

# Formaline 12 %, buffered pH 7.4

Revision date: 01.07.2022

Product code: 13294.xxxxx

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

## 1.1. Product identifier

Formaline 12 %, buffered pH 7.4

## Further trade names

This MSDS covers this product in all container sizes.

UFI:

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

## Use of the substance/mixture

Use as laboratory reagent. The product is intended for research, analysis and scientific education.

PCT5-R1MQ-S009-NP1R

#### Uses advised against

Any non-intended use.

### 1.3. Details of the supplier of the safety data sheet

Company name:	MORPHISTO GmbH GIZ	
Street:	Schumannstr. 142/144	
Place:	D-63069 Offenbach	
Telephone:	+49 (0) 69 / 400 3019-60	Telefax: +49 (0) 69 / 400 3019-64
e-mail:	info@morphisto.de	
Contact person:	Morphisto GmbH	
e-mail:	info@morphisto.de	
Internet:	http://www.morphisto.de	
1.4. Emergency telephone	Poison Information Center Mainz, Ge	ermany, Tel: +49(0)6131/19240

### number:

# **SECTION 2: Hazards identification**

## 2.1. Classification of the substance or mixture

### GB CLP Regulation

Acute Tox. 4; H302 Acute Tox. 4; H312 Acute Tox. 4; H312 Skin Irrit. 2; H315 Eye Irrit. 2; H319 Skin Sens. 1; H317 Muta. 2; H341 Carc. 1B; H350 STOT SE 3; H335

Full text of hazard statements: see SECTION 16.

Danger

### 2.2. Label elements

#### **GB CLP Regulation**

Hazard components for labelling Formaldehyde 37 %

Signal word:

## Pictograms:





according to UK REACH Regulation

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Ha	azard statements		
	H302+H312+H332	Harmful if swallowed, in contact with skin or if inhaled.	
	H315	Causes skin irritation.	
	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.	
Pi	recautionary statemer	nts	
	P201	Obtain special instructions before use.	
	P202	Do not handle until all safety precautions have been read and understood.	
	P261	Avoid breathing dust/fume/gas/mist/vapours/spray.	
	P264	Wash thoroughly after handling.	
	P270	Do not eat, drink or smoke when using this product.	
	P271	Use only outdoors or in a well-ventilated area.	
	P272	Contaminated work clothing should not be allowed out of the workplace.	
	P280	Wear protective gloves/protective clothing/eye protection/face protection/hearing	
		protection.	
	P301+P312	IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.	
	P330	Rinse mouth.	
	P302+P352	IF ON SKIN: Wash with plenty of water.	
	P312	Call a POISON CENTER/doctor if you feel unwell.	
	P321	Specific treatment (see on this label).	
	P362+P364	Take off contaminated clothing and wash it before reuse.	
	P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.	
	P312	Call a POISON CENTER/doctor if you feel unwell.	
	P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.	
	P337+P313	If eye irritation persists: Get medical advice/attention.	
	P308+P313	IF exposed or concerned: Get medical advice/attention.	
	P403+P233	Store in a well-ventilated place. Keep container tightly closed.	
	P405	Store locked up.	
	P501	Dispose of contents/container to	
Si	pecial labelling of cert	ain mixtures	
•	EUH018	In use may form flammable/explosive vapour-air mixture.	
		Restricted to professional users.	
		•	

# 2.3. Other hazards

No information available.

# **SECTION 3: Composition/information on ingredients**

# 3.2. Mixtures

# **Chemical characterization**

in aqueous solution



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### Hazardous components

CAS No	Chemical name			
	EC No	Index No	REACH No	
	Classification (GB CLP	Regulation)		
50-00-0	D Formaldehyde 37 %			
	200-001-8	605-001-00-5	01-2119488953-20	
	Carc. 1B, Muta. 2, Acute Sens. 1; H350 H341 H3			

Full text of H and EUH statements: see section 16.

