	0.0146 mg/L	0.000146 mg/L		
Benzyl acetate 140-11-4	0.0184 mg/L	0.04 mg/L	0.00184 mg/L		
Linalool 78-70-6	0.2 mg/L	2 mg/L	0.02 mg/L		
Piperonal 120-57-0	2.5 µg/L	25 µg/L	0.25 µg/L		
1,3,4,6,7,8-hexahydro-4,6,6,7,8,8-hexamethylindeno[5,6-c]pyran 1222-05-5	4.4 µg/L	30 µg/L	0.44 µg/L		

Chemical name	Freshwater sediment	Marine sediment	Sewage treatment	Soil	Food chain
Formaldehyde 50-00-0	2.3 mg/kg sediment dw	2.3 mg/kg sediment dw	0.19 mg/L	0.2 mg/kg soil dw	
Methanol 67-56-1	77 mg/kg sediment dw	7.7 mg/kg sediment dw	100 mg/L	100 mg/kg soil dw	
Propylene Glycol 57-55-6	572 mg/kg sediment dw	57.2 mg/kg sediment dw	20000 mg/L	50 mg/kg soil dw	
Sodium benzoate 532-32-1	1.76 mg/kg sediment dw	0.176 mg/kg sediment dw	10 mg/L	0.06 mg/kg soil dw	300 mg/kg food
Sodium salicylate 54-21-7	0.167 mg/kg sediment dw	16.7 µg/kg sediment dw		9.19 µg/kg soil dw	

Chemical name	Freshwater sediment	Marine sediment	Sewage treatment	Soil	Food chain
Trisodium 2-(carboxylatomethyl(2-hydroxyethyl)amino)ethyliminodi(acetate) 139-89-9	0.922 mg/kg sediment dw	92.2 µg/kg sediment dw	5.89 mg/L	0.184 mg/kg soil dw	
C9-11 Alcohol ethoxylate 68439-46-3	13.7 mg/kg sediment dw	13.7 mg/kg sediment dw	1.4 mg/L	1 mg/kg soil dw	
4-(2,6,6-Trimethylcyclohex-1-ene-1-yl)-but-3-ene-2-one 14901-07-6	22.45122592 mg/kg sediment dw	22.45122592 mg/kg sediment dw	0.0428 mg/L	10.46619104 mg/kg soil dw	
Benzyl acetate 140-11-4	0.526 mg/kg sediment dw	0.0526 mg/kg sediment dw	8.55 mg/L	0.09443 mg/kg soil dw	
Linalool 78-70-6	2.22 mg/kg sediment dw	0.222 mg/kg sediment dw	10 mg/L	0.327 mg/kg soil dw	7.8 mg/kg food
Piperonal 120-57-0	11.9 µg/kg sediment dw	1.2 µg/kg sediment dw	10 mg/L	0.84 µg/kg soil dw	
1,3,4,6,7,8-hexahydro-4,6,6,7,8,8-hexamethylindeno[5,6-c]pyran 1222-05-5	2 mg/kg sediment dw	0.394 mg/kg sediment dw	1 mg/L	0.31 mg/kg soil dw	3.3 mg/kg food

8.2. Exposure controls

Engineering controls

Showers
Eyewash stations
Ventilation systems.

Personal protective equipment

Eye/face protection

Eye protection must conform to standard EN 166. Tight sealing safety goggles. Face protection shield.

Hand protection

Gloves must conform to standard EN 374. To protect the wearer, gloves must be the correct fit and be used properly. Ensure that the breakthrough time of the glove material is not exceeded. Refer to glove supplier for information on breakthrough time for specific gloves. Wear suitable gloves. Impervious gloves.

Skin and body protection

Wear suitable protective clothing. Long sleeved clothing. Chemical resistant apron. Antistatic boots.

Respiratory protection

No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.

