

07020-07021 - ARTHYL 26



SAFETY DATA SHEET
(REACH regulation (EC) n° 1907/2006 - n° 2020/878)

SECTION 1 : IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

Product name : 07020-07021 - ARTHYL 26

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

Relevant identified uses: Arterial fluid.
For professional use.

1.3. Details of the supplier of the safety data sheet

Registered company name : HYGECO INTERNATIONAL PRODUITS.
Address : 12-16, rue Sarah Bernhardt.92600.ASNIERES SUR SEINE.France.
Telephone : +33 (0)1 34 53 40 60. Fax : -.
Email : info@hygeco.com
<https://www.hygeco.com>

1.4. Emergency telephone number : +33 (0)1 45 42 59 59.

Association/Organisation : INRS / ORFILA <http://www.centres-antipoison.net>.

Other emergency numbers

National Poisons Information Service of England: <http://npis.org> - NHS 111: dial 111 - National Poisons Information Centre of Ireland: 353 (1) 809 2166 - LUXEMBOURG : (+352) 8002 5500 - European Emergency Number Association (EENA) : 112

SECTION 2 : HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

In compliance with EC regulation No. 1272/2008 and its amendments.

Flammable liquid, Category 3 (Flam. Liq. 3, H226).
Acute oral toxicity, Category 3 (Acute Tox. 3, H301).
Acute dermal toxicity, Category 3 (Acute Tox. 3, H311).
Acute inhalation toxicity, Category 3 (Acute Tox. 3, H331).
Skin irritation, Category 2 (Skin Irrit. 2, H315).
Eye irritation, Category 2 (Eye Irrit. 2, H319).
Skin sensitisation, Category 1 (Skin Sens. 1, H317).
Germ cell mutagenicity, Category 2 (Muta. 2, H341).
Carcinogenicity, Category 1B (Carc. 1B, H350).
Specific target organ toxicity (single exposure), Category 1 (STOT SE 1, H370).
Specific target organ toxicity (single exposure), Category 3 (STOT SE 3, H335).
This mixture does not present an environmental hazard. No known or foreseeable environmental damage under standard conditions of use.

2.2. Label elements

Biocidal mixture (see section 15).

In compliance with EC regulation No. 1272/2008 and its amendments.

Hazard pictograms :



GHS02



GHS06



GHS08

Signal Word :

DANGER

Product identifiers :

605-001-00-5 FORMALDEHYDE
603-001-00-X METHANOL

Hazard statements :

H226 Flammable liquid and vapour.
H301 + H311 + H331 Toxic if swallowed, in contact with skin or if inhaled.
H315 Causes skin irritation.

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H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.
H341	Suspected of causing genetic defects .
H350	May cause cancer .
H370	Causes damage to organs (if inhaled, if swallowed, in contact with skin).
Precautionary statements - Prevention :	
P201	Obtain special instructions before use.
P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
Precautionary statements - Response :	
P301 + P310	IF SWALLOWED: Immediately call a POISON CENTER/doctor.
P308 + P311	IF exposed or concerned: Call a POISON CENTER/doctor/...
Precautionary statements - Disposal :	
P501	Dispose of contents/container at a disposal facility in accordance with local regulations.
Other information :	

2.3. Other hazards

The mixture contains substances classified as 'Substances of Very High Concern' (SVHC) $\geq 0.1\%$ published by the European Chemicals Agency (ECHA) under article 57 of REACH: <http://echa.europa.eu/fr/candidate-list-table>

The mixture fulfils neither the PBT nor the vPvB criteria for mixtures in accordance with annexe XIII of the REACH regulations EC 1907/2006.

The mixture does not contain substances $\geq 0.1\%$ with endocrine disrupting properties in accordance with the criteria of the Delegated Regulation (EU) 2017/2100 of the Commission or Regulation (EU) 2018/605 of the Commission.