#### Specific Conc. Limits, M-factors and ATE

CAS No	EC No	Chemical name	Quantity
	Specific Conc.	Limits, M-factors and ATE	
50-00-0	200-001-8	Formaldehyde 37 %	15 - < 20 %
	= 300 mg/kg; o	50 = 462 mg/l (vapours); inhalation: ATE = 0,5 mg/l (dusts or mists); dermal: ATE ral: LD50 = 640 mg/kg Skin Corr. 1B; H314: >= 25 - 100 Skin Irrit. 2; H315: >= Irrit. 2; H319: >= 5 - < 25 Skin Sens. 1; H317: >= 0,2 - 100 STOT SE 3; H335:	

#### **Further Information**

hydrolysis produces small amounts of methanol.

Product does not contain listed SVHC substances > 0,1 % according to Regulation (EC) No. 1907/2006 Article 59 (REACH)

## SECTION 4: First aid measures

#### 4.1. Description of first aid measures

#### **General information**

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

Remove contaminated, saturated clothing immediately.Remove casualty to fresh air and keep warm and at rest.

#### After inhalation

Provide fresh air. If breathing is irregular or stopped, administer artificial respiration. Medical treatment necessary. Remove person to fresh air and keep comfortable for breathing. In all cases of doubt, or when symptoms persist, seek medical advice.

#### After contact with skin

After contact with skin, wash immediately with plenty of water and soap. Take off immediately all contaminated clothing and wash it before reuse. Medical treatment necessary.

#### After contact with eyes

After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an ophthalmologist immediately. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Seek medical advice immediately.

## After ingestion

If accidentally swallowed rinse the mouth with plenty of water (only if the person is conscious) and obtain immediate medical attention. Rinse mouth thoroughly with water. Let water be drunken in little sips (dilution effect). Do NOT induce vomiting. Get immediate medical advice/attention.

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

drowsiness. Headache. vomiting. Dizziness. Irritation. Allergic reactions. Cough. shortage of breath. Blood pressure drop. Spasms.

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

Treat symptomatically.



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- Advice for first medical aid:

After contact with solutions / concentrated vapors rinse eyes persistently with water. Always follow-up by ophthalmologist as soon as possible. Wash contaminated skin thoroughly with water. Treat irritated areas with Dermatocorticoid. After extensive wetting a clarification is recommended.

## **SECTION 5: Firefighting measures**

## 5.1. Extinguishing media

## Suitable extinguishing media

Water spray jet, Carbon dioxide (CO2), Foam, Extinguishing powder. Co-ordinate fire-fighting measures to the fire surroundings.

#### Unsuitable extinguishing media

High power water jet.

## 5.2. Special hazards arising from the substance or mixture

Flammable. Vapours can form explosive mixtures with air. In case of fire may be liberated: Carbon monoxide Carbon dioxide (CO2). Formaldehyde

### 5.3. Advice for firefighters

Wear a self-contained breathing apparatus and chemical protective clothing. Full protection suit.

#### Additional information

Use water spray jet to protect personnel and to cool endangered containers. Suppress gases/vapours/mists with water spray jet. Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water. Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

Co-ordinate fire-fighting measures to the fire surroundings.

## **SECTION 6: Accidental release measures**

### 6.1. Personal precautions, protective equipment and emergency procedures

## General advice

Remove all sources of ignition. Do not breathe gas/fumes/vapour/spray. Avoid contact with skin, eyes and clothes. Use personal protection equipment. Ventilate affected area.

Use a positive-pressure air-supplied respirator if there is any potential for an uncontrolled release, exposure levels are not known, or any other circumstances where air-purifying respirators may not provide adequate protection.

## 6.2. Environmental precautions

Do not allow uncontrolled discharge of product into the environment. Explosion risk. Do not allow to enter into surface water or drains. Discharge into the environment must be avoided. Inform competent authorities in case of accidental release. (Larger quantities)Cover drains.

## 6.3. Methods and material for containment and cleaning up

## For cleaning up

Take up carefully when dry. Treat the recovered material as prescribed in the section on waste disposal.

### Other information

Absorb with liquid-binding material (sand, diatomaceous earth, acid- or universal binding agents). Treat the recovered material as prescribed in the section on waste disposal. The contaminated area should be cleaned up immediately with: a concentrated aqueous sodium bisulfite solution. Rinse with water.

