SAFETY DATA SHEET

This safety data sheet was created pursuant to the requirements of:
Regulation (EC) No. 1907/2006 as amended by Regulation (EU) No. 2020/878, and
Regulation (EC) No. 1272/2008

Supercedes date 22-Nov-2021 **Revision date** 13-Mar-2025 **Revision Number** 3

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

1.1. Product identifier

Product Name PERMAGLO 35

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
Medenta GmbH
Huckrieden Esch 9,
49549 Ladbergen.
Germany
(05485) 2020
info@medenta.de

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

1.4. Emergency telephone number

Emergency telephone No information available

Emergency telephone - §45 - (EC)1272/2008	
Europe	**112**
Germany	Poison Control Center - Charité - Universitätsmedizin Berlin Tel (+49) 30 30686700

SECTION 2: Hazards identification

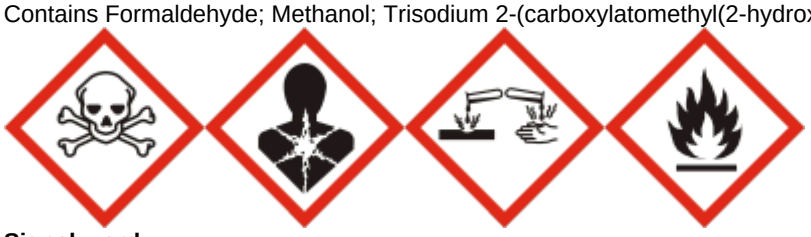
2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Flammable liquids	Category 3 - (H226)
Acute toxicity - Oral	Category 4 - (H302)
Acute toxicity - Dermal	Category 3 - (H311)
Acute toxicity - Inhalation (Gases)	Category 3 - (H331)
Acute toxicity - Inhalation (Dusts/Mists)	Category 2 - (H330)
Skin corrosion	Category 1 Sub-category B - (H314)
Serious eye damage	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 1 Category 3 - (H370, H335)
Category 3 Respiratory irritation	

2.2. Label elements

Contains Formaldehyde; Methanol; Trisodium 2-(carboxylatomethyl(2-hydroxyethyl)amino)ethyliminodi(acetate)



Signal word
Danger

Hazard statements
H302 - Harmful if swallowed.
H311 - Toxic in contact with skin.
H314 - Causes severe skin burns and eye damage.
H317 - May cause an allergic skin reaction.
H330 - Fatal if inhaled.
H331 - Toxic if inhaled.
H341 - Suspected of causing genetic defects.
H350 - May cause cancer.
H370 - Causes damage to organs.
H226 - Flammable liquid and vapour.
EUH071 - Corrosive to the respiratory tract

Precautionary Statements - EU (§28, 1272/2008)
P201 - Obtain special instructions before use.
P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P260 - Do not breathe dust, fume, gas, mist, vapors and spray.
P280 - Wear protective gloves, protective clothing, eye protection and face protection.
P303 + P361 + P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.
P304 + P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing.
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.
P320 - Specific treatment is urgent (see supplemental first aid instructions on this label).
P370 + P378 - In case of fire: Use dry chemical, CO2, water spray or alcohol-resistant foam to extinguish.
P403 + P233 - Store in a well-ventilated place. Keep container tightly closed.

Unknown acute toxicity
10.83 % of the mixture consists of ingredient(s) of unknown acute toxicity.
10.83 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (gas).

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

2.3. Other hazards

Other hazards Toxic to aquatic life.

PBT & vPvB None known

Endocrine Disruptor Information This product does not contain any known or suspected endocrine disruptors.

SECTION 3: Composition/information on ingredients

3.1 Substances

Not applicable

3.2 Mixtures

Chemical name	Weight-%	REACH registration number	EC No (EU Index No)	Classification according to Regulation (EC) No. 1272/2008 [CLP]	Specific concentration limit (SCL)	M-Factor	M-Factor (long-term)	Notes
Formaldehyde 50-00-0	25 - <50%	No data available	200-001-8 (605-001-00-5)	Acute Tox. 4 (H302) Acute Tox. 3 (H311) Skin Corr. 1B (H314) Skin Sens. 1A (H317) Acute Tox. 2 (H330) Muta. 2 (H341) Carc. 1B (H350) (EUH071)	STOT SE 3 :: C>=5% Skin Corr. 1B :: C>=25% Skin Irrit. 2 :: 5%<=C<25% Eye Irrit. 2 :: 5%<=C<25%	-	-	B,D,F
Methanol 67-56-1	10 - <15%	01-2119433307-44-XXX	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	3 - <5%	-	200-338-0	[F]	-	-	-	-
Sodium benzoate 532-32-1	<0.5%	No data available	208-534-8	Eye Irrit. 2 (H319)	-	-	-	-
Trisodium 2-(carboxylatomethyl(2-hydroxyethyl)amino)ethyliminodi(acetate) 139-89-9	< 1%	No data available	205-381-9	Skin Irrit. 2 (H315) Eye Dam. 1 (H318)	-	-	-	-
Sodium acetate 127-09-3	<0.3%	No data available	204-823-8	No data available	-	-	-	-
Citric acid 77-92-9	0.01	No data available	201-069-1 (607-750-00-3)	Eye Irrit. 2 (H319) STOT SE 3 (H335)	-	-	-	-
Sodium hydroxide 1310-73-2	<0.025%	No data available	215-185-5 (011-002-00-6)	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%			
Benzyl acetate 140-11-4	0.00052	No data available	205-399-7	Aquatic Chronic 3 (H412)	-	-	-	-
D-Limonene 5989-27-5	<0.025%	No data available	227-813-5 (601-096-00-2)	Flam. Liq. 3 (H226) Asp. Tox. 1 (H304) Skin Irrit. 2 (H315) Skin Sens. 1B (H317) Aquatic Acute 1 (H400) Aquatic Chronic 3 (H412)	-	1	1	-
7-Methyl-3-methylene octa-1,6-diene 123-35-3	<0.025%	-	204-622-5	Flam. Liq. 3 (H226) Skin Irrit. 2 (H315) Eye Irrit. 2 (H319) Asp. Tox. 1 (H304) Aquatic Acute 1 (H400) Aquatic Chronic 2 (H411)	-	1	-	-

Classification according to Regulation (EC) No. 1272/2008 [CLP] - Notes

[F] - Although non-hazardous, the manufacturer chooses to disclose the composition

Note B - Some substances (acids, bases, etc.) are placed on the market in aqueous solutions at various concentrations and, therefore, these solutions require different classification and labelling since the hazards vary at different concentrations. In Part 3 entries with Note B have a general designation of the following type: 'nitric acid … %'. In this case the supplier must state the percentage concentration of the solution on the label. Unless otherwise stated, it is assumed that the percentage concentration is calculated on a weight/weight basis.