General hygiene considerations

Do not eat, drink or smoke when using this product. Contaminated work clothing should not be allowed out of the workplace. Regular cleaning of equipment, work area and clothing is recommended. Wash hands before breaks and immediately after handling the product. Avoid contact with skin, eyes or clothing. Wear suitable gloves and eye/face protection. Remove and wash contaminated clothing and gloves, including the inside, before re-use.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance

Physical state Liquid

Colour Light pink Orange colour

Odour Characteristic

Odour threshold No information available

Property	Values	Remarks • Method
Melting point / freezing point		No data available
Initial boiling point and boiling range	92 - 94 °C	
Flammability		No data available
Flammability Limit in Air		
Upper flammability or explosive limits	73%	
Lower flammability or explosive limits	7%	
Flash point	58 - 60 °C	CC (closed cup)
Autoignition temperature	371 °C	
Decomposition temperature		No data available
pH	7.7 - 9.0	Concentrated solution
pH (as aqueous solution)		No data available
Kinematic viscosity		No data available
Dynamic viscosity		No data available
Water solubility	Soluble in water	
Solubility(ies)		No data available
Partition coefficient		No data available
Vapour pressure		No data available
Relative density	1.07 - 1.08	
Bulk density		No data available
Liquid Density		No data available
Vapour density	>1	
Particle characteristics		
Particle Size		No data available
Particle Size Distribution		No data available

Explosive properties No information available.
Oxidising properties No information available.

9.2. Other information

VOC No information available
Evaporation rate > 1 Butyl acetate = 1

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity None under normal use conditions.

10.2. Chemical stability

Stability Stable under normal conditions.

Explosion data
Sensitivity to mechanical impact None.
Sensitivity to static discharge Yes.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions None under normal processing.

10.4. Conditions to avoid

Conditions to avoid Heat, flames and sparks. Exposure to air or moisture over prolonged periods. Excessive heat.

10.5. Incompatible materials

Incompatible materials Strong mineral acids. Strong alkalis. Phenols. Acids. Bases. Oxidising agent.

10.6. Hazardous decomposition products

Hazardous decomposition products Thermal decomposition can lead to release of irritating and toxic gases and vapours.

SECTION 11: Toxicological information

11.1. Toxicological information

Information on likely routes of exposure

Product Information

Inhalation Specific test data for the substance or mixture is not available. Corrosive by inhalation. (based on components). Inhalation of corrosive fumes/gases may cause coughing, choking, headache, dizziness, and weakness for several hours. Pulmonary edema may occur with tightness in the chest, shortness of breath, bluish skin, decreased blood pressure, and increased heart rate. Inhaled corrosive substances can lead to a toxic edema of the lungs. Pulmonary edema can be fatal. May cause irritation of respiratory tract. Harmful by inhalation.

Eye contact Specific test data for the substance or mixture is not available. Causes serious eye damage. (based on components). Corrosive to the eyes and may cause severe damage including blindness. May cause irreversible damage to eyes.

Skin contact Specific test data for the substance or mixture is not available. Corrosive. (based on components). Causes burns. May cause sensitisation by skin contact. Repeated or prolonged skin contact may cause allergic reactions with susceptible persons. Toxic in contact with skin.

Ingestion Specific test data for the substance or mixture is not available. Causes burns. (based on components). Ingestion causes burns of the upper digestive and respiratory tracts. May cause severe burning pain in the mouth and stomach with vomiting and diarrhea of dark blood. Blood pressure may decrease. Brownish or yellowish stains may be seen around the mouth. Swelling of the throat may cause shortness of breath and choking. May cause lung damage if swallowed. May be fatal if swallowed and enters airways.

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms Redness. Burning. May cause blindness. Coughing and/ or wheezing. Itching. Rashes. Hives.

Acute toxicity

Numerical measures of toxicity
Acute Toxicity Estimate (ATE) values provided as a reflection of the hazard classification.

