

Safety Data Sheet

according to Regulation (EC) No 1907/2006

Fixing solution R Reag. Ph. Eur., chapter 4.1.1

Revision: 06.12.2023 Product code: 11304 Page 1 of 16

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

1.1. Product identifier

Fixing solution R Reag. Ph. Eur., chapter 4.1.1

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

Use of the substance/mixture

Reagents and laboratory chemicals

Only for laboratory and analysis purposes.

Uses advised against

Do not use for private purposes (household).

1.3. Details of the supplier of the safety data sheet

Company name: AnalytiChem GmbH

ACD

Street: Stempelstraße 6
Place: D-47167 Duisburg

Telephone: 0203/5194-0 Telefax: 0203/5194-290

E-mail: info@analytichem.de

Contact person: Abteilung Produktsicherheit Telephone: 0203/5194-107/117

E-mail: produktsicherheit@analytichem.de

Internet: www.analytichem.de

Responsible Department: Abteilung Produktsicherheit

<u>1.4. Emergency telephone</u> For Hazardous Materials [or Dangerous Goods] Incidents Spill, Leak, Fire,

<u>number:</u> Exposure, or Accident Call CHEMTREC Day or Night Within USA and Canada:

1-800-424-9300 Outside USA and Canada: +1 703-741-5970 (collect calls

accepted)

Further Information

This product is a mixture. REACH Registration Number see section 3.

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Regulation (EC) No 1272/2008

Flam. Liq. 3; H226 Acute Tox. 3; H331

Acute Tox. 3; H311

Acute Tox. 3; H301

STOT SE 1; H370

Full text of hazard statements: see SECTION 16.

2.2. Label elements

Regulation (EC) No 1272/2008

Hazard components for labelling

methanol

Signal word: Danger

Pictograms:









Safety Data Sheet

according to Regulation (EC) No 1907/2006

Fixing solution R Reag. Ph. Eur., chapter 4.1.1

Revision: 06.12.2023 Product code: 11304 Page 2 of 16

Hazard statements

H226 Flammable liquid and vapour.

H301+H311+H331 Toxic if swallowed, in contact with skin or if inhaled.

H370 Causes damage to organs.

Precautionary statements

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No

smoking.

P260 Do not breathe dust/fume/gas/mist/vapours/spray.

P308+P311 IF exposed or concerned: Call a POISON CENTER/doctor.

P403+P235 Store in a well-ventilated place. Keep cool.

2.3. Other hazards

No data available

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Relevant ingredients

CAS No	Chemical name			Quantity	
	EC No	Index No	REACH No		
	Classification (Regulation	on (EC) No 1272/2008)	•		
67-56-1	methanol			40 - < 45 %	
	200-659-6	603-001-00-X	01-2119433307-44		
	Flam. Liq. 2, Acute Tox.	3, Acute Tox. 3, Acute Tox. 3, STOT	SE 1; H225 H331 H311 H301 H370		
50-00-0	formaldehyde			< 0.1 %	
	200-001-8	605-001-00-5	01-2119488953-20		
	Carc. 1B, Muta. 2, Acute Tox. 3, Acute Tox. 3, Acute Tox. 3, Skin Corr. 1B, Skin Sens. 1; H350 H341 H331 H311 H301 H314 H317				

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

Specific Conc. Limits, M-factors and ATE

	no. Emmo, m rac		
CAS No	EC No	Chemical name	Quantity
	Specific Conc.	Limits, M-factors and ATE	
67-56-1	200-659-6	methanol	40 - < 45 %
		60 = 128,2 mg/l (vapours); inhalation: ATE = 0,5 mg/l (dusts or mists); dermal: kg; oral: LD50 = 6000 mg/kg STOT SE 1; H370: >= 10 - 100 STOT SE 2; H371:	
50-00-0	200-001-8	formaldehyde	< 0.1 %
	inhalation: LC50 = < 463 mg/l (vapours); inhalation: ATE = 0,5 mg/l (dusts or mists); dermal: ATE = 300 mg/kg; oral: LD50 = 460 mg/kg Skin Corr. 1B; H314: >= 25 - 100 Skin Irrit. 2; H315: >= 5 - < 25 Eye Irrit. 2; H319: >= 5 - < 25 Skin Sens. 1; H317: >= 0,2 - 100 STOT SE 3; H335: >= 5 - 100		

Further Information

This product does not contain substances of very high concern according to Regulation (EC) No 1907/2006 (REACH), Article 57 above the respective regulatory concentration limit of = 0.1 % (w/w).