SECTION 3 : COMPOSITION/INFORMATION ON INGREDIENTS**3.2. Mixtures****Composition :**

Identification	(EC) 1272/2008	Note	%
INDEX: 605-001-00-5 CAS: 50-00-0 EC: 200-001-8 REACH: 01-2119488953-20 FORMALDEHYDE	GHS06, GHS05, GHS08 Dgr Acute Tox. 3, H301 Acute Tox. 3, H311 Skin Corr. 1B, H314 Skin Sens. 1, H317 Acute Tox. 3, H331 STOT SE 3, H335 Muta. 2, H341 Carc. 1B, H350	B D [1] [2]	10 \leq x % < 25
INDEX: 603-001-00-X CAS: 67-56-1 EC: 200-659-6 REACH: 01-2119433307-44 METHANOL	GHS02, GHS06, GHS08 Dgr Flam. Liq. 2, H225 Acute Tox. 3, H331 Acute Tox. 3, H311 Acute Tox. 3, H301 STOT SE 1, H370	[1] [XVII]	10 \leq x % < 25
CAS: 56-81-5 EC: 200-289-5 GLYCEROL		[1]	2.5 \leq x % < 10
INDEX: 603-053-00-3 CAS: 107-41-5 EC: 203-489-0 REACH: 01-2119539582-35 2-METHYLPENTANE-2,4-DIOL	GHS07 Wng Eye Irrit. 2, H319 Skin Irrit. 2, H315	[1]	1 \leq x % < 2.5
CAS: 1303-96-4 EC: 215-540-4 REACH: 01-2119490790-32 DISODIUM TETRABORATE DECAHYDRATE	GHS08, GHS07 Dgr Eye Irrit. 2, H319 Repr. 1B, H360FD	[1] [2] [6]	0.1 \leq x % < 1

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Specific concentration limits:

Identification	Specific concentration limits	ATE
INDEX: 605-001-00-5 CAS: 50-00-0 EC: 200-001-8 REACH: 01-2119488953-20 FORMALDEHYDE	Repr. 1B: H350 C _≥ 0.1% Skin Corr. 1B: H314 C _≥ 25% Skin Irrit. 2: H315 5% ≤ C < 25% Eye Dam. 1: H318 C _≥ 25% Eye Irrit. 2: H319 5% ≤ C < 25% STOT SE 3: H335 C _≥ 5% Skin Sens. 1: H317 C _≥ 0.2%	
INDEX: 603-001-00-X CAS: 67-56-1 EC: 200-659-6 REACH: 01-2119433307-44 METHANOL	STOT SE 1 (Cut) : H370 C _≥ 10% STOT SE 2: H371 3% ≤ C < 10% STOT SE 1 (Oral) : H370 C _≥ 10% STOT SE 2: H371 3% ≤ C < 10% STOT SE 1 (Inh) : H370 C _≥ 10% STOT SE 2: H371 3% ≤ C < 10%	
INDEX: 603-053-00-3 CAS: 107-41-5 EC: 203-489-0 REACH: 01-2119539582-35 2-METHYLPENTANE-2,4-DIOL	Skin Irrit. 2: H315 ≥ 10% Eye Irrit. 2: H319 C _≥ 10%	
CAS: 1303-96-4 EC: 215-540-4 REACH: 01-2119490790-32 DISODIUM TETRABORATE DECAHYDRATE	Repr. 1B: H360F C _≥ 8.5% Repr. 1B: H360D C _≥ 8.5%	

Information on ingredients :

(Full text of H-phrases: see section 16)

[XVII] Restricted substance under Regulation (EC) No. 1907/2006 (REACH), Annex XVII.

[1] Substance for which maximum workplace exposure limits are available.

[2] Carcinogenic, mutagenic or reprotoxic (CMR) substance.

[6] Substances of very high concern (SVHC).

SECTION 4 : FIRST AID MEASURES

As a general rule, in case of doubt or if symptoms persist, always call a doctor.

NEVER induce swallowing by an unconscious person.

4.1. description of first aid measures

In the event of exposure by inhalation :

In the event of massive inhalation, remove the person exposed to fresh air. Keep warm and at rest.

If the person is unconscious, place in recovery position. Notify a doctor in all events, to ascertain whether observation and supportive hospital care will be necessary.

If breathing is irregular or has stopped, effect mouth-to-mouth resuscitation and call a doctor.