The following values are calculated based on chapter 3.1 of the GHS document

ATEmix (oral)	265.50 mg/kg
ATEmix (dermal)	796.60 mg/kg
ATEmix (inhalation-gas)	2,460.20 ppm
ATEmix (inhalation-vapour)	453.00 mg/l
ATEmix (inhalation-dust/mist)	1.33 mg/l

Unknown acute toxicity
Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Formaldehyde	= 100 mg/kg (Rat)	> 2000 mg/kg (Rat)	< 463 ppm (Rat) 4 h
Methanol	= 100 mg/kg	= 300 mg/kg	= 22500 ppm (Rat) 8 h

Propylene Glycol	= 20 g/kg (Rat)	= 20800 mg/kg (Rabbit)	> 317 042 mg/m³ (Rabbit) 2h
Sodium hydroxide	= 325 mg/kg (Rat)	= 1350 mg/kg (Rabbit)	-

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

Skin corrosion/irritation Classification based on data available for ingredients. Causes severe skin burns and eye damage.

Serious eye damage/eye irritation Classification based on data available for ingredients. Causes serious eye damage. Causes burns.

Respiratory or skin sensitisation May cause an allergic skin reaction.

Germ cell mutagenicity Contains a known or suspected mutagen. Classification based on data available for ingredients. Suspected of causing genetic defects.

The table below indicates ingredients above the cut-off threshold considered as relevant which are listed as mutagenic.

Chemical name	United Kingdom
Formaldehyde	Muta. 2

Carcinogenicity Contains a known or suspected carcinogen. Classification based on data available for ingredients. May cause cancer.

The table below indicates whether each agency has listed any ingredient as a carcinogen.

Chemical name	United Kingdom
Formaldehyde	Carc. 1B

Reproductive toxicity No information available.

STOT - single exposure Based on the classification criteria of the Globally Harmonized System as adopted in the country or region with which this safety data sheet complies, this product has been determined to cause systemic target organ toxicity from acute exposure. (STOT SE). May cause damage to organs if swallowed. May cause damage to organs in contact with skin. May cause respiratory irritation.

STOT - repeated exposure No information available.

Aspiration hazard No information available.

Other adverse effects No information available.

SECTION 12: Ecological information

12.1. Toxicity

Ecotoxicity

Unknown aquatic toxicity Contains 0.00328 % of components with unknown hazards to the aquatic environment.

Chemical name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea

Formaldehyde	EC50 3.48 mg/L (72h, Desmodesmus subspicatus)	LC50: 6.7mg/L (96h, Morone saxatilis)	-	LC50: 5.8 mg/L (48h, Daphnia magna)
Methanol	-	LC50: =28200mg/L (96h, Pimephales promelas) LC50: >100mg/L (96h, Pimephales promelas) LC50: 19500 - 20700mg/L (96h, Oncorhynchus mykiss) LC50: 18 - 20mL/L (96h, Oncorhynchus mykiss) LC50: 13500 - 17600mg/L (96h, Lepomis macrochirus)	-	-
Propylene Glycol	EC50: 24200 mg/L (72h, Pseudokirchneriella subcapitata)	LC50: 40613 mg/L (96h, Oncorhynchus mykiss)	-	LC50: 18340 mg/L (48h, Ceriodaphnia dubia)
Sodium hydroxide	-	LC50: =45.4mg/L (96h, Oncorhynchus mykiss)	-	-

12.2. Persistence and degradability

Persistence and degradability No information available.

12.3. Bioaccumulative potential

Bioaccumulation

Component Information

Chemical name	Partition coefficient
Formaldehyde	0.35
Methanol	-0.77
Propylene Glycol	-1.07

12.4. Mobility in soil

Mobility in soil No information available.

12.5. Results of PBT and vPvB assessment

PBT and vPvB assessment

Chemical name	PBT and vPvB assessment
Formaldehyde	The substance is not PBT / vPvB
Methanol	The substance is not PBT / vPvB
Propylene Glycol	The substance is not PBT / vPvB
Sodium hydroxide	The substance is not PBT / vPvB

12.6. Other adverse effects

No information available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste from residues/unused products Should not be released into the environment. Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.