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

First aider: Pay attention to self-protection!



Safety Data Sheet

according to Regulation (EC) No 1907/2006

Fixing solution R Reag. Ph. Eur., chapter 4.1.1

Revision: 06.12.2023 Product code: 11304 Page 3 of 16

After inhalation

Provide fresh air.

If breathing is irregular or stopped, administer artificial respiration.

Call a physician immediately.

After contact with skin

Wash immediately with: Water

Take off immediately all contaminated clothing and wash it before reuse.

Call a physician immediately.

After contact with eyes

After eye contact: Rinse immediately carefully and thoroughly with eye-bath or water.

Remove contact lenses, if present and easy to do. Continue rinsing.

Consult an ophthalmologist.

After ingestion

Provide fresh air.

Call a physician immediately.

Notes for the doctor: Methanol

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

Irritant, Dizziness

Dizziness. Anaesthetic state

Agitation, Spasms

Inebriation, Vomiting

Headache, Impairment of vision

Repeated exposure may cause skin dryness or cracking.

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

No data available

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Water spray jet, Carbon dioxide (CO2), Foam, Extinguishing powder.

Unsuitable extinguishing media

no restriction

5.2. Special hazards arising from the substance or mixture

Combustible liquids

Hazardous combustion products

In case of fire may be liberated: Carbon dioxide, Carbon monoxide

Vapours are heavier than air, spread along floors and form explosive mixtures with air.

Heating causes rise in pressure with risk of bursting.

5.3. Advice for firefighters

In case of fire: Wear self-contained breathing apparatus.

Wear full chemical protective clothing.

In case of fire and/or explosion do not breathe fumes.

Additional information

Use water spray jet to protect personnel and to cool endangered containers.

Move undamaged containers from immediate hazard area if it can be done safely.

Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures



Safety Data Sheet

according to Regulation (EC) No 1907/2006

Fixing solution R Reag. Ph. Eur., chapter 4.1.1

Revision: 06.12.2023 Product code: 11304 Page 4 of 16

General advice

Keep away from sources of ignition - No smoking.

This material can be ignited by heat, sparks, flames, or other sources of ignition (e.g., static electricity, pilot lights, mechanical/electrical equipment, and electronic devices such as cell phones, computers, calculators, and pagers which have not been certified as intrinsically safe).

Take action to prevent static discharges.

For non-emergency personnel

Provide adequate ventilation.

Use personal protection equipment.

Avoid contact with skin, eyes and clothes.

Remove persons to safety.

Emergency procedures

Consult an expert

Do not breathe dust/fume/gas/mist/vapours/spray.

For emergency responders

Precautionary statements For emergency responders: Personal protection equipment: see section 8

6.2. Environmental precautions

Do not allow uncontrolled discharge of product into the environment. Danger of explosion

Do not allow to enter into surface water or drains.

The vapour of the product is heavier than air and may accumulate below ground level, in pits, channels and basements in higher concentration.

Danger of explosion

6.3. Methods and material for containment and cleaning up

For containment

Cover drains.

Prevent spread over a wide area (e.g. by containment or oil barriers).

Collect in closed and suitable containers for disposal.

Absorb with liquid-binding material (sand, diatomaceous earth, acid- or universal binding agents).

For cleaning up

Clean contaminated articles and floor according to the environmental legislation.

Other information

Provide adequate ventilation.

Do not breathe dust/fume/gas/mist/vapours/spray.

Wear breathing apparatus if exposed to vapours/dusts/aerosols.

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

Advice on safe handling

Avoid exposure - obtain special instructions before use.

If handled uncovered, arrangements with local exhaust ventilation have to be used.

Read label before use. Handle and open container with care.

When using do not eat, drink, smoke, sniff. Keep container tightly closed.

Use personal protection equipment. Use extractor hood (laboratory).

Do not breathe gas/fumes/vapour/spray. Provide adequate ventilation.

Advice on protection against fire and explosion

Keep away from sources of ignition - No smoking. Take precautionary measures against static discharges.