## 6.4. Reference to other sections

Safe handling: see section 7 Personal protection equipment: see section 8 Disposal: see section 13

## **SECTION 7: Handling and storage**

# 7.1. Precautions for safe handling



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## Advice on safe handling

If handled uncovered, arrangements with local exhaust ventilation have to be used. Do not breathe gas/fumes/vapour/spray. Technical ventilation of workplace. Wear suitable protective clothing. (See section 8.)

Avoid exposure - obtain special instructions before use. Avoid contact with skin, eyes and clothes.

### Advice on protection against fire and explosion

Keep away from sources of ignition - No smoking. Take precautionary measures against static discharges. Vapours can form explosive mixtures with air. Usual measures for fire prevention.

### Advice on general occupational hygiene

Remove contaminated, saturated clothing immediately. Draw up and observe skin protection programme. Wash hands and face before breaks and after work and take a shower if necessary. When using do not eat, drink, smoke, sniff. Remove contaminated, saturated clothing immediately. Draw up and observe skin protection programme. Wash hands and face before breaks and after work and take a shower if necessary. When using do not eat, drink, smoke, sniff. Always close containers tightly after the removal of product. Used working clothes should not be worn outside the work area. Street clothing should be stored seperately from work clothing.

### Further information on handling

General protection and hygiene measures: refer to chapter 8

Wash hands and face before breaks and after work and take a shower if necessary. When using do not eat, drink, smoke, sniff. Street clothing should be stored seperately from work clothing. Contaminated work clothing should not be allowed out of the workplace. Always close containers tightly after the removal of product.

## 7.2. Conditions for safe storage, including any incompatibilities

#### Requirements for storage rooms and vessels

Keep container tightly closed. Keep locked up. Store in a place accessible by authorized persons only. Provide adequate ventilation as well as local exhaustion at critical locations. Keep cool. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Recommended storage temperature: 15-25°C.

### Hints on joint storage

Do not store together with: Oxidizing agent. Pyrophoric or self-heating substances. Do not store together with: food and feed. pharmaceuticals. Infectious substances. Radioactive substances. Explosive substances. Oxidizing substances. Oxidizing liquids. Organic peroxides. Self-reactive substances and mixtures. Pyrophoric solids. Substances which in contact with water form flammable gases. Ammonium nitrate and preparations containing ammonium nitrate. Explosives. Gas.. Oxidizing liquids. Oxidizing solids. Organic peroxides. Ammonium nitrate. Combustible toxic substances. Non-combustible toxic substances. Radioactive substances. Infectious substances.

#### Further information on storage conditions

Keep/Store only in original container. Ensure adequate ventilation of the storage area. Store small packages in a suitable, robust cabinet.Protect against: heat. UV-radiation/sunlight.

## 7.3. Specific end use(s)

See section 1.

### **SECTION 8: Exposure controls/personal protection**

### 8.1. Control parameters

#### Exposure limits (EH40)

CAS No	Substance	ppm	mg/m³	fibres/ml	Category	Origin
50-00-0	Formaldehyde	2	2.5		TWA (8 h)	WEL
		2	2.5		STEL (15 min)	WEL



according to UK REACH Regulation

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# **DNEL/DMEL** values

CAS No	Substance			
DNEL type		Exposure route	Effect	Value
50-00-0	Formaldehyde 37 %			
Worker DNE	L, acute	inhalation	systemic	1 mg/m³
Worker DNE	L, long-term	dermal	systemic	240 mg/kg bw/day
Worker DNE	L, long-term	inhalation	systemic	0,5 mg/m³
Worker DNE	L, long-term	inhalation	local	0,375 mg/m³
Worker DNEL, acute		inhalation	local	0,75 mg/m³
Worker DNEL, long-term		dermal	local	0,037 mg/cm <sup>2</sup>
Worker DNE	L, long-term	dermal	local	0,037 mg/cm <sup>2</sup>

### **PNEC** values

CAS No	Substance				
Environmenta	I compartment	Value			
50-00-0	0-0 Formaldehyde 37 %				
Freshwater		0,44 mg/l			
Freshwater (ir	ntermittent releases)	4,44 mg/l			
Marine water		0,44 mg/l			
Freshwater se	ediment	2,3 mg/kg			
Marine sedime	ent	2,3 mg/kg			
Micro-organis	0,19 mg/l				
Soil 0,2 mg/kg					

## 8.2. Exposure controls









### Appropriate engineering controls

If handled uncovered, arrangements with local exhaust ventilation have to be used. Do not breathe gas/fumes/vapour/spray. Technical measures and the application of suitable work processes have priority over personal protection equipment. Technical ventilation of workplace. Use extractor hood (laboratory). Process within closed systems.