Contaminated packaging Empty containers pose a potential fire and explosion hazard. Do not cut, puncture or weld containers.

SECTION 14: Transport information

IMDG

14.1 UN number or ID number	UN3286
14.2 UN proper shipping name	FLAMMABLE LIQUID, TOXIC, CORROSIVE, N.O.S.(Formaldehyde, Methanol)
14.3 Transport hazard class(es)	3
Subsidiary hazard class	6.1, 8
14.4 Packing group	III
Description	UN3286, FLAMMABLE LIQUID, TOXIC, CORROSIVE, N.O.S.(Formaldehyde, Methanol), 3 (6.1, 8), III, (58°C C.C.)
14.5 Environmental hazards	Not applicable
14.6 Special Precautions for Users	
Special Provisions	274
EmS-No	F-E, S-C
14.7 Maritime transport in bulk according to IMO instruments	No information available

RID

14.1 UN number	UN3286
14.2 UN proper shipping name	FLAMMABLE LIQUID, TOXIC, CORROSIVE, N.O.S.(Formaldehyde, Methanol)
14.3 Transport hazard class(es)	3
Subsidiary hazard class	6.1, 8
14.4 Packing group	III
Description	UN3286, FLAMMABLE LIQUID, TOXIC, CORROSIVE, N.O.S.(Formaldehyde, Methanol), 3 (6.1, 8), III
14.5 Environmental hazards	Not applicable
14.6 Special Precautions for Users	
Special Provisions	190, 327, 344, 625
Classification code	FTC

ADR

14.1 UN number or ID number	UN3286
14.2 UN proper shipping name	FLAMMABLE LIQUID, TOXIC, CORROSIVE, N.O.S.(Formaldehyde, Methanol)
14.3 Transport hazard class(es)	3
Subsidiary class	6.1, 8
14.4 Packing group	III
Description	UN3286, FLAMMABLE LIQUID, TOXIC, CORROSIVE, N.O.S.(Formaldehyde, Methanol), 3 (6.1, 8), III, (D/E)
14.5 Environmental hazards	Not applicable
14.6 Special Precautions for Users	
Special Provisions	274
Classification code	FTC
Tunnel restriction code	(D/E)

IATA

14.1 UN number or ID number	UN3286
14.2 UN proper shipping name	Flammable liquid, toxic, corrosive, n.o.s.(Formaldehyde, Methanol)
14.3 Transport hazard class(es)	3
Subsidiary hazard class	6.1, 8
14.4 Packing group	III
Description	UN3286, Flammable liquid, toxic, corrosive, n.o.s.(Formaldehyde, Methanol), 3 (6.1, 8), III
14.5 Environmental hazards	Not applicable
14.6 Special Precautions for Users	
Special Provisions	None
ERG Code	3CP
Note:	None

SECTION 15: Regulatory information

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

National regulations

Authorisations and/or restrictions on use:
This product contains one or more substances subject to restriction (UK REACH - Annex XVII).

Chemical name	Restricted substance per REACH Annex XVII	Substance subject to authorisation per REACH Annex XIV
Formaldehyde - 50-00-0	Use restricted. See item 28. Use restricted. See item 72. Restricted Carcinogen 1B	-
Methanol - 67-56-1	Use restricted. See item 69.	-

Persistent Organic Pollutants
Not applicable

Export Notification requirements
Not applicable

Dangerous substance category per COMAH Regulations 2015 (as amended)
P5a - FLAMMABLE LIQUIDS
P5b - FLAMMABLE LIQUIDS
P5c - FLAMMABLE LIQUIDS

Named dangerous substances per COMAH Regulations 2015 (as amended)

Chemical name	Lower-tier requirements (tons)	Upper-tier requirements (tons)
Formaldehyde - 50-00-0	5	50
Methanol - 67-56-1	500	5000