Safety Data Sheet

according to Regulation (EC) No 1907/2006

Fixing solution R Reag. Ph. Eur., chapter 4.1.1

Revision: 06.12.2023 Product code: 11304 Page 5 of 16

Vapours can form explosive mixtures with air.

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 or drink. The choice of body protection depends on the concentration and quantity of hazardous substances. The chemical resistance of protective agents must be clarified with their suppliers.

Further information on handling

Take off immediately all contaminated clothing and wash it before reuse.

Draw up and observe skin protection programme. Wash hands and face before breaks and after work and take a shower if necessary. If handled uncovered, arrangements with local exhaust ventilation have to be used.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep in a cool, well-ventilated place.

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 in a cool, well-ventilated place. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

Hints on joint storage

Do not store together with: Oxidising agent. Pyrophoric or self-heating substances. national regulations

Further information on storage conditions

Keep cool. Protect from sunlight. storage temperature: +5°C - +30°C

7.3. Specific end use(s)

Laboratory chemicals

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational exposure limits

CAS No	Substance	ppm	mg/m³	fib/cm³	Category	Origin
50-00-0	Formaldehyde	0.3	0.37		TWA (8 h)	
		0.6	0.738		STEL (15 min)	
67-56-1	Methyl alcohol	200	260		TWA (8 h)	

Biological limit values

CAS No	Substance	Parameter	Value	Test material	Sampling time
67-56-1	Methanol	Methanol	15 mg/L	Urine	End of shift



according to Regulation (EC) No 1907/2006

Fixing solution R Reag. Ph. Eur., chapter 4.1.1

Revision: 06.12.2023 Product code: 11304 Page 6 of 16

DNEL/DMEL values

CAS No	Substance				
DNEL type		Exposure route	Effect	Value	
67-56-1	methanol				
Consumer DNE	EL, acute	inhalation	systemic	50 mg/m³	
Worker DNEL,	long-term	inhalation	systemic	260 mg/m³	
Worker DNEL,	acute	inhalation	systemic	260 mg/m³	
Worker DNEL,	long-term	inhalation	local	260 mg/m³	
Worker DNEL,	acute	inhalation	local	260 mg/m³	
Worker DNEL,	long-term	dermal	systemic	40 mg/kg bw/day	
Worker DNEL,	acute	dermal	systemic	40 mg/kg bw/day	
Consumer DNE	EL, long-term	inhalation	systemic	50 mg/m³	
Consumer DNE	EL, long-term	inhalation	local	50 mg/m³	
Consumer DNE	EL, acute	inhalation	local	50 mg/m³	
Consumer DNE	EL, long-term	dermal	systemic	8 mg/kg bw/day	
Consumer DNE	EL, acute	dermal	systemic	8 mg/kg bw/day	
Consumer DNE	EL, long-term	oral	systemic	8 mg/kg bw/day	
Consumer DNE	EL, acute	oral	systemic	8 mg/kg bw/day	
50-00-0	formaldehyde				
Worker DNEL,	long-term	inhalation	systemic	9 mg/m³	
Worker DNEL,	long-term	inhalation	local	0,375 mg/m³	
Worker DNEL, long-term		dermal	systemic	240 mg/kg bw/day	
Consumer DNEL, long-term		inhalation	systemic	3,2 mg/m³	
Consumer DNEL, long-term		inhalation	local	0,1 mg/m³	
Consumer DNEL, long-term		dermal	systemic	102 mg/kg bw/day	
Consumer DNE	EL, long-term	oral	systemic	4,1 mg/kg bw/day	
Worker DNEL,	acute	inhalation	local	0,75 mg/m³	



Safety Data Sheet

according to Regulation (EC) No 1907/2006

Fixing solution R Reag. Ph. Eur., chapter 4.1.1

Revision: 06.12.2023 Product code: 11304 Page 7 of 16

PNEC values

CAS No	Substance		
Environmen	Environmental compartment		
67-56-1	methanol		
Freshwater		20,8 mg/l	
Freshwater	intermittent releases)	1540 mg/l	
Marine wate	r	2,08 mg/l	
Freshwater	sediment	77 mg/kg	
Marine sediment		7,7 mg/kg	
Micro-organisms in sewage treatment plants (STP)		100 mg/l	
Soil	Soil		
50-00-0	formaldehyde		
Freshwater		0,44 mg/l	
Freshwater	(intermittent releases)	4,44 mg/l	
Marine wate	Marine water		
Freshwater sediment		2,3 mg/kg	
Marine sediment		2,3 mg/kg	
Micro-organisms in sewage treatment plants (STP)		0,19 mg/l	
Soil			

8.2. Exposure controls

Appropriate engineering controls

Technical measures and the application of suitable work processes have priority over personal protection equipment

If handled uncovered, arrangements with local exhaust ventilation have to be used.