Do not proceed with mouth-to-mouth or mouth-to-nose resuscitation. Use the appropriate equipment.

In the event of splashes or contact with eyes :

Wash thoroughly with fresh, clean water for 15 minutes holding the eyelids open.

If there is any redness, pain or visual impairment, consult an ophthalmologist.

In the event of splashes or contact with skin :

Remove contaminated clothing and wash the skin thoroughly with soap and water or a recognised cleaner.

Remove any soiled or splashed clothing immediately.

Watch out for any remaining product between skin and clothing, watches, shoes, etc.

In the event of an allergic reaction, seek medical attention.

If the contaminated area is widespread and/or there is damage to the skin, a doctor must be consulted or the patient transferred to hospital.

In the event of swallowing :

Do not give the patient anything orally.

Keep the person exposed at rest. Do not force vomiting.

Seek medical attention immediately, showing the label.

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

No data available.

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

No data available.

SECTION 5 : FIREFIGHTING MEASURES

Flammable.

Chemical powders, carbon dioxide and other extinguishing gas are suitable for small fires.

5.1. Extinguishing media

Keep packages near the fire cool, to prevent pressurised containers from bursting.

Suitable methods of extinction

In the event of a fire, use :

- sprayed water or water mist
- water with AFFF (Aqueous Film Forming Foam) additive
- halon
- foam
- multipurpose ABC powder
- BC powder
- carbon dioxide (CO₂)

Prevent the effluent of fire-fighting measures from entering drains or waterways.

Unsuitable methods of extinction

In the event of a fire, do not use :

- water jet

5.2. Special hazards arising from the substance or mixture

A fire will often produce a thick black smoke. Exposure to decomposition products may be hazardous to health.

Do not breathe in smoke.

In the event of a fire, the following may be formed :

- carbon monoxide (CO)
- carbon dioxide (CO₂)
- nitrogen oxide (NO)
- nitrogen dioxide (NO₂)

5.3. Advice for firefighters

Due to the toxicity of the gas emitted on thermal decomposition of the products, fire-fighting personnel are to be equipped with autonomous insulating breathing apparatus.

SECTION 6 : ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Consult the safety measures listed under headings 7 and 8.

For non first aid worker

Because of the organic solvents contained in the mixture, eliminate sources of ignition and ventilate the area.

Avoid inhaling the vapors.

Avoid any contact with the skin and eyes.

If a large quantity has been spilt, evacuate all personnel and only allow intervention by trained operators equipped with safety apparatus.

For first aid worker

First aid workers will be equipped with suitable personal protective equipment (See section 8).

6.2. Environmental precautions

Contain and control the leaks or spills with non-combustible absorbent materials such as sand, earth, vermiculite, diatomaceous earth in drums for waste disposal.

Prevent any material from entering drains or waterways.

6.3. Methods and material for containment and cleaning up

If the ground is contaminated, once the product has been recovered by sponging with an inert and non-combustible absorbent material, wash the contaminated area in plenty of water.

Clean preferably with a detergent, do not use solvents.

6.4. Reference to other sections

No data available.

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SECTION 7 : HANDLING AND STORAGE

Requirements relating to storage premises apply to all facilities where the mixture is handled.

Individuals with a history of skin sensitisation should not, under any circumstance, handle this mixture.

7.1. Precautions for safe handling

Always wash hands after handling.

Remove and wash contaminated clothing before re-using.

Ensure that there is adequate ventilation, especially in confined areas.

Fire prevention :

Handle in well-ventilated areas.

Vapours are heavier than air. They can spread along the ground and form mixtures that are explosive with air.

Prevent the formation of flammable or explosive concentrations in air and avoid vapor concentrations higher than the occupational exposure limits.

Prevent the accumulation of electrostatic charges with connections to earth.

The mixture can become electrostatically charged: always ground when decanting. Wear antistatic shoes and clothing and make floors of non-conductive

Use the mixture in premises free of naked flames or other sources of ignition and ensure that electrical equipment is suitably protected.

Keep packages tightly closed and away from sources of heat, sparks and naked flames.