## Individual protection measures, such as personal protective equipment

### Eye/face protection

Suitable eye protection: goggles. Suitable eye protection: Tightly sealed safety glasses. Eye glasses with side protection. EN 166.

## Hand protection

When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits. The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves. (EN ISO 374).

Suitable material:

penetration time (maximum wearing period): >= 8h

NBR (Nitrile rubber). (0,4 mm)

Before using check leak tightness / impermeability.

Additional hand protection measures: Use protective skin cream before handling the product.



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## Skin protection

Use of protective clothing. Suitable protective clothing: Chemical protection clothing, Lab apron. Minimum standard for preventive measures while handling with working materials are specified in the TRGS 500 (D).

## **Respiratory protection**

In case of inadequate ventilation wear respiratory protection. Respiratory protection necessary at: Insufficient ventilation. insufficient absorbtion. exceeding exposure limit values Release of: product

Suitable respiratory protective equipment:

gas filtering equipment (EN 141). Type : B

In case of increasing hazard add:

Combination filtering device (EN 14387) Type : B-P2 Identification color: grey/white.

The filter class must be suitable for the maximum contaminant concentration (gas/vapour/aerosol/particulates) that may arise when handling the product. If the concentration is exceeded, self-contained breathing apparatus must be used.

# **Environmental exposure controls**

Do not allow uncontrolled discharge of product into the environment.

## **SECTION 9: Physical and chemical properties**

## 9.1. Information on basic physical and chemical properties

Physical state:	liquid	
Colour:	colourless	
Odour:	characteristic	
Changes in the physical state		
Melting point/freezing point:		not determined
Boiling point or initial boiling poir	nt and	-19 °C
boiling range:		
Sublimation point:		not determined
Softening point:		not determined
Pour point:		not determined
Flash point:		Methanol: 9,7 °C
Flammability		
Solid/liquid:		not applicable
Gas:		not applicable
Explosive properties		
Vapours can form explosive	mixtures with air. none	
Lower explosion limits:		7
Upper explosion limits:		72
Auto-ignition temperature:		Methanol: 455 °C
Self-ignition temperature		
Gas:		not determined
Decomposition temperature:		not determined
pH-Value (at 20 °C):		9,67
Viscosity / dynamic:		not determined
Viscosity / kinematic:		not determined
3		



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Flow time:	not determined	
Water solubility:	completely miscible	
Solubility in other solvents not determined		
Partition coefficient n-octanol/water:	not determined	
Vapour pressure:	2 hPa	
Density:	1,00 g/cm³	
Relative vapour density:	not determined	
9.2. Other information		
Information with regard to physical hazard cla	asses	
Sustaining combustion:	Not sustaining combustion	
Oxidizing properties Vapours may form explosive mixtures with a systems.	ir. Flammable vapours can accumulate in head space of clo	osed
Other safety characteristics		
Solvent separation test:	not determined	
Solvent content:	94,45 %	
Solid content:	5,55 %	
Evaporation rate:	not determined	

## **SECTION 10: Stability and reactivity**

# 10.1. Reactivity

Explosive. Vapours can form explosive mixtures with air.

## 10.2. Chemical stability

The product is chemically stable under recommended conditions of storage, use and temperature.

# 10.3. Possibility of hazardous reactions

Violent reaction with: Oxidizing agents. phenol. Nitric acid. Nitrogen oxides (NOx).

## 10.4. Conditions to avoid

Handle with care - avoid bumps, friction and impact. Explosive. Remove all sources of ignition. Keep away from: Heat. Ignition. Protect against: UV-radiation/sunlight. heat.