Do not breathe gas/fumes/vapour/spray.

Individual protection measures, such as personal protective equipment

Eye/face protection

goggles

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.

Protective gloves are recommended Company KCL GmbH, D-36124 Eichenzell, email: vertrieb@kcl.de With specification (test according to EN374):

By long-term hand contact

Trade name/designation: KCL 897 Butoject®

Recommended material: Butyl caoutchouc (butyl rubber) 0,3 mm

Wearing time with permanent contact: > 480 min

By short-term hand contact

Trade name/designation: KCL 897 Butoject®

Recommended material: Butyl caoutchouc (butyl rubber) 0,3 mm Wearing time with occasional contact (splashes): > 480 min



according to Regulation (EC) No 1907/2006

Fixing solution R Reag. Ph. Eur., chapter 4.1.1

Revision: 06.12.2023 Product code: 11304 Page 8 of 16

The breakthrough times stated above were determined by KCL in laboratory tests acc. to EN374 with samples of the recommended glove types. This recommendation applies only to the product stated in the safety data sheet<(>,<)> supplied by us and for the designated use. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN374 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell, Internet: www.kcl.de).

Skin protection

Flame-retardant protective clothing. Wear anti-static footwear and clothing

Take off immediately all contaminated clothing and wash it before reuse.

Wear fire resistant or flame retardant clothing.

Wash hands and face before breaks and after work and take a shower if necessary.

Draw up and observe skin protection programme.

Respiratory protection

Respiratory protection necessary at: aerosol or mist formation

The entrepeneur has to ensure that maintenance, cleaning and testing of respiratory protective devices are carried out according to the instructions of the producer. These measures have to be properly documented.

Environmental exposure controls

Do not allow to enter into surface water or drains.

Due to danger of explosion, prevent leakage of vapours into cellars, flues and ditches.

Danger of explosion

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state:

Colour:

Odour:

Odour threshold:

Liquid

colourless

characteristic

No data available

Melting point/freezing point:

Boiling point or initial boiling point and

No data available

No data available

boiling range:

not applicable Flammability: No data available Lower explosion limits: No data available Upper explosion limits: Flash point: 27 °C No data available Auto-ignition temperature: No data available Decomposition temperature: No data available pH-Value: not determined Viscosity / kinematic: Water solubility: very soluble

Solubility in other solvents

not determined

Dissolution rate: No data available No data available Partition coefficient n-octanol/water: No data available Dispersion stability: No data available Vapour pressure: No data available Vapour pressure: 0,896 g/cm³ Density: Relative density: No data available not determined Bulk density: No data available Relative vapour density:



Safety Data Sheet

according to Regulation (EC) No 1907/2006

Fixing solution R Reag. Ph. Eur., chapter 4.1.1

Revision: 06.12.2023 Product code: 11304 Page 9 of 16

Particle characteristics: No data available

9.2. Other information

Information with regard to physical hazard classes

Explosive properties

Vapours can form explosive mixtures with air.

Sustained combustibility:

No data available

Self-ignition temperature

Solid: not applicable
Gas: not applicable

Oxidizing properties

No data available

Other safety characteristics

Evaporation rate:

Solvent separation test:

No data available
Solvent content:

No data available
Solid content:

No data available
Sublimation point:

No data available
Softening point:

No data available
Pour point:

No data available

No data available:

Viscosity / dynamic: No data available

(at □ °C)

Flow time: not determined

Further Information

No data available

SECTION 10: Stability and reactivity

10.1. Reactivity

Vapours can form explosive mixtures with air.

10.2. Chemical stability

The product is stable under storage at normal ambient temperatures.