The Ozone-Depleting Substances Regulations 2015
Not applicable

The Biocidal Products Regulations 2001 (as amended)

Chemical name	The Biocidal Products Regulations 2001 (as amended)
Formaldehyde - 50-00-0	Product-type 2: Disinfectants and algaecides not intended for direct application to humans or animals Product-type 3: Veterinary hygiene Product-type 22: Embalming and taxidermist fluids

The Water Environment (Water Framework Directive) (England and Wales) Regulations 2017 (as amended)
Not applicable

Poisons Act 1972 (Explosive Precursors) Regulations (as Amended)

Chemical name	Poisons and Explosive Precursors
Formaldehyde	Poison, Reportable 5 % w/w
Sodium hydroxide	Poison, Reportable 12 % of total caustic alkalinity

International Inventories
Contact supplier for inventory compliance status

15.2. Chemical safety assessment

Chemical Safety Report No information available

SECTION 16: Other information

Key or legend to abbreviations and acronyms used in the safety data sheet

Full text of H-Statements referred to under section 3
H225 - Highly flammable liquid and vapour
H301 - Toxic if swallowed
H311 - Toxic in contact with skin
H314 - Causes severe skin burns and eye damage
H317 - May cause an allergic skin reaction
H331 - Toxic if inhaled
H341 - Suspected of causing genetic defects
H350 - May cause cancer
H370 - Causes damage to organs

Legend
SVHC: Substances of Very High Concern for Authorisation:

Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

TWA	TWA (time-weighted average)	STEL	STEL (Short Term Exposure Limit)
Ceiling	Maximum limit value	*	Skin designation
+	Sensitisers		

Classification procedure	
Classification according to Regulation (EC) No. 1272/2008 [CLP]	Method Used
Acute oral toxicity	Calculation method
Acute dermal toxicity	Calculation method
Acute inhalation toxicity - gas	Calculation method
Acute inhalation toxicity - vapour	Calculation method
Acute inhalation toxicity - dust/mist	Calculation method
Skin corrosion/irritation	Calculation method
Serious eye damage/eye irritation	Calculation method
Respiratory sensitisation	Calculation method
Skin sensitisation	Calculation method
Mutagenicity	Calculation method
Carcinogenicity	Calculation method
Reproductive toxicity	Calculation method
STOT - single exposure	Calculation method
STOT - repeated exposure	Calculation method
Acute aquatic toxicity	Calculation method
Chronic aquatic toxicity	Calculation method
Aspiration hazard	Calculation method
Ozone	Calculation method

Key literature references and sources for data used to compile the SDS
Agency for Toxic Substances and Disease Registry (ATSDR)
U.S. Environmental Protection Agency ChemView Database
European Food Safety Authority (EFSA)
European Chemicals Agency (ECHA) Committee for Risk Assessment (ECHA_RAC)
European Chemicals Agency (ECHA) (ECHA_API)
EPA (Environmental Protection Agency)
Acute Exposure Guideline Level(s) (AEGL(s))
U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act
U.S. Environmental Protection Agency High Production Volume Chemicals
Food Research Journal
Hazardous Substance Database
International Uniform Chemical Information Database (IUCLID)
National Institute of Technology and Evaluation (NITE)
Australian National Industrial Chemicals Notification and Assessment Scheme (NICNAS)
NIOSH (National Institute for Occupational Safety and Health)
National Library of Medicine's ChemID Plus (NLM CIP)

National Library of Medicine’s PubMed database (NLM PUBMED)
National Toxicology Program (NTP)
New Zealand's Chemical Classification and Information Database (CCID)
Organisation for Economic Co-operation and Development Environment, Health, and Safety Publications
Organisation for Economic Co-operation and Development High Production Volume Chemicals Programme
Organisation for Economic Co-operation and Development Screening Information Data Set
World Health Organization

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This material safety data sheet complies with the requirements of UK REACH

Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work

Disclaimer
The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text

End of Safety Data Sheet