Note D - Certain substances which are susceptible to spontaneous polymerization or decomposition are generally placed on the market in a stabilized form. It is in this form that they are listed in Part 3 of Annex VI to Regulation (EC) No 1272/2008. However, such substances are sometimes placed on the market in a non-stabilized form. In this case, the supplier who places such a substance on the market must state on the label the name of the substance followed by the words "non-stabilized".

Note F - This substance may contain a stabilizer. If the stabilizer changes the hazardous properties of the substance, as indicated by the classification in Part 3, classification and labelling should be provided in accordance with the rules for classification and labelling of hazardous mixtures.

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

Acute Toxicity Estimate

If LD50/LC50 data is not available or does not correspond to the classification category, then the appropriate conversion value from CLP Annex I, Table 3.1.2, is used to calculate the acute toxicity estimate (ATEmix) for classifying a mixture based on its components

Chemical name	Oral LD50 mg/kg	Dermal LD50 mg/kg	Inhalation LC50 - 4 hour - dust/mist - mg/L	Inhalation LC50 - 4 hour - vapour - mg/L	Inhalation LC50 - 4 hour - gas - ppm
Formaldehyde 50-00-0	500 * 100	300	0.501	No data available	700
Methanol 67-56-1	100	300	0.501	41.6976	No data available
Propylene Glycol 57-55-6	20000	20800	No data available	No data available	No data available
Sodium benzoate 532-32-1	4070	No data available	No data available	No data available	No data available
Trisodium 2-(carboxylatomethyl(2-hydroxyethyl)amino)ethyliminodi(acetate) 139-89-9	10000	No data available	No data available	No data available	No data available
Sodium acetate	3530	10010	5.6056	No data available	No data available

Chemical name	Oral LD50 mg/kg	Dermal LD50 mg/kg	Inhalation LC50 - 4 hour - dust/mist - mg/L	Inhalation LC50 - 4 hour - vapour - mg/L	Inhalation LC50 - 4 hour - gas - ppm
127-09-3					
Citric acid 77-92-9	3000	2002	No data available	No data available	No data available
Sodium hydroxide 1310-73-2	325	1350	No data available	No data available	No data available
Benzyl acetate 140-11-4	2490	5005	No data available	No data available	No data available
D-Limonene 5989-27-5	5200 4400	5005	No data available	No data available	No data available
7-Methyl-3-methyleneocta-1,6-diene 123-35-3	5000	5005	No data available	No data available	No data available

+ This value is the harmonised acute toxicity estimate (ATE) listed in CLP Annex VI, Part 3. This harmonised ATE value must be used when calculating the acute toxicity estimate (ATEmix) for classifying a mixture containing the listed substance

This product does not contain candidate substances of very high concern at a concentration >=0.1% (Regulation (EC) No. 1907/2006 (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. 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. If breathing has stopped, give artificial respiration. Get medical attention immediately. Delayed pulmonary edema may occur.

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. Do not breathe vapour or mist. 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. Avoid contact with skin, eyes or clothing.

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

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

Effects of Exposure May cause cancer. Mutagenic effects. Causes damage to organs.

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 powder. 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. Inorganic compounds. Organic compounds. Formaldehyde. Methanol.

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. Do not breathe vapour or mist. Attention! Corrosive material.

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. 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. Do not breathe vapour or mist. 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. Do not breathe vapour or mist.

7.2. Conditions for safe storage, including any incompatibilities

Storage Conditions 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.

Storage class (TRGS 510) LGK 3.

7.3. Specific end use(s)

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

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure Limits

Chemical name	European Union	Austria	Belgium	Bulgaria	Croatia
Formaldehyde 50-00-0	TWA: 0.37 mg/m³; TWA: 0.62 mg/m³; TWA: 0.3 ppm; TWA: 0.5 ppm;	TWA-TMW: 0.3 ppm; TWA-TMW: 0.37 mg/m³;	STEL: 0.3 ppm; STEL: 0.38 mg/m³;	TWA: 0.37 mg/m³; TWA: 0.3 ppm; TWA: 0.62 mg/m³; STEL: 0.5 ppm;	TWA-GVI: 0.3 ppm; TWA-GVI: 0.37 mg/m³; TWA-GVI: 0.5 ppm;

	STEL: 0.74 mg/m³; STEL: 0.6 ppm; DS	STEL-KZGW: 0.6 ppm (); STEL-KZGW: 0.74 mg/m³ (); DS		STEL: 0.74 mg/m³; STEL: 0.6 ppm; DS	TWA-GVI: 0.62 mg/m³; STEL-KGVI: 0.6 ppm; STEL-KGVI: 0.74 mg/m³; DS
Methanol 67-56-1	TWA: 200 ppm; TWA: 260 mg/m³; pSk	TWA-TMW: 200 ppm; TWA-TMW: 260 mg/m³; STEL-KZGW: 800 ppm (4 X 15 min); STEL-KZGW: 1040 mg/m³ (4 X 15 min); Sk	TWA: 200 ppm; TWA: 266 mg/m³; STEL: 250 ppm; STEL: 333 mg/m³; Sd	TWA: 200 ppm; TWA: 260.0 mg/m³; Sk	TWA-GVI: 200 ppm; TWA-GVI: 260 mg/m³; Sk
Propylene Glycol 57-55-6	-	-	-	-	TWA-GVI: 150 ppm; TWA-GVI: 474 mg/m³; total vapor and particles TWA-GVI: 10 mg/m³; particles
Sodium hydroxide 1310-73-2	-	TWA-TMW: 2 mg/m³; inhalable fraction STEL-KZGW: 4 mg/m³ (8 X 5 min); inhalable fraction	TWA: 2 mg/m³;	TWA: 2.0 mg/m³; alkaline aerosols	STEL-KGVI: 2 mg/m³;
Benzyl acetate 140-11-4	-	-	TWA: 10 ppm; TWA: 62 mg/m³;	-	-
Chemical name	Cyprus	Czech Republic	Denmark	Estonia	Finland
Formaldehyde 50-00-0	TWA: 0.3 ppm; TWA: 0.37 mg/m³; STEL: 0.74 mg/m³; STEL: 0.6 ppm;	TWA: 0.37 mg/m³; TWA: 0.5 mg/m³; Ceiling: 0.74 mg/m³; pSk S	TWA: 0.3 ppm; TWA: 0.37 mg/m³; STEL: 0.74 mg/m³; STEL: 0.6 ppm;	TWA: 0.3 ppm; TWA: 0.37 mg/m³; TWA: 0.62 mg/m³; TWA: 0.5 ppm; STEL: 0.6 ppm; STEL: 0.74 mg/m³; S	TWA: 0.3 ppm; TWA: 0.37 mg/m³; TWA: 0.05 ppm; STEL: 0.6 ppm; STEL: 0.74 mg/m³;
Methanol 67-56-1	TWA: 200 ppm; TWA: 260 mg/m³; pSk	TWA: 250 mg/m³; Ceiling: 1000 mg/m³; pSk	TWA: 200 ppm; TWA: 260 mg/m³; STEL: 400 ppm; STEL: 520 mg/m³; pSk	TWA: 200 ppm; TWA: 250 mg/m³; STEL: 250 ppm; STEL: 350 mg/m³; Sk	TWA: 200 ppm; TWA: 270 mg/m³; STEL: 250 ppm; STEL: 330 mg/m³; pSk
Citric acid 77-92-9	-	TWA: 4 mg/m³; dust	-	-	-
Sodium hydroxide 1310-73-2	-	TWA: 1 mg/m³; Ceiling: 2 mg/m³;	Ceiling: 2 mg/m³;	TWA: 1 mg/m³; STEL: 2 mg/m³;	Ceiling: 2 mg/m³;
Benzyl acetate 140-11-4	-	-	TWA: 10 ppm; TWA: 61 mg/m³; STEL: 20 ppm; STEL: 122 mg/m³;	-	-
D-Limonene 5989-27-5	-	-	-	-	TWA: 25 ppm; TWA: 140 mg/m³; STEL: 50 ppm; STEL: 280 mg/m³;
Chemical name	France	Germany TRGS	Germany DFG	Greece	Hungary
Formaldehyde 50-00-0	TWA-VME: 0.5 ppm; TWA-VME: 0.3 ppm; TWA-VME: 0.37	TWA-AGW; 0.3 ppm (exposure factor 2);	TWA-MAK: 0.3 ppm; I(2); TWA-MAK: 0.37	TWA: 0.37 mg/m³; TWA: 0.62 mg/m³; TWA: 0.3 ppm;	TWA-AK: 0.3 ppm; TWA-AK: 0.37 mg/m³;