10.3. Possibility of hazardous reactions

Oxidising agent, Nitrogen oxides (NOx), Potassium chlorate, peroxides, for example hydrogen peroxide, Nitric acid, sulphuric acid, sodium hypochlorite, Acid halogen, Acetic anhydride, Maleic anhydride, Reducing agent, Acid, Bromine, Chlorine, Chloroform, Fluorine, Alkali metals, Alkaline earth metal;

Risk of explosion with: Oxidizing agents, perchloric acid, perchlorates, salts of oxyhalogenic acids, chromium(VI) oxide, halogen oxides, nitrogen oxides, nonmetallic oxides, chromosulfuric acid, chlorates, hydrides, zinc diethyl, halogens, powdered magnesium, hydrogen peroxide, Nitric acid, sulphuric acid, permanganic acid, sodium hypochlorite Exothermic reaction with: acid halides, Acid anhydrides, Reducing agents, acids, Bromine, Chlorine, Chloroform, magnesium, tetrachloromethane, CYANURIC CHLORIDE Risk of ignition or formation of inflammable gases or vapours with: Fluorine, Oxides of phosphorus, Raney-nickel Generates dangerous gases or fumes in contact with: Alkaline earth metals, Alkali metals

10.4. Conditions to avoid

Vapours can form explosive mixtures with air.

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

10.5. Incompatible materials

Plastic articles

Zinc



according to Regulation (EC) No 1907/2006

Fixing solution R Reag. Ph. Eur., chapter 4.1.1

Revision: 06.12.2023 Product code: 11304 Page 10 of 16

10.6. Hazardous decomposition products

SECTION 5: Firefighting measures

Further information

No data available

SECTION 11: Toxicological information

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

Toxicocinetics, metabolism and distribution

Avoid exposure - obtain special instructions before use.

Acute toxicity

Toxic if inhaled.

Toxic in contact with skin.

Toxic if swallowed.

Irritation to respiratory tract

ATEmix calculated

ATE (oral) 226,2 mg/kg; ATE (dermal) 678,7 mg/kg; ATE (inhalation vapour) 6,790 mg/l; ATE (inhalation dust/mist) 1,131 mg/l

CAS No	Chemical name							
	Exposure route	Dose		Species	Source	Method		
67-56-1	methanol							
	oral	LD50 mg/kg	6000	Monkey	Amer J Ophthalmol 40: 76-83 (cited in DG	Determination of the acute toxicity of t		
	dermal	ATE mg/kg	300					
	inhalation (4 h) vapour	LC50 mg/l	128,2	Rat	Study report (1980)	Study performed according to internal co		
	inhalation dust/mist	ATE	0,5 mg/l					
50-00-0	formaldehyde							
	oral	LD50 mg/kg	460	Rat	Kefo J Med 24: 19-37 (1975)	OECD Guideline 401		
	dermal	ATE mg/kg	300					
	inhalation (4 h) vapour	LC50 mg/l	< 463	Rat	Study report (2015)	OECD Guideline 403		
	inhalation dust/mist	ATE	0,5 mg/l					

Irritation and corrosivity

Skin corrosion/irritation: Based on available data, the classification criteria are not met.

Serious eye damage/eye irritation: Based on available data, the classification criteria are not met.

Has degreasing effect on the skin.

Sensitising effects

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

Carcinogenic/mutagenic/toxic effects for reproduction

Germ cell mutagenicity: Based on available data, the classification criteria are not met.

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

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



Safety Data Sheet

according to Regulation (EC) No 1907/2006

Fixing solution R Reag. Ph. Eur., chapter 4.1.1

Revision: 06.12.2023 Product code: 11304 Page 11 of 16

STOT-single exposure

Causes damage to organs. (methanol) (eyes)

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.

Information on likely routes of exposure

There are no data available on the mixture itself.

Specific effects in experiment on an animal

There are no data available on the mixture itself.

Additional information on tests

There are no data available on the mixture itself.

Practical experience

There are no data available on the mixture itself.

11.2. Information on other hazards

Endocrine disrupting properties

There are no data available on the mixture itself.

Other information

Irritation to respiratory tract

Repeated exposure may cause skin dryness or cracking.

Causes damage to organs.

Organs affected:

Liver and kidney damage

eyes

heart

Irreversible damage to the optic nerve.

Further information

Irritant, Dizziness, Dizziness, Anaesthetic state, Agitation, Spasms, Inebriation, Vomiting, Headache,

Impairment of vision

Repeated exposure may cause skin dryness or cracking.

The substance has delayed effects.

Other dangerous properties cannot be excluded.