Do not use tools which may produce sparks. Do not smoke.

Prevent access by unauthorised personnel.

Recommended equipment and procedures :

For personal protection, see section 8.

Observe precautions stated on label and also industrial safety regulations.

Avoid inhaling vapors. Carry out any industrial operation which may give rise to this in a sealed apparatus.

Provide vapor extraction at the emission source and also general ventilation of the premises.

Also provide breathing apparatus for certain short tasks of an exceptional nature and for emergency interventions.

In all cases, recover emissions at source.

Avoid skin and eye contact with this mixture.

Avoid exposure - obtain special instructions before use.

Packages which have been opened must be reclosed carefully and stored in an upright position.

Prohibited equipment and procedures :

No smoking, eating or drinking in areas where the mixture is used.

7.2. Conditions for safe storage, including any incompatibilities

No data available.

Storage

Keep the container tightly closed in a dry, well-ventilated place.

Keep away from food and drink, including those for animals.

Keep away from all sources of ignition - do not smoke.

Keep well away from all sources of ignition, heat and direct sunlight.

Avoid accumulation of electrostatic charges.

The floor must be impermeable and form a collecting basin so that, in the event of an accidental spillage, the liquid cannot spread beyond this area.

Packaging

Always keep in packaging made of an identical material to the original.

7.3. Specific end use(s)

No data available.

SECTION 8 : EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Occupational exposure limits :

- European Union (2022/431, 2019/1831, 2017/2398, 2017/164, 2009/161, 2006/15/CE, 2000/39/CE, 98/24/CE) :

CAS	VME-mg/m3 :	VME-ppm :	VLE-mg/m3 :	VLE-ppm :	Notes :
50-00-0	0.37	0.3	0.74	0.6	
67-56-1	260	200	-	-	Peau

- ACGIH TLV (American Conference of Governmental Industrial Hygienists, Threshold Limit Values, 2010) :

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CAS	TWA :	STEL :	Ceiling :	Definition :	Criteria :
50-00-0			0.3 ppm	SEN; A2	
67-56-1	200 ppm	250 ppm		Skin; BEI	
56-81-5	10 mg/m3				
107-41-5			25 ppm		
1303-96-4	2 (I) mg/m3	6 (I) mg/m3		A4	

- Germany - AGW (BAuA - TRGS 900, 02/2022) :

CAS	VME :	VME :	Excess	Notes
50-00-0		0.3 ppm 0.37 mg/m ³		2(I)
67-56-1		200 ppm 270 mg/m ³		4(II)
56-81-5		200 E mg/m ³		2 (I)

- Australia (NOHSC: 3008, 1995) :

CAS	TWA :	STEL :	Ceiling :	Definition :	Criteria :
50-00-0	1 ppm 1.2 mg/m3	2 ppm 2.5 mg/m3		H;R	
67-56-1	200 ppm 262 mg/m3	250 ppm 328 mg/m3		H	
56-81-5	10 mg/m3			H	
107-41-5	25 ppm 121 Peak limitation mg/m3			H	
1303-96-4	1 mg/m3			H	

- Austria (BGBl. II Nr. 156/2021) :

CAS	TWA :	STEL :	Ceiling :	Definition :	Criteria :
50-00-0	0.3 ppm 0.37 mg/m ³	0.6 ppm 0.74 mg/m ³			
67-56-1	200 ppm 260 mg/m ³	800 ppm 1040 mg/m ³			
107-41-5	10 ppm 49 mg/m ³	10 ppm 49 mg/m ³			

- Belgium (Royal decree of 11/05/2021) :

CAS	TWA :	STEL :	Ceiling :	Definition :	Criteria :
50-00-0		0.3 ppm 0.38 mg/m ³		C. M	
67-56-1	200 ppm 266 mg/m ³	250 ppm 333 mg/m ³		D	
56-81-5	10 mg/m ³				
107-41-5		25 ppm 123 mg/m ³		M	
1303-96-4	2 mg/m ³	6 mg/m ³			

- France (INRS - Outils 65 / 2021-1849, 2021-1763, decree of 09/12/2021) :