	mg/m³; TWA-VME: 0.62 mg/m³; STEL-VLCT: 0.6 ppm; STEL-VLCT: 0.74 mg/m³;	TWA-AGW; 0.37 mg/m³ (exposure factor 2); DS	mg/m³; I(2); Peak: 0.6 ppm; Peak: 0.74 mg/m³; DS	TWA: 0.5 ppm; STEL: 0.6 ppm; STEL: 0.74 mg/m³; DS	STEL-CK: 0.6 ppm; STEL-CK: 0.74 mg/m³; pSk S
Methanol 67-56-1	TWA-VME: 200 ppm; TWA-VME: 260 mg/m³; STEL-VLCT: 1000 ppm; STEL-VLCT: 1300 mg/m³; dSk	TWA-AGW; 100 ppm (exposure factor 2); TWA-AGW; 130 mg/m³ (exposure factor 2); Sk	TWA-MAK: 100 ppm; II(2); TWA-MAK: 130 mg/m³; II(2); Peak: 200 ppm; Peak: 260 mg/m³; Sk	TWA: 200 ppm; TWA: 260 mg/m³; STEL: 250 ppm; STEL: 325 mg/m³; pSk	TWA-AK: 260 mg/m³; TWA-AK: 200 ppm; pSk
Sodium benzoate 532-32-1	-	TWA-AGW; 10 mg/m³ (exposure factor 2); inhalable fraction Sk	TWA-MAK: 10 mg/m³; II(2);inhalable fraction Peak: 20 mg/m³; inhalable fraction Sk	-	-
Citric acid 77-92-9	-	TWA-AGW; 2 mg/m³ (exposure factor 2); inhalable fraction	TWA-MAK: 2 mg/m³; I(2);inhalable fraction Peak: 4 mg/m³; respirable fraction	-	-
Sodium hydroxide 1310-73-2	TWA-VME: 2 mg/m³;	-	-	TWA: 2 mg/m³; STEL: 2 mg/m³;	TWA-AK: 1 mg/m³; STEL-CK: 2 mg/m³;
D-Limonene 5989-27-5	TWA-VME: 1000 mg/m³; vapor STEL-VLCT: 1500 mg/m³; vapor	TWA-AGW; 5 ppm (exposure factor 4); TWA-AGW; 28 mg/m³ (exposure factor 4); Sk DS	TWA-MAK: 5 ppm; II(4); TWA-MAK: 28 mg/m³; II(4); Peak: 20 ppm; Peak: 112 mg/m³; Sk DS	-	-
7-Methyl-3-methyleneocta-1,6-diene 123-35-3	TWA-VME: 1000 mg/m³; vapor STEL-VLCT: 1500 mg/m³; vapor	-	-	-	-
Chemical name	Ireland	Italy MDLPS	Italy AIDII	Latvia	Lithuania
Formaldehyde 50-00-0	TWA: 0.3 ppm; TWA: 0.5 ppm; TWA: 0.37 mg/m³; TWA: 0.62 mg/m³; STEL: 0.6 ppm (calculated); STEL: 0.738 mg/m³ (calculated); STEL: 0.62 mg/m³ (for the healthcare, funeral and embalming sectors until July 11, 2024);	TWA: 0.37 mg/m³; TWA: 0.3 ppm; STEL: 0.74 mg/m³; STEL: 0.6 mg/m³; pSk	STEL (REL): 0.3 ppm; STEL (REL): 0.37 mg/m³; DS RS	-	TWA-IPRD: 0.3 ppm; TWA-IPRD: 0.37 mg/m³; TWA-IPRD: 0.62 mg/m³; TWA-IPRD: 0.5 ppm; STEL-TPRD: 0.74 mg/m³; STEL-TPRD: 0.6 ppm; S
Methanol 67-56-1	TWA: 200 ppm; TWA: 260 mg/m³; STEL: 600 ppm (calculated);	TWA: 200 ppm; TWA: 260 mg/m³; pSk	TWA: 200 ppm; TWA: 262 mg/m³; STEL (REL): 250 ppm;	TWA: 200 ppm; TWA: 260 mg/m³; pSk	TWA-IPRD: 200 ppm; TWA-IPRD: 260 mg/m³;