SECTION 12: Ecological information

12.1. Toxicity

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



according to Regulation (EC) No 1907/2006

Fixing solution R Reag. Ph. Eur., chapter 4.1.1

Revision: 06.12.2023 Product code: 11304 Page 12 of 16

CAS No	Chemical name						
	Aquatic toxicity	Dose		[h] [d]	Species	Source	Method
67-56-1	methanol						
	Acute fish toxicity	LC50 mg/l	15400	96 h	Lepomis macrochirus	Bulletin of Environmental Contamination	other: EPA-660/3-75-00 9, 1975
	Acute algae toxicity	ErC50 22000 mg/l	ca.	96 h	Pseudokirchneriella subcapitata	Ecotoxicology and Environmental Safety 7	OECD Guideline 201
	Acute crustacea toxicity	EC50 mg/l	> 10000	48 h	Daphnia magna	Water Research 23(4): 495-499 (1989)	other: DIN 38412 Teil 11
	Fish toxicity	NOEC mg/l	446,7	28 d	Pimephales promelas	SAR and QSAR in Environmental Research,	Calculation performed with ECOSAR
	Crustacea toxicity	NOEC	208 mg/l	21 d	Daphnia magna	OECD QSAR Toolbox Report (2013)	Toxicity of the target chemical is predi
50-00-0	formaldehyde						
	Acute fish toxicity	LC50 mg/l	27,57	96 h	Ictalurus punctatus	Prog.Fish-Cult. 20(1):8-15 (1958)	acute toxicity test; "static bioassay"
	Acute algae toxicity	ErC50 mg/l	3,48	72 h	Desmodesmus subspicatus	Ecotoxicol Environ Safety 54: 346-354 (2	OECD Guideline 201
	Acute crustacea toxicity	EC50	5,8 mg/l	48 h	Daphnia pulex	Water, Air and Soil Pollution 97, 315-32	OECD Guideline 202
	Fish toxicity	NOEC mg/l	>= 48	28 d	Oryzias latipes	NTIS (ed.) Compendium of the FY1988 and	OECD Guideline 215
	Crustacea toxicity	NOEC mg/l	>= 6,4	21 d	Daphnia magna	Study report (2008)	OECD Guideline 211
	Acute bacteria toxicity	EC50	19 mg/l (3 h	Activated sludge	Chemosphere 14, 1239-1251 (1985)	OECD Guideline 209

12.2. Persistence and degradability

There are no data available on the mixture itself.

12.3. Bioaccumulative potential

There are no data available on the mixture itself.

Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
67-56-1	methanol	-0,77
50-00-0	formaldehyde	0,35

BCF

CAS No	Chemical name	BCF	Species	Source
67-56-1	methanol	1	Cyprinus carpio	Comparative Biochemi
50-00-0	formaldehyde		Paralichthys olivaceus and Sebastes schlegeli	Aquaculture 194, 253



Safety Data Sheet

according to Regulation (EC) No 1907/2006

Fixing solution R Reag. Ph. Eur., chapter 4.1.1

Revision: 06.12.2023 Product code: 11304 Page 13 of 16

12.4. Mobility in soil

There are no data available on the mixture itself.

12.5. Results of PBT and vPvB assessment

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

Avoid release to the environment.

Further information

Do not allow to enter into surface water or drains.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal recommendations

Waste disposal according to directive 2008/98/EC, covering waste and dangerous waste.

Send to a physico-chemical treatment facility under observation of official regulations.

Do not allow to enter into surface water or drains.

Contaminated packaging

This material and its container must be disposed of as hazardous waste.

Handle contaminated packages in the same way as the substance itself.

The allocation of waste identity numbers/waste descriptions must be carried out according to the EEC, specific to the industry and process.

SECTION 14: Transport information

Land transport (ADR/RID)

14.1. UN number or ID number: UN 1986

14.2. UN proper shipping name: ALCOHOLS, FLAMMABLE, TOXIC, N.O.S. (methanol)

14.3. Transport hazard class(es): Ш 14.4. Packing group: 3+6.1 Hazard label: FT1 Classification code: 274 **Special Provisions:** 5 I Limited quantity: Excepted quantity: E1 Transport category: 36 Hazard No: D/F Tunnel restriction code:

Inland waterways transport (ADN)