CAS	VME-ppm :	VME-mg/m3 :	VLE-ppm :	VLE-mg/m3 :	Notes :	TMP No :
50-00-0	0.3	0.37	0.6	0.74	C1B, M2, (16)	43, 43bis
67-56-1	200	260	1000	1300	(12)	84
56-81-5	-	10	-	-	-	-
107-41-5	-	-	25	125	-	84
1303-96-4	-	5	-	-	R2	-

- Switzerland (Suva 2021) :

CAS	VME	VLE	Valeur plafond	Notations
50-00-0	0.3 ppm 0.37 mg/m ³	0.6 ppm 0.74 mg/m ³		
67-56-1	200 ppm 260 mg/m ³	400 ppm 520 mg/m ³		
56-81-5	50 ppm	100 ppm		
107-41-5	10 ppm 49 mg/m ³	20 ppm 98 mg/m ³		
1303-96-4	5 i mg/m3	5 i mg/m3		RF2 RD2

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- UK / WEL (Workplace exposure limits, EH40/2005, Fourth Edition 2020) :

CAS	TWA :	STEL :	Ceiling :	Definition :	Criteria :
50-00-0	2 ppm 2.5 mg/m ³	2 ppm 2.5 mg/m ³		Carc	
67-56-1	200 ppm 266 mg/m ³	250 ppm 333 mg/m ³		Sk	
56-81-5	10 mg/m ³				
107-41-5	25 ppm 123 mg/m ³	25 ppm 123 mg/m ³			
1303-96-4	5 mg/m ³	-	-	-	-

- USA / OSHA PEL (Occupational Safety and Health Administration, Permissible Exposure Limits) :

CAS	TWA :	STEL :	Ceiling :	Definition :	Criteria :
50-00-0	0.75 ppm	2 ppm			
67-56-1	200 ppm 260 mg/m ³				
56-81-5	15 mg/m ³				

8.2. Exposure controls

Personal protection measures, such as personal protective equipment

Pictogram(s) indicating the obligation of wearing personal protective equipment (PPE) :



Use personal protective equipment that is clean and has been properly maintained.

Store personal protective equipment in a clean place, away from the work area.

Never eat, drink or smoke during use. Remove and wash contaminated clothing before re-using. Ensure that there is adequate ventilation, especially in confined areas.

- Eye / face protection

Avoid contact with eyes.

Use eye protectors designed to protect against liquid splashes

Before handling, wear safety goggles with protective sides accordance with standard EN166.

In the event of high danger, protect the face with a face shield.

Prescription glasses are not considered as protection.

Individuals wearing contact lenses should wear prescription glasses during work where they may be exposed to irritant vapours.

Provide eyewash stations in facilities where the product is handled constantly.

- Hand protection

Use suitable protective gloves that are resistant to chemical agents in accordance with standard EN ISO 374-1.

Gloves must be selected according to the application and duration of use at the workstation.

Protective gloves need to be selected according to their suitability for the workstation in question : other chemical products that may be handled, necessary physical protections (cutting, pricking, heat protection), level of dexterity required.

Type of gloves recommended :

- Natural latex
- Nitrile rubber (butadiene-acrylonitrile copolymer rubber (NBR))
- PVC (polyvinyl chloride)
- Butyl Rubber (Isobutylene-isoprene copolymer)

Recommended properties :

- Thickness (average value): - on the finger (middle finger): 0.11 mm - on the palm: 0.07 mm - on the cuff: 0.05 mm
- Minimum material breakage time: > 30 minutes

- Body protection

Avoid skin contact.

Wear suitable protective clothing.

Suitable type of protective clothing :

In the event of substantial spatter, wear liquid-tight protective clothing against chemical risks (type 3) in accordance with EN14605/A1 to prevent skin contact.

In the event of a risk of splashing, wear protective clothing against chemical risks (type 6) in accordance with EN13034/A1 to prevent skin contact.

Wear suitable protective clothing and, in particular, an apron and boots. These items of clothing shall be maintained in good condition and cleaned after use.

Work clothing worn by personnel shall be laundered regularly.