	STEL: 780 mg/m³ (calculated); pSk		STEL (REL): 328 mg/m³; pSk		Sk
Propylene Glycol 57-55-6	TWA: 10 mg/m³; particulate TWA: 150 ppm; total vapour and particulates TWA: 470 mg/m³; total vapour and particulates STEL: 1410 mg/m³ (calculated); particulates STEL: 30 mg/m³ (calculated); STEL: 450 ppm (calculated); tot al vapor and particulates	-	-	TWA: 7 mg/m³;	TWA-IPRD: 7 mg/m³;
Sodium hydroxide 1310-73-2	STEL: 2 mg/m³;	-	Ceiling: 2 mg/m³;	TWA: 0.5 mg/m³;	Ceiling (NRD): 2 mg/m³;
Benzyl acetate 140-11-4	TWA: 10 ppm; STEL: 30 ppm (calculated);	-	TWA: 10 ppm; TWA: 61 mg/m³;	TWA: 5 mg/m³;	TWA-IPRD: 5 mg/m³;
Chemical name	Luxembourg	Malta	Netherlands	Norway	Poland
Formaldehyde 50-00-0	-	-	TWA: 0.12 ppm; TWA: 0.15 mg/m³; STEL: 0.41 ppm; STEL: 0.5 mg/m³;	TWA: 0.37 mg/m³; TWA: 0.3 ppm; STEL: 0.74 mg/m³ (value from the regulation); STEL: 0.6 ppm (value from the regulation); Ceiling: 1 ppm; Ceiling: 1.2 mg/m³; As	TWA-NDS: 0.37 mg/m³; STEL-NDSCh: 0.74 mg/m³; Sk DS
Methanol 67-56-1	TWA: 200 ppm; TWA: 260 mg/m³; pSk	TWA: 200 ppm; TWA: 260 mg/m³; pSk	TWA: 100 ppm; TWA: 133 mg/m³; Sk	TWA: 100 ppm; TWA: 130 mg/m³; STEL: 150 ppm (value calculated); STEL: 162.5 mg/m³ (value calculated); Sk	TWA-NDS: 100 mg/m³; STEL-NDSCh: 300 mg/m³; Prohibited - substances or mixtures containing Methanol in weight concentration >3%;except fuels used in the model building, powerboating, fuel cells and biofuels Sk
Propylene Glycol 57-55-6	-	-	-	TWA: 25 ppm; TWA: 79 mg/m³; STEL: 37.5 ppm (value calculated); STEL: 118.5 mg/m³ (value calculated);	TWA-NDS: 100 mg/m³; vapor and inhalable fraction

Sodium hydroxide 1310-73-2	-	-	-	Ceiling: 2 mg/m³;	TWA-NDS: 0.5 mg/m³; STEL-NDSCh: 1 mg/m³;
D-Limonene 5989-27-5	-	-	-	TWA: 25 ppm; TWA: 140 mg/m³; STEL: 37.5 ppm (value calculated); STEL: 175 mg/m³ (value calculated); As	-
7-Methyl-3-methyleneocta-1,6-diene 123-35-3	-	-	-	TWA: 40 ppm; TWA: 275 mg/m³; STEL: 60 ppm (higher than Decane;value calculated); STEL: 343.75 mg/m³ (higher than Decane;value calculated);	-
Chemical name	Portugal	Romania	Slovakia	Slovenia	Spain
Formaldehyde 50-00-0	TWA (VLE-MP): 0.3 ppm; TWA (VLE-MP): 0.37 mg/m³; STEL (VLE-CD): 0.6 ppm; STEL (VLE-CD): 0.74 mg/m³; Ceiling (VLE-CM): 0.3 ppm; DS	TWA: 0.37 mg/m³; TWA: 0.3 ppm; STEL: 0.6 ppm; STEL: 0.74 mg/m³; Sk	TWA: 0.3 ppm; TWA: 0.37 mg/m³; STEL: 0.6 ppm; STEL: 0.74 mg/m³; Ceiling: 0.74 mg/m³; S	TWA: 0.62 mg/m³; TWA: 0.5 ppm; TWA: 0.37 mg/m³; TWA: 0.3 ppm; STEL: 0.6 ppm; STEL: 0.74 mg/m³; pSk	TWA-(VLA-ED): 0.3 ppm; TWA-(VLA-ED): 0.37 mg/m³; STEL (VLA-EC): 0.6 ppm; STEL (VLA-EC): 0.74 mg/m³; S
Methanol 67-56-1	TWA (VLE-MP): 200 ppm; TWA (VLE-MP): 260 mg/m³; STEL (VLE-CD): 250 ppm; pSk	TWA: 200 ppm; TWA: 260 mg/m³; Sk	TWA: 200 ppm; TWA: 260 mg/m³; pSk	TWA: 200 ppm; TWA: 260 mg/m³; STEL: 800 ppm; STEL: 1040 mg/m³; pSk	TWA-(VLA-ED): 200 ppm; TWA-(VLA-ED): 266 mg/m³; pSk
Sodium benzoate 532-32-1	-	-	-	TWA: 10 mg/m³; inhalable fraction STEL: 20 mg/m³; inhalable fraction pSk	-
Sodium hydroxide 1310-73-2	Ceiling (VLE-CM): 2 mg/m³;	TWA: 1 mg/m³; STEL: 3 mg/m³;	TWA: 2 mg/m³;	-	STEL (VLA-EC): 2 mg/m³;
Benzyl acetate 140-11-4	TWA (VLE-MP): 10 ppm;	TWA: 8 ppm; TWA: 50 mg/m³; STEL: 13 ppm; STEL: 80 mg/m³;	-	-	TWA-(VLA-ED): 10 ppm; TWA-(VLA-ED): 62 mg/m³;
D-Limonene 5989-27-5	-	-	-	TWA: 28 mg/m³; TWA: 5 ppm; STEL: 20 ppm; STEL: 112 mg/m³; pSk	TWA-(VLA-ED): 30 ppm; TWA-(VLA-ED): 168 mg/m³; pSk S
7-Methyl-3-methyleneoct	-	TWA: 700 mg/m³;	-	-	-

a-1,6-diene 123-35-3		STEL: 1000 mg/m³;			