## 10.5. Incompatible materials

Protect against: Contact with air/oxygen. Materials to avoid: Nitrogen oxides (NOx). Nitric acid. Hydrogenium peroxide. Aniline. Performic acid, perchloric acid Oxidizing agents, strong. Strong acid.

## 10.6. Hazardous decomposition products

In case of fire may be liberated: Carbon monoxide Carbon dioxide (CO2). Formaldehyde

## **SECTION 11: Toxicological information**

### 11.1. Information on hazard classes as defined in GB CLP Regulation

#### Toxicocinetics, metabolism and distribution

No information available.

# Acute toxicity

Harmful if swallowed. Harmful in contact with skin. Harmful if inhaled.



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# ATEmix calculated

ATE (oral) 624,2 mg/kg; ATE (dermal) 1872,7 mg/kg; ATE (inhalation vapour) 18,73 mg/l; ATE (inhalation dust/mist) 3,121 mg/l

CAS No	Chemical name	Chemical name						
	Exposure route	Dose		Species	Source	Method		
50-00-0	Formaldehyde 37 %							
	oral	LD50 mg/kg	640	Rat	ECHA	OECD 401		
	dermal	ATE mg/kg	300					
	inhalation (4 h) vapour	LC50	462 mg/l	Rat	ECHA			
	inhalation dust/mist	ATE	0,5 mg/l					

## Irritation and corrosivity

Causes skin irritation.

Causes serious eye irritation.

## Sensitising effects

May cause an allergic skin reaction. (Formaldehyde 37 %)

People who suffer from skin sensitization problems, asthma, allergies, chronic or recurring respiratory illnesses should not be deployed in any process using this mixture.

# Carcinogenic/mutagenic/toxic effects for reproduction

Suspected of causing genetic defects. (Formaldehyde 37 %) May cause cancer. (Formaldehyde 37 %) Reproductive toxicity: Based on available data, the classification criteria are not met.

### STOT-single exposure

May cause respiratory irritation. (Formaldehyde 37 %)

# STOT-repeated exposure

Based on available data, the classification criteria are not met. formaldehyde 37 % (CAS-No.: 50-00-0): Chronic oral toxicity Exposure time: 105 weeks Species: Wistar Rat. Method: OECD Guideline 453 (Combined Chronic Toxicity / Carcinogenicity Studies) Result: NOAEL = 150 mg/kg bw/day Literature information: ECHA Dossier

## Aspiration hazard

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

# Specific effects in experiment on an animal

No information available.

## **Further information**

The mixture is classified as hazardous according to regulation (EC) No 1272/2008 [CLP]. Special hazards arising from the substance or mixture!

## **SECTION 12: Ecological information**

## 12.1. Toxicity

The product has not been tested.



according to UK REACH Regulation

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CAS No	Chemical name						
	Aquatic toxicity	Dose		[h]   [d]	Species	Source	Method
50-00-0	Formaldehyde 37 %						
	Acute fish toxicity	LC50 mg/l	6,18	96 h	Morone saxatilis	ECHA Dossier	
	Acute algae toxicity	ErC50 mg/l	5,67	72 h	Freshwater algae	ECHA Dossier	
	Acute crustacea toxicity	EC50	5,8 mg/l	48 h	Daphnia magna	ECHA Dossier	

## 12.2. Persistence and degradability

The product has not been tested.

CAS No	Chemical name								
	Method	Value	d	Source					
	Evaluation								
50-00-0	Formaldehyde 37 %								
	OECD Guideline 301 C	91	14	ECHA Dossier					
	Product is biodegradable.		-						
	OECD Guideline 301 D	90	28	ECHA Dossier					
	Product is biodegradable.		-						

## 12.3. Bioaccumulative potential

No indication of bioaccumulation potential.

Formaldehyde(CAS: 50-00-0): Distribution coefficient (n-octanol / water) (log P O/W): 0,35.

## 12.4. Mobility in soil

No information available.

#### 12.5. Results of PBT and vPvB assessment

The substances in the mixture do not meet the PBT/vPvB criteria according to UK REACH.