After contact with the product, all parts of the body that have been soiled must be washed.

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Avoid inhaling vapors.

Avoid inhaling vapors. Carry out any industrial task giving rise to this risk in a closed circuit. Provide extractor fans to capture the vapors at the emission source as well as general ventilation of the premises.

If the ventilation is insufficient, wear appropriate breathing apparatus.

When workers are confronted with concentrations that are above occupational exposure limits, they must wear a suitable, approved, respiratory protection device.

Likewise provide safety breathing apparatus for certain short tasks of an exceptional nature or for emergency interventions

Anti-gas and vapour filter(s) (Combined filters) in accordance with standard EN14387 :

- A1 (Brown)

- A2 (Brown)

- A3 (Brown)

- AX (Brown)

Users of this product must work in a ventilated room.

SECTION 9 : PHYSICAL AND CHEMICAL PROPERTIES**9.1. Information on basic physical and chemical properties****Physical state**

Physical state : Fluid liquid.

Colour

Colour: Red.

Odour

Odour threshold : Not stated.

Odour: Aldehyde.

Freezing point

Freezing point / Freezing range : Not stated.

Boiling point or initial boiling point and boiling range

Boiling point/boiling range : Not relevant.

Flammability

Flammability (solid, gas) : Not stated.

Lower and upper explosion limit

Explosive properties, lower explosivity limit (%) : Not stated.

Explosive properties, upper explosivity limit (%) : Not stated.

Flash point

Flash Point Interval : 23°C <= FP <= 55°C

Auto-ignition temperature

Self-ignition temperature : Not relevant.

Decomposition temperature

Decomposition point/decomposition range : Not relevant.

pH

pH (aqueous solution) : Not stated.

pH : Not relevant.

Kinematic viscosity

Viscosity : Not stated.

Solubility

Water solubility : Dilutable.

Fat solubility : Not stated.

Partition coefficient n-octanol/water (log value)

Partition coefficient: n-octanol/water : Not stated.

Vapour pressure

Vapour pressure (50°C) : Below 110 kPa (1.10 bar).

Density and/or relative density

Density : = 1

Relative vapour density

Vapour density : Not stated.

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9.2. Other information

No data available.

9.2.1. Information with regard to physical hazard classes

No data available.

9.2.2. Other safety characteristics

No data available.

SECTION 10 : STABILITY AND REACTIVITY

10.1. Reactivity

No data available.

10.2. Chemical stability

This mixture is stable under the recommended handling and storage conditions in section 7.

10.3. Possibility of hazardous reactions

When exposed to high temperatures, the mixture can release hazardous decomposition products, such as carbon monoxide and dioxide, fumes and nitrogen oxide.

10.4. Conditions to avoid

Any apparatus likely to produce a flame or to have a metallic surface at high temperature (burners, electric arcs, furnaces etc.) must not be allowed on the premises.

Avoid :

- accumulation of electrostatic charges.
- heating
- heat
- flames and hot surfaces
- frost

10.5. Incompatible materials

Keep away from :

- acids
- strong oxidising agents

10.6. Hazardous decomposition products

The thermal decomposition may release/form :

- carbon monoxide (CO)
- carbon dioxide (CO₂)
- nitrogen oxide (NO)
- nitrogen dioxide (NO₂)

SECTION 11 : TOXICOLOGICAL INFORMATION

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

Toxic if swallowed.

Toxic in contact with the skin.

Toxic by inhalation.

May cause irreversible damage to the skin; namely inflammation of the skin or the formation of erythema and eschar or oedema following exposure up to four hours.

May have reversible effects on the eyes, such as eye irritation which is totally reversible by the end of observation at 21 days.

Splashes in the eyes may cause irritation and reversible damage

Respiratory tract irritation may occur, together with symptoms such as coughing, choking and breathing difficulties.

May cause an allergic reaction by skin contact.

Presumed human carcinogen.

Cause for concern owing to the possibility that it may induce heritable mutations in the germ cells of humans.

Causes damage to organs.