Chemical name	Sweden	Switzerland	United Kingdom
Formaldehyde 50-00-0	TLV-NGV: 0.3 ppm; TLV-NGV: 0.37 mg/m³; STEL (Bindande KGV): 0.6 ppm; STEL (Bindande KGV): 0.74 mg/m³; Sk S	TWA-MAK: 0.3 ppm; TWA-MAK: 0.37 mg/m³; STEL-KZGW: 0.6 ppm; STEL-KZGW: 0.74 mg/m³; S	TWA: 2 ppm; TWA: 2.5 mg/m³; STEL: 2 ppm; STEL: 2.5 mg/m³;
Methanol 67-56-1	TLV-NGV: 200 ppm; TLV-NGV: 250 mg/m³; STEL (Vägledande KGV): 250 ppm; STEL (Vägledande KGV): 350 mg/m³; Sk	TWA-MAK: 200 ppm; TWA-MAK: 260 mg/m³; STEL-KZGW: 400 ppm; STEL-KZGW: 520 mg/m³; Sk	TWA: 200 ppm; TWA: 266 mg/m³; STEL: 250 ppm; STEL: 333 mg/m³; pSk
Propylene Glycol 57-55-6	-	-	TWA: 150 ppm; total vapour and particulate TWA: 474 mg/m³; total vapour and particulate TWA: 10 mg/m³; particulate STEL: 450 ppm; total vapour and particulate STEL: 1422 mg/m³; total vapour and particulate STEL: 30 mg/m³; particulate
Sodium benzoate 532-32-1	-	TWA-MAK: 0.2 ppm; respirable dust TWA-MAK: 1 mg/m³; respirable dust TWA-MAK: 10 mg/m³; inhalable dust STEL-KZGW: 0.8 ppm; STEL-KZGW: 4 mg/m³; respirable dust STEL-KZGW: 20 mg/m³; inhalable dust Sk	-
Citric acid 77-92-9	-	TWA-MAK: 2 mg/m³; inhalable dust STEL-KZGW: 4 mg/m³; inhalable dust	-
Sodium hydroxide 1310-73-2	TLV-NGV: 1 mg/m³; inhalable fraction STEL (Bindande KGV): 2 mg/m³; inhalable fraction	TWA-MAK: 2 mg/m³; inhalable dust STEL-KZGW: 2 mg/m³; inhalable dust	STEL: 2 mg/m³;
D-Limonene 5989-27-5	-	TWA-MAK: 7 ppm; TWA-MAK: 40 mg/m³; STEL-KZGW: 14 ppm; STEL-KZGW: 80 mg/m³; S	-

Note See section 16 for terms and abbreviations

Biological occupational exposure limits

Chemical name	European Union	Austria	Bulgaria	Croatia	Czech Republic
Methanol 67-56-1	-	-	-	7.0 mg/g Creatinine - urine (Methanol) - at	0.47 mmol/L (urine - Methanol end of

				the end of the work shift	shift) 15 mg/L (urine - Methanol end of shift)
Chemical name	Denmark	Finland	France	Germany DFG	Germany TRGS
Methanol 67-56-1	-	-	- urine (Methanol) - end of shift	15 mg/L (urine - Methanol at the end of the shift, in case of long-term exposure after several previous shifts) 15 mg/L - BAT (end of exposure or end of shift) urine	15 mg/L (urine - Methanol at the end of the shift, in case of long-term exposure after several previous shifts)

Chemical name	Hungary	Ireland	Italy MDLPS	Italy AIDII
Methanol 67-56-1	30 mg/L (urine - Methanol end of shift) 940 µmol/L (urine - Methanol end of shift)	15 mg/L (urine - Methanol end of shift)	-	15 mg/L - urine (Methanol) - end of shift

Chemical name	Latvia	Luxembourg	Romania	Slovakia
Methanol 67-56-1	-	-	6 mg/L - urine (Methanol) - end of shift	30 mg/L (urine - Methanol end of exposure or work shift) 30 mg/L (urine - Methanol after all work shifts)

Chemical name	Slovenia	Spain	Switzerland	United Kingdom
Methanol 67-56-1	15 mg/L - urine (Methanol) - at the end of the work shift; for long-term exposure: at the end of the work shift after several consecutive workdays	15 mg/L (urine - Methanol end of shift)	30 mg/L (urine - Methanol end of shift, and after several shifts (for long-term exposures)) 936 µmol/L (urine - Methanol end of shift, and after several shifts (for long-term exposures))	-

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]
Sodium benzoate 532-32-1	-	62.5 mg/kg bw/day [4] [6]	3 mg/m³ [4] [6] 0.1 mg/m³ [5] [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]
Sodium hydroxide 1310-73-2	-	-	1 mg/m³ [5] [6]
Benzyl acetate 140-11-4	-	2.5 mg/kg bw/day [4] [6]	9 mg/m³ [4] [6]
D-Limonene	-	9.5 mg/kg bw/day [4] [6]	66.7 mg/m³ [4] [6]

Chemical name	Oral	Dermal	Inhalation
5989-27-5			

Notes

[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]
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]
Trisodium 2-(carboxylatomethyl(2-hydroxyethyl)amino)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]
Sodium hydroxide 1310-73-2	-	-	1 mg/m³ [5] [6]
Benzyl acetate 140-11-4	1.3 mg/kg bw/day [4] [6]	-	2.2 mg/m³ [4] [6]
D-Limonene 5989-27-5	4.8 mg/kg bw/day [4] [6]	-	16.6 mg/m³ [4] [6]

Notes

[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
Propylene Glycol 57-55-6	260 mg/L	183 mg/L	26 mg/L	-	-
Sodium benzoate 532-32-1	300 mg/kg food 0.581 mg/L	0.0581 mg/L	300 mg/kg food 0.0581 mg/L	0.00581 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	-
Sodium acetate 127-09-3	0.1 mg/L	-	0.01 mg/L	-	-
Benzyl acetate 140-11-4	0.0184 mg/L	0.04 mg/L	0.00184 mg/L	-	-

Chemical name	Freshwater	Freshwater (intermittent release)	Marine water	Marine water (intermittent release)	Air
D-Limonene 5989-27-5	14 µg/L 133 mg/kg food	-	1.4 µg/L 133 mg/kg food	-	-

Chemical name	Freshwater sediment	Marine sediment	Sewage treatment	Soil	Food chain
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	2.5 mg/kg sediment dw	0.25 mg/kg sediment dw	10 mg/L	0.1587 mg/kg soil dw	-
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	-
Sodium acetate 127-09-3	0.000402 mg/kg sediment dw	4.02E-05 mg/kg sediment dw	0.72 g/L	0.000402 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	-
D-Limonene 5989-27-5	3.85 mg/kg sediment dw	0.385 mg/kg sediment dw	1.8 mg/L	0.763 mg/kg soil dw	-

8.2. Exposure controls

Engineering controls
Showers
Eyewash stations
Ventilation systems.

Personal protective equipment

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

Hand protection
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. Gloves must conform to standard EN 374.

Skin and body protection
Wear suitable protective clothing. Long sleeved clothing. Chemical resistant apron. Antistatic boots. (EN ISO 6529).

Respiratory protection
When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.