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

# 12.6. Endocrine disrupting properties

This product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms as no components meets the criteria.

## 12.7. Other adverse effects

strongly hazardous to water

# **Further information**

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil. Do not allow uncontrolled discharge of product into the environment.

## **SECTION 13: Disposal considerations**

## 13.1. Waste treatment methods

#### **Disposal recommendations**

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil. Dispose of waste according to applicable legislation. Hazardous waste according to Directive 2008/98/EC (waste framework directive). Consult the local waste disposal expert about waste disposal. According to (EWC) European Waste Catalogue, allocation of waste identity numbers/waste descriptions must be carried out in a specific way for every industry and process.

Control report for waste code/ waste marking according to (EWC) European Waste Catalogue:

## List of Wastes Code - residues/unused products

160506 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; gases in pressure containers and discarded chemicals; laboratory chemicals, consisting of or containing hazardous substances, including mixtures of laboratory chemicals; hazardous waste



according to UK REACH Regulation

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## List of Wastes Code - used product

160506 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; gases in pressure containers and discarded chemicals; laboratory chemicals, consisting of or containing hazardous substances, including mixtures of laboratory chemicals; hazardous waste

## List of Wastes Code - contaminated packaging

150110 WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED; packaging (including separately collected municipal packaging waste); packaging containing residues of or contaminated by hazardous substances; hazardous waste

### Contaminated packaging

Hazardous waste according to Directive 2008/98/EC (waste framework directive). Handle contaminated packages in the same way as the substance itself. Non-contaminated packages may be recycled.

# **SECTION 14: Transport information**

## Land transport (ADR/RID)

14.1. UN number or ID number:	Not restricted
14.2. UN proper shipping name:	Not restricted
14.3. Transport hazard class(es):	Not restricted
14.4. Packing group:	Not restricted
Inland waterways transport (ADN)	
14.1. UN number or ID number:	Not restricted
14.2. UN proper shipping name:	Not restricted
14.3. Transport hazard class(es):	Not restricted
14.4. Packing group:	Not restricted
Marine transport (IMDG)	
14.1. UN number or ID number:	Not restricted
14.2. UN proper shipping name:	Not restricted
14.3. Transport hazard class(es):	Not restricted
14.4. Packing group:	Not restricted
Air transport (ICAO-TI/IATA-DGR)	
14.1. UN number or ID number:	Not restricted
14.2. UN proper shipping name:	Not restricted
14.3. Transport hazard class(es):	Not restricted
14.4. Packing group:	Not restricted
14.5. Environmental hazards	
ENVIRONMENTALLY HAZARDOUS:	No
14.6. Special precautions for user	

Refer to section 6-8

14.7. Maritime transport in bulk according to IMO instruments

not relevant

## **SECTION 15: Regulatory information**

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

## EU regulatory information

Authorisations (REACH, annex XIV): Substances of very high concern, SVHC (REACH, article 59): Formaldehyde 37 %

Restrictions on use (REACH, annex XVII): Entry 3, Entry 72, Entry 75



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2010/75/EU (VOC):	16,02 % (160,2 g/l)	
2004/42/EC (VOC):	16,02 % (160,2 g/l)	
Information according to 2012/18/EU (SEVESO III):	Not subject to 2012/18/EU (SEVESO III)	
Additional information		
The mixture is classified as hazardou Not subject to 96/82/EC (Seveso II). 2012/18/CE (SEVESO III) Annex I, P REACH 1907/2006 Appendix XVII, N	art 1: none	
National regulatory information		
Employment restrictions:	Observe restrictions to employment for juveniles according to work protection guideline' (94/33/EC). Observe employment r under the Maternity Protection Directive (92/85/EEC) for expe	restrictions

 Water hazard class (D):
 3 - highly hazardous to water

 Skin resorption/Sensitization:
 Permeates easily through outer skin and causes poisoning. Causes allergic hypersensitivity reactions.

#### 15.2. Chemical safety assessment

Chemical safety assessments for substances in this mixture were not carried out.