11.1.1. Substances

Acute toxicity :

DISODIUM TETRABORATE DECAHYDRATE (CAS: 1303-96-4)

Oral route : LD₅₀ > 2500 mg/kg

Dermal route : 2,000 < LD₅₀ <= 5000 mg/kg

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GLYCEROL (CAS: 56-81-5)

Oral route : LD50 > 5000 mg/kg
Species : Rat

Dermal route : LD50 > 10000 mg/kg
Species : Rabbit

11.1.2. Mixture

No toxicological data available for the mixture.

11.2. Information on other hazards

Monograph(s) from the IARC (International Agency for Research on Cancer) :

CAS 915-67-3 : IARC Group 3 : The agent is not classifiable as to its carcinogenicity to humans.

CAS 50-00-0 : IARC Group 1 : The agent is carcinogenic to humans.

SECTION 12 : ECOLOGICAL INFORMATION

12.1. Toxicity

12.1.1. Substances

DISODIUM TETRABORATE DECAHYDRATE (CAS: 1303-96-4)

Fish toxicity : LC50 = 79.7 mg/l
Species : Pimephales promelas
Duration of exposure : 96 h

Crustacean toxicity : EC50 = 133 mg/l
Species : Daphnia magna
Duration of exposure : 48 h

Algae toxicity : ECr50 = 40 mg/l
Species : Pseudokirchnerella subcapitata
Duration of exposure : 72 h

GLYCEROL (CAS: 56-81-5)

Fish toxicity : LC50 = 54000 mg/l
Species : Oncorhynchus mykiss
Duration of exposure : 96 h

Crustacean toxicity : EC50 = 1955 mg/l
Species : Daphnia magna
Duration of exposure : 96 h

Algae toxicity : ECr50 = 3200 mg/l
Species : Others
Duration of exposure : 72 h

12.1.2. Mixtures

No aquatic toxicity data available for the mixture.

12.2. Persistence and degradability

12.2.1. Substances

DISODIUM TETRABORATE DECAHYDRATE (CAS: 1303-96-4)

Biodegradability : no degradability data is available, the substance is considered as not degrading quickly.

GLYCEROL (CAS: 56-81-5)

Chemical oxygen demand : DCO = 1.16 g/g

Five-day biochemical oxygen demand : DBO5 = 1.217

Biodegradability : Rapidly degradable.
DBO5/DCO = 1.05

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12.3. Bioaccumulative potential**12.3.1. Substances**

GLYCEROL (CAS: 56-81-5)

Octanol/water partition coefficient : log K_{ow} = -1.76**12.4. Mobility in soil**

No data available.

12.5. Results of PBT and vPvB assessment

No data available.

12.6. Endocrine disrupting properties

No data available.

12.7. Other adverse effects

No data available.

German regulations concerning the classification of hazards for water (WGK, AwSV Annex I, KBws) :

WGK 3 : Extremely hazardous for water.

SECTION 13 : DISPOSAL CONSIDERATIONS

Proper waste management of the mixture and/or its container must be determined in accordance with Directive 2008/98/EC.

13.1. Waste treatment methods

Do not pour into drains or waterways.

Waste :

Waste management is carried out without endangering human health, without harming the environment and, in particular without risk to water, air, soil, plants or animals.

Recycle or dispose of waste in compliance with current legislation, preferably via a certified collector or company.

Do not contaminate the ground or water with waste, do not dispose of waste into the environment.

Soiled packaging :

Empty container completely. Keep label(s) on container.

Give to a certified disposal contractor.

SECTION 14 : TRANSPORT INFORMATION

Transport product in compliance with provisions of the ADR for road, RID for rail, IMDG for sea and ICAO/IATA for air transport (ADR 2021 - IMDG 2020 [40-20] - ICAO/IATA 2022 [63]).

14.1. UN number or ID number

1992

14.2. UN proper shipping name

UN1992=FLAMMABLE LIQUID, TOXIC, N.O.S.