Environmental exposure controls
Local authorities should be advised if significant spillages cannot be contained.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance

Physical state Liquid
Colour Light pink, orange
Odour Pungent Perfume

Odour threshold	No information available

Property	Values	Remarks • Method
Melting point / freezing point		No data available
Boiling point or initial boiling point and boiling range	92 - 94 °C	
Flammability		No data available
Lower and upper explosion limit/flammability limit		
Lower explosion limit	7%	
Upper explosion limit	73%	
Flash point	58 - 60 °C	CC (closed cup)
Autoignition temperature		
Decomposition temperature		No data available
SADT (°C)		No data available
pH	7.5 - 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		No data available
Partition coefficient n-octanol/water (log value)		No data available
Vapour pressure		No data available
Density and/or relative density	1.07 - 1.08	
Bulk density		No data available
Liquid Density		No data available
Relative vapour density	>1	
Particle characteristics		
Particle Size		No data available
Particle Size Distribution		No data available

9.2. Other information

Molecular weight	No information available
VOC content	No information available
Softening point	No information available
Evaporation rate	> 1 Butyl acetate = 1

9.2.1. Information with regards to physical hazard classes

Explosives	
Explosive properties	No information available
Oxidising properties	No information available

9.2.2. Other safety characteristics

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

10.5. Incompatible materials

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

10.6. Hazardous decomposition products

Hazardous decomposition products Carbon oxides. Formaldehyde. Methanol. Organic compounds. Harmful gases or vapours. Thermal decomposition can lead to release of irritating and toxic gases and vapours.

SECTION 11: Toxicological information

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

Information on likely routes of exposure

Product Information

Inhalation Specific test data for the substance or mixture is not available. Fatal if inhaled. (based on components). Corrosive by inhalation. 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.

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 Coughing and/ or wheezing. Difficulty in breathing. Redness. Burning. May cause blindness. Itching. Rashes. Hives.

Acute toxicity Fatal if inhaled. Toxic in contact with skin. Toxic by inhalation. Harmful if swallowed.

Numerical measures of toxicity

The following ATE values have been calculated for the mixture:

ATEmix (oral)	576.60 mg/kg
ATEmix (dermal)	691.40 mg/kg

ATEmix (inhalation-gas) 1,917.00 ppm
ATEmix (inhalation-vapour) 385.00 mg/l
ATEmix (inhalation-dust/mist) 0.149 mg/l

Unknown acute toxicity

10.83 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (gas).

Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Formaldehyde	= 100 mg/kg (Rat)	> 2000 mg/kg (Rat)	= 578 mg/m³ (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 benzoate	= 4070 mg/kg (Rat)	> 2000 mg/kg (Rabbit)	> 12 200 mg/m³ (Rat) 4h
Trisodium 2-(carboxylatomethyl(2-hydroxyethyl)amino)ethyliminodi(acetate)	= 10000 mg/kg (Rat)	-	-
Sodium acetate	= 3530 mg/kg (Rat)	> 10 g/kg (Rabbit)	> 5.6 mg/L (Rat) 4 h
Citric acid	= 3 g/kg (Rat)	> 2000 mg/kg (Rat)	-
Sodium hydroxide	= 325 mg/kg (Rat)	= 1350 mg/kg (Rabbit)	-
Benzyl acetate	= 2490 mg/kg (Rat)	> 5000 mg/kg (Rabbit)	-
D-Limonene	= 5200 mg/kg (Rat) = 4400 mg/kg (Rat)	> 5 g/kg (Rabbit)	-
7-Methyl-3-methyleneocta-1,6-diene	> 3380 mg/kg (Mouse)	> 5 g/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	European Union
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	European Union
Formaldehyde	Carc. 1B

Reproductive toxicity Based on available data, the classification criteria are not met.

STOT - single exposure Causes damage to organs if swallowed. Causes damage to organs in contact with skin. Causes damage to organs if inhaled. May cause respiratory irritation.

STOT - repeated exposure Based on available data, the classification criteria are not met.

Aspiration hazard Based on available data, the classification criteria are not met.

11.2. Information on other hazards

11.2.1. Endocrine disrupting properties

Endocrine disrupting properties Based on available data, the classification criteria are not met

11.2.2. Other information

Other adverse effects No information available.

SECTION 12: Ecological information

12.1. Toxicity

Ecotoxicity Toxic to aquatic life.

Chemical name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Formaldehyde 50-00-0	EC50 3.48 mg/L (72h, Desmodesmus subspicatus)	LC50: 6.7mg/L (96h, Morone saxatilis)	-	LC50: 5.8 mg/L (48h, Daphnia magna)
Methanol 67-56-1	-	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 57-55-6	EC50: 24200 mg/L (72h, Pseudokirchneriella subcapitata)	LC50: 40613 mg/L (96h, Oncorhynchus mykiss)	-	LC50: 18340 mg/L (48h, Ceriodaphnia dubia)
Sodium benzoate 532-32-1	EC50: >30.5 mg/L (72h, Pseudokirchneriella subcapitata)	LC50: 484 mg/L (96h, Pimephales promelas)	-	EC50: >100mg/L (48h, Daphnia magna)
Trisodium 2-(carboxylatomethyl(2-hydroxyethyl)amino)ethyliminodi(acetate) 139-89-9	-	LC50: =372mg/L (96h, Pimephales promelas)	-	-
Sodium acetate	-	LC50: >100mg/L (96h,	-	EC50: >1000mg/L (48h,

127-09-3		Danio rerio)		Daphnia magna)
Citric acid 77-92-9	-	LC50: =1516mg/L (96h, Lepomis macrochirus)	-	-
Sodium hydroxide 1310-73-2	-	LC50: =45.4mg/L (96h, Oncorhynchus mykiss)	-	-
Benzyl acetate 140-11-4	EC50: 92 mg/L (96h, Desmodesmus subspicatus)	LC50: 4 mg/L (96h, Oryzias latipes)	-	-
D-Limonene 5989-27-5	-	LC50: 0.619 - 0.796mg/L (96h, Pimephales promelas) LC50: =35mg/L (96h, Oncorhynchus mykiss)	-	-
7-Methyl-3-methyleneocta-1,6-diene 123-35-3	EC50 0.31 mg/L (72h, Pseudokirchneriella subcapitata)	-	-	EC50 1.47 mg/L (48h, Daphnia magna)

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
Sodium benzoate	-2.13
Citric acid	-1.72
Benzyl acetate	1.96
D-Limonene	4.38
7-Methyl-3-methyleneocta-1,6-diene	4.82

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 50-00-0	Not PBT/vPvB
Methanol 67-56-1	Not PBT/vPvB
Propylene Glycol 57-55-6	Not PBT/vPvB
Sodium benzoate 532-32-1	Not PBT/vPvB
Trisodium 2-(carboxylatomethyl(2-hydroxyethyl)amino)ethyliminodi(acetate) 139-89-9	Not PBT/vPvB

Sodium acetate 127-09-3	Not PBT/vPvB
Citric acid 77-92-9	Not PBT/vPvB
Sodium hydroxide 1310-73-2	Not PBT/vPvB
Benzyl acetate 140-11-4	Not PBT/vPvB
D-Limonene 5989-27-5	Not PBT/vPvB
7-Methyl-3-methyleneocta-1,6-diene 123-35-3	Not PBT/vPvB

12.6. Endocrine disrupting properties

Endocrine disrupting properties Based on available data, the classification criteria are not met.