# **SECTION 16: Other information**

## Changes

Rev. 2.0 01.7.2022; Individual safety data sheet based on 10195\_collect

#### Abbreviations and acronyms

ADR: Accord européen sur le transport des marchandises dangereuses par Route CAS Chemical Abstracts Service DNEL: Derived No Effect Level IARC: INTERNATIONAL AGENCY FOR RESEARCH ON CANCER

IMDG: International Maritime Code for Dangerous Goods IATA: International Air Transport Association IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA) ICAO: International Civil Aviation Organization ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO) GHS: Globally Harmonized System of Classification and Labelling of Chemicals GefStoffV: Gefahrstoffverordnung (Ordinance on Hazardous Substances, Germany) LOAEL: Lowest observed adverse effect level LOAEC: Lowest observed adverse effect concentration LC50: Lethal concentration, 50 percent LD50: Lethal dose, 50 percent NOAEL: No observed adverse effect level NOAEC: No observed adverse effect level NTP: National Toxicology Program N/A: not applicable OSHA: Occupational Safety and Health Administration PNEC: predicted no effect concentration PBT: Persistent bioaccumulative toxic RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail) SARA: Superfund Amendments and Reauthorization Act SVHC: substance of very high concern TRGS Technische Regeln fuerGefahrstoffe



according to UK REACH Regulation

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Revision date: 01.07.2022

Product code: 13294.xxxx

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TSCA: Toxic Substances Control Act VOC: Volatile Organic Compounds VwVwS: Verwaltungsvorschrift wassergefaehrdender Stoffe WGK: Wassergefaehrdungsklasse CLP: Classification, labelling and Packaging REACH: Registration, Evaluation and Authorization of Chemicals GHS: Globally Harmonised System of Classification, Labelling and Packaging of Chemicals **UN: United Nations** CAS: Chemical Abstracts Service DNEL: Derived No Effect Level DMEL: Derived Minimal Effect Level PNEC: Predicted No Effect Concentration ATE: Acute toxicity estimate LL50: Lethal loading, 50% EL50: Effect loading, 50% EC50: Effective Concentration 50% ErC50: Effective Concentration 50%, growth rate NOEC: No Observed Effect Concentration BCF: Bio-concentration factor PBT: persistent, bioaccumulative, toxic vPvB: very persistent, very bioaccumulative ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road) RID: Regulations concerning the international carriage of dangerous goods by rail ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways (Accord européen relatif au transport international des marchandises dangereuses par voies de navigation intérieures) EmS: Emergency Schedules MFAG: Medical First Aid Guide MARPOL: International Convention for the Prevention of Marine Pollution from Ships IBC: Intermediate Bulk Container For abbreviations and acronyms, see table at http://abbrev.esdscom.eu For abbreviations and acronyms, see: ECHA Guidance on information requirements and chemical safety assessment, chapter R.20 (Table of terms and abbreviations).

## Classification for mixtures and used evaluation method according to GB CLP Regulation

Classification	Classification procedure	
Acute Tox. 4; H302	Calculation method	
Acute Tox. 4; H312	Calculation method	
Acute Tox. 4; H332	Calculation method	
Skin Irrit. 2; H315	Calculation method	
Eye Irrit. 2; H319	Calculation method	
Skin Sens. 1; H317	Calculation method	
Muta. 2; H341	Calculation method	
Carc. 1B; H350	Calculation method	
STOT SE 3; H335	Calculation method	

### Relevant H and EUH statements (number and full text)

H301	Toxic if swallowed.
H302	Harmful if swallowed.
H302+H312+H332	Harmful if swallowed, in contact with skin or if inhaled.
H311	Toxic in contact with skin.
H312	Harmful in contact with skin.
H314	Causes severe skin burns and eye damage.



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H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H331	Toxic if inhaled.

H331	l oxic if inhaled.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H341	Suspected of causing genetic defects.
H350	May cause cancer.
EUH018	In use may form flammable/explosive vapour-air mixture.

### Further Information

The information is based on the present level of our knowledge. It does not, however, give assurance of product properties and establishes no contract legal rights. The receiver of our product is singularly responsible for adhering to existing laws and regulations. The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.

(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)