(methanol, formaldehyde ...%)

14.3. Transport hazard class(es)

- Classification :



3+6.1

14.4. Packing group

II

14.5. Environmental hazards

-

14.6. Special precautions for user

ADR/RID	Class	Code	Pack gr.	Label	Ident.	LQ	Provis.	EQ	Cat.	Tunnel
	3	FT1	II	3+6.1	336	1 L	274	E2	2	D/E

IMDG	Class	2°Label	Pack gr.	LQ	EMS	Provis.	EQ	Stowage Handling	Segregation
	3	6.1	II	1 L	F-E. S-D	274	E2	Category B SW2	-

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IATA	Class	2°Label	Pack gr.	Passager	Passager	Cargo	Cargo	note	EQ
	3	6.1	II	352	1 L	364	60 L	A3	E2
	3	6.1	II	Y341	1 L	-	-	A3	E2

For limited quantities, see part 2.7 of the OACI/IATA and chapter 3.4 of the ADR and IMDG.

For excepted quantities, see part 2.6 of the OACI/IATA and chapter 3.5 of the ADR and IMDG.

14.7. Maritime transport in bulk according to IMO instruments

No data available.

SECTION 15: Regulatory information**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture****- Classification and labelling information included in section 2:**

The following regulations have been used:

- EU Regulation No. 1272/2008 amended by EU Regulation No. 2022/692 (ATP 18)

- Container information:

No data available.

-Restrictions applied under Title VIII of Regulation (EC) No. 1907/2006 (REACH):

The mixture contains at least one restricted substance under Annex XVII of Regulation (EC) No. 1907/2006 (REACH):
<https://echa.europa.eu/substances-restricted-under-reach>. Please refer to Section 3 to identify the substance involved.

For professional users only.

- Particular provisions :

No data available.

- Labelling for biocidal products (Regulation (UE) n° 528/2012) :

Name	CAS	%	Product-type
FORMALDEHYDE ...%	50-00-0	244.35 g/kg	22

Product-type 22 : Embalming and taxidermist fluids.

- German regulations concerning the classification of hazards for water (WGK, AwSV Annex I, KBws) :

WGK 3 : Extremely hazardous for water.

- Swiss ordinance on the incentive tax on volatile organic compounds :

50-00-0 formaldehyde (méthanal)

67-56-1 méthanol (alcool méthylique)

15.2. Chemical safety assessment

No data available.

SECTION 16 : OTHER INFORMATION

Since the user's working conditions are not known by us, the information supplied on this safety data sheet is based on our current level of knowledge and on national and community regulations.

The mixture must not be used for other uses than those specified in section 1 without having first obtained written handling instructions.

It is at all times the responsibility of the user to take all necessary measures to comply with legal requirements and local regulations.

The information in this safety data sheet must be regarded as a description of the safety requirements relating to the mixture and not as a guarantee of the properties thereof.

Wording of the phrases mentioned in 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.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H331	Toxic if inhaled.
H335	May cause respiratory irritation.
H341	Suspected of causing genetic defects .
H350	May cause cancer .
H360FD	May damage fertility. May damage the unborn child.
H370	Causes damage to organs .

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Abbreviations :

LD50 : The dose of a test substance resulting in 50% lethality in a given time period.
LC50 : The concentration of a test substance resulting in 50% lethality in a given period.
EC50 : The effective concentration of substance that causes 50% of the maximum response.
ECr50 : The effective concentration of substance that causes 50% reduction in growth rate.
REACH : Registration, Evaluation, Authorization and Restriction of Chemical Substances.
CMR: Carcinogenic, mutagenic or reprotoxic.
STEL : Short-term exposure limit
TWA : Time Weighted Averages
TMP : French Occupational Illness table
TLV : Threshold Limit Value (exposure)
AEV : Average Exposure Value.
ADR : European agreement concerning the international carriage of dangerous goods by Road.
IMDG : International Maritime Dangerous Goods.
IATA : International Air Transport Association.
ICAO : International Civil Aviation Organisation
RID : Regulations concerning the International carriage of Dangerous goods by rail.
WGK : Wassergefährdungsklasse (Water Hazard Class).
GHS02 : Flame
GHS06 : Skull and crossbones
GHS08 : Health hazard
PBT: Persistent, bioaccumulable and toxic.
vPvB : Very persistent, very bioaccumulable.
SVHC : Substances of very high concern.