12.7. Other adverse effects

Other adverse effects No information available.

PMT or vPvM properties Based on available data, the classification criteria are not met.

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.

Waste codes / waste designations according to EWC / AVV According to the European Waste Catalogue, Waste Codes are not product specific, but application specific. Waste codes should be assigned by the user based on the application for which the product was used.

SECTION 14: Transport information

IATA

14.1 UN number or ID number UN3286
14.2 UN proper shipping name Flammable liquid, toxic, corrosive, n.o.s. (Formaldehyde, Methanol)
IATA Technical Name Formaldehyde, Methanol
14.3 Transport hazard class(es) 3
Subsidiary hazard class 6.1, 8
14.4 Packing group II
14.5 Environmental hazards No
14.6 Special precautions for user
Special Provisions None
ERG Code 3CP
Description UN3286, Flammable liquid, toxic, corrosive, n.o.s. (Formaldehyde, Methanol), 3 (6.1, 8), II

IMDG

14.1 UN number or ID number UN3286
14.2 UN proper shipping name Flammable liquid, toxic, corrosive, n.o.s. (Formaldehyde, Methanol)
Technical Name Formaldehyde, Methanol
14.3 Transport hazard class(es) 3

Subsidiary hazard class	6.1, 8
14.4 Packing group	II
14.5 Environmental hazards	No
Marine pollutant indicator	NP
14.6 Special precautions for user	
Special Provisions	274
EmS-No.	F-E, S-C
Description	UN3286, Flammable liquid, toxic, corrosive, n.o.s. (Formaldehyde, Methanol), 3 (6.1, 8), II, (58°C c.c.)
14.7 Maritime transport in bulk according to IMO instruments	No information available

RID

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	II
Description	UN3286, Flammable liquid, toxic, corrosive, n.o.s. (Formaldehyde, Methanol), 3 (6.1, 8), II
14.5 Environmental hazards	No
14.6 Special precautions for user	
Special Provisions	274
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 hazard class	6.1, 8
14.4 Packing group	II
Description	UN3286, Flammable liquid, toxic, corrosive, n.o.s. (Formaldehyde, Methanol), 3 (6.1, 8), II, (D/E)
14.5 Environmental hazards	No
14.6 Special precautions for user	
Special Provisions	274
Classification code	FTC
Tunnel restriction code	(D/E)

ADN

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	II
Description	UN3286, Flammable liquid, toxic, corrosive, n.o.s. (Formaldehyde, Methanol), 3 (6.1, 8), II
14.5 Environmental hazard	No
14.6 Special precautions for user	
Special Provisions	274, 802
Classification code	FTC
Ventilation	VE01, VE02
Equipment Requirements	PP, EP, EX, TOX, A

SECTION 15: Regulatory information

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

National regulations

France

Occupational Illnesses (R-463-3, France)

Chemical name	French RG number

Formaldehyde - 50-00-0	RG 43
Methanol - 67-56-1	RG 84
Propylene Glycol - 57-55-6	RG 84
D-Limonene - 5989-27-5	RG 84

Germany

Water hazard class (WGK) strongly hazardous to water (WGK 3)

Chemical Prohibition Ordinance (ChemVerbotsV) This product is subject to requirements and restrictions regarding handling and delivery

Chemical name	ANNEX I
Formaldehyde 50-00-0	1
D-Limonene 5989-27-5	2.1

TA Luft (German Air Pollution Control Regulation)

Chemical name	Number	Class
Formaldehyde	5.2.7.1.1	-
Methanol	5.2.5	Class I

TRGS 905 Not applicable

Netherlands

Carcinogenic, mutagenic and reproductive toxic effects

Chemical name	Netherlands - List of Carcinogens	Netherlands - List of Mutagens	Netherlands - List of Reproductive Toxins
Formaldehyde - 50-00-0	Present	-	-

Switzerland

Ordinance on the Incentive Tax on Volatile Organic Compounds (OVOC) SR 814.018 Group I

Storage of Hazardous Material SC 6.1

WPO (GSchV) SR 814.201; WPA (GSchG) SR 814.20 Class A

Major Accidents Ordinance SR 814.012 Not applicable

European Union

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.

Authorisations and/or restrictions on use:

This product contains one or more substance(s) subject to restriction (Regulation (EC) No. 1907/2006 (REACH), Annex XVII)

Chemical name	Restricted substance per REACH Annex XVII	Substance subject to authorisation per REACH Annex XIV
Formaldehyde - 50-00-0	72 77 28 75	-
Methanol - 67-56-1	69 75	-
Citric acid - 77-92-9	75	-

Sodium hydroxide - 1310-73-2	75.	-
D-Limonene - 5989-27-5	75	-

Persistent Organic Pollutants
Not applicable

Dangerous substance category per Seveso Directive (2012/18/EU)
H2 - ACUTE TOXIC
H3 - STOT SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE
Named dangerous substances per Seveso Directive (2012/18/EU)

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

Ozone-depleting substances (ODS) regulation (EC) 2024/590
Not applicable.

EU - Plant Protection Products (1107/2009/EC)

Chemical name	EU - Plant Protection Products (1107/2009/EC)
D-Limonene - 5989-27-5	Plant protection agent

Biocidal Products Regulation (EU) No 528/2012 (BPR)

Chemical name	Biocidal Products Regulation (EU) No 528/2012 (BPR)
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
Sodium benzoate - 532-32-1	Simplified procedure - Category 1
Sodium acetate - 127-09-3	Simplified procedure - Category 1
Citric acid - 77-92-9	Product-type 2: Disinfectants and algaecides not intended for direct application to humans or animals Product-type 6: Preservatives for products during storage

Explosives Precursors Marketing and Use (2019/1148)
Not applicable

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 any hazard and/or precautionary statements referred to under Sections 2-15
EUH071 - Corrosive to the respiratory tract
H225 - Highly flammable liquid and vapour
H226 - Flammable liquid and vapour
H301 - Toxic if swallowed
H302 - Harmful if swallowed

H304 - May be fatal if swallowed and enters airways
H311 - Toxic in contact with skin
H314 - Causes severe skin burns and eye damage
H315 - Causes skin irritation
H317 - May cause an allergic skin reaction
H318 - Causes serious eye damage
H319 - Causes serious eye irritation
H330 - Fatal if inhaled
H331 - Toxic if inhaled
H335 - May cause respiratory irritation
H341 - Suspected of causing genetic defects
H350 - May cause cancer
H370 - Causes damage to organs
H400 - Very toxic to aquatic life
H411 - Toxic to aquatic life with long lasting effects
H412 - Harmful to aquatic life with long lasting effects
P264 - Wash face, hands and any exposed skin thoroughly after handling
P270 - Do not eat, drink or smoke when using this product
P301 + P312 - IF SWALLOWED: Call a POISON CENTER or doctor if you feel unwell
P330 - Rinse mouth
P501 - Dispose of contents and container in accordance with local, regional, national, and international regulations as applicable
P280 - Wear protective gloves, protective clothing, eye protection and face protection
P302 + P352 - IF ON SKIN: Wash with plenty of water and soap
P312 - Call a POISON CENTER or doctor if you feel unwell
P321 - Specific treatment (see supplemental instructions on the administration of antidotes on this label)
P361 + P364 - Take off immediately all contaminated clothing and wash it before reuse
P405 - Store locked up
P261 - Avoid breathing dust, fume, gas, mist, vapors and spray
P271 - Use only outdoors or in a well-ventilated area
P304 + P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing
P311 - Call a POISON CENTER or doctor
P321 - Specific treatment (see supplemental first aid instructions on this label)
P403 + P233 - Store in a well-ventilated place. Keep container tightly closed
P260 - Do not breathe dust, fume, gas, mist, vapors and spray
P284 - In case of inadequate ventilation wear respiratory protection
P310 - Immediately call a POISON CENTER or doctor
P301 + P330 + P331 - IF SWALLOWED: Rinse mouth. Do NOT induce vomiting
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
P363 - Wash contaminated clothing before reuse
P272 - Contaminated work clothing should not be allowed out of the workplace
P280 - Wear protective gloves
P333 + P313 - If skin irritation or rash occurs: Get medical advice/attention
P362 + P364 - Take off contaminated clothing and wash it before reuse
P201 - Obtain special instructions before use
P202 - Do not handle until all safety precautions have been read and understood
P308 + P313 - IF exposed or concerned: Get medical advice/attention
P308 + P311 - IF exposed or concerned: Call a POISON CENTER or doctor
P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking
P233 - Keep container tightly closed
P240 - Ground and bond container and receiving equipment
P241 - Use explosion-proof electrical, ventilating and lighting equipment
P242 - Use non-sparking tools
P243 - Take action to prevent static discharges
P370 + P378 - In case of fire: Use .? to extinguish
P403 + P235 - Store in a well-ventilated place. Keep cool
P501 - Dispose of contents/container to industrial incineration plant
P321 - Specific treatment (see supplemental first aid instructions on this label)
P320 - Specific treatment is urgent (see supplemental first aid instructions on this label)

Legend

ACGIH	American Conference of Governmental Industrial Hygienists
AIDII	Italian Association of Industrial Hygienists
ADN	Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways (Europe)
ADR	Agreement concerning the International Carriage of Dangerous Goods by Road (Europe)
AIIC	Australian Inventory of Industrial Chemicals
ATE	Acute Toxicity Estimate
ASTM	American Society for the Testing of Materials
bar	Biological Reference Values for Chemical Compounds in the Work Area
BAT	Biological tolerance values for occupational exposure
BEL	Biological exposure limits
bw	Body weight
Ceiling	Maximum limit value
CLP	Classification, Labelling and Packaging Regulation; Regulation (EC) No 1272/2008
CMR	Carcinogen, Mutagen or Reproductive Toxicant
DFG	German Research Foundation
DOT	Department of Transportation (United States)
DSL	Domestic Substances List (Canada)
ECHA	European Chemicals Agency
EC Number	European Community number
EmS	Emergency Schedule
ENCS	Existing and New Chemical Substances (Japan)
EPA	Environmental Protection Agency
EWC	European Waste Codes
GHS	Globally Harmonized System
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association
IBC	International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk
ICAO	International Civil Aviation Organisation
IECSC	Inventory of Existing Chemical Substances in China
IMDG	International Maritime Dangerous Goods
IMO	International Maritime Organization
ISO	International Organisation for Standardisation
KECI	Korean Existing Chemicals Inventory
LC50	Lethal Concentration to 50% of a test population
LD50	Lethal Dose to 50% of a test population (Median Lethal Dose)
MAL	Measuring Technical Hygienic Air Needs
MARPOL	International Convention for the Prevention of Pollution from Ships
MDLPS	Ministry of Labour and Social Policy
n.o.s.	Not Otherwise Specified
NOAEC	No Observed Adverse Effect Concentration
NOAEL	No Observed Adverse Effect Level
NOELR	No Observable Effect Loading Rate
NZIoC	New Zealand Inventory of Chemicals
OECD	Organization for Economic Cooperation and Development
OEL	Occupational exposure limits
PBT	Persistent, Bioaccumulative and Toxic substance
PICCS	Philippines Inventory of Chemicals and Chemical Substances
PMT	Persistent, Mobile and Toxic
PPE	Personal protective equipment
QSAR	Quantitative Structure Activity Relationship
REACH	Registration, Evaluation, Authorisation, and Restriction of Chemicals (REACH) Regulation (EC 1907/2006)
RID	Agreement concerning the International Carriage of Dangerous Goods by Rail (Europe)

SADT	Self-Accelerating Decomposition Temperature
SAR	Structure-activity relationship
SDS	Safety Data Sheet
SL	Surface Limit
STEL	Short Term Exposure Limit
STOT RE	Specific target organ toxicity - Repeated exposure
STOT SE	Specific target organ toxicity - Single exposure
SVHC	Substance of very high concern
TCSI	Taiwan Chemical Substance Inventory
TDG	Transport of Dangerous Goods (Canada)
TRGS	Technical Rule for Hazardous Substances
TSCA	Toxic Substances Control Act (United States)
TWA	Time-Weighted Average
UN	United Nations
VOC	Volatile organic compounds
vPvB	Very Persistent and Very Bioaccumulative
vPvM	Very Persistent and Very Mobile
As	Allergenic substance
DS	Dermal Sensitizer
Ot	Ototoxicant
pOt	Ototoxicant - potential to cause hearing disorders
PS	Photosensitiser
RS	Respiratory Sensitiser
S	Sensitiser
poS	Sensitizer - capable of causing occupational asthma
Sa	Simple asphyxiant
Sd	Skin designation
pSd	Skin designation - potential for cutaneous absorption
Sdv	Skin designation - vacated
Sk	Skin notation
dSk	Skin notation - danger of cutaneous absorption
pSk	Skin notation - potential for cutaneous absorption

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
Chronic aquatic toxicity	Calculation method
Acute 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)
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)
Japan GHS Classification
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)
U.S. 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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End of Safety Data Sheet