14.1. UN number or ID number: UN 1986

14.2. UN proper shipping name: ALCOHOLS, FLAMMABLE, TOXIC, N.O.S. (methanol)

14.3. Transport hazard class(es):314.4. Packing group:IIIHazard label:3+6.1Classification code:FT1Special Provisions:274 802Limited quantity:5 LExcepted quantity:E1

Marine transport (IMDG)



Safety Data Sheet

according to Regulation (EC) No 1907/2006

Fixing solution R Reag. Ph. Eur., chapter 4.1.1

Revision: 06.12.2023 Product code: 11304 Page 14 of 16

14.1. UN number or ID number: UN 1986

14.2. UN proper shipping name: ALCOHOLS, FLAMMABLE, TOXIC, N.O.S. (methanol)

14.3. Transport hazard class(es):314.4. Packing group:IIIHazard label:3+6.1Special Provisions:223, 274Limited quantity:5 LExcepted quantity:E1EmS:F-E, S-D

Air transport (ICAO-TI/IATA-DGR)

14.1. UN number or ID number: UN 1986

14.2. UN proper shipping name: ALCOHOLS, FLAMMABLE, TOXIC, N.O.S. (methanol)

14.3. Transport hazard class(es):314.4. Packing group:IIIHazard label:3+6.1Special Provisions:A3Limited quantity Passenger:2 LPassenger LQ:Y343Excepted quantity:E1

IATA-packing instructions - Passenger:355IATA-max. quantity - Passenger:60 LIATA-packing instructions - Cargo:366IATA-max. quantity - Cargo:220 L

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: No

14.6. Special precautions for user

Warning: Combustible liquid. Toxic.

14.7. Maritime transport in bulk according to IMO instruments

not applicable

SECTION 15: Regulatory information

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

EU regulatory information

Restrictions on use (REACH, annex XVII):

Entry 3, Entry 28, Entry 40, Entry 69, Entry 75

Information according to Directive H2 ACUTE TOXIC

2012/18/EU (SEVESO III):

Additional information: P5c

National regulatory information

Employment restrictions: Observe restrictions to employment for juveniles according to the 'juvenile

work protection guideline' (94/33/EC). Observe employment restrictions under the Maternity Protection Directive (92/85/EEC) for expectant or

nursing mothers.

Water hazard class (D): 2 - obviously hazardous to water

Skin resorption/Sensitization: Permeates easily through outer skin and causes poisoning.

15.2. Chemical safety assessment

For this substance a chemical safety assessment has not been carried out.

SECTION 16: Other information



Safety Data Sheet

according to Regulation (EC) No 1907/2006

Fixing solution R Reag. Ph. Eur., chapter 4.1.1

Revision: 06.12.2023 Product code: 11304 Page 15 of 16

Changes

This data sheet contains changes from the previous version in section(s): 1,2,5,8,9,10,11,12,14,15.

Abbreviations and acronyms

Flam. Liq. 2: Flammable liquids, hazard category 2 Acute Tox. 3: Acute toxicity, hazard category 3 Skin Corr. 1B: Skin corrosion, sub-category 1B Skin Sens. 1: Skin sensitisation, hazard category 1 Muta. 2: Germ cell mutagenicity, hazard category 2 Carc. 1B: Carcinogenicity, hazard category 1B

STOT SE 1: Specific target organ toxicity - single exposure, hazard category 1 ADR: Accord européen sur le transport des marchandises dangereuses par Route

(European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonized System of Classification and Labelling of Chemicals EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service LC50: Lethal concentration, 50%

LD50: Lethal dose, 50%

Classification for mixtures and used evaluation method according to Regulation (EC) No 1272/2008 [CLP]

Classification	Classification procedure
Flam. Liq. 3; H226	On basis of test data
Acute Tox. 3; H331	Calculation method
Acute Tox. 3; H311	Calculation method
Acute Tox. 3; H301	Calculation method
STOT SE 1; H370	Calculation method

Relevant H and EUH statements (number and full text)

H225 Highly flammable liquid and vapour.
H226 Flammable liquid and vapour.

H301 Toxic if swallowed.

H301+H311+H331 Toxic if swallowed, in contact with skin or if inhaled.

H311 Toxic in contact with skin.

H314 Causes severe skin burns and eye damage.

H317 May cause an allergic skin reaction.

H331 Toxic if inhaled.

H341 Suspected of causing genetic defects.

H350 May cause cancer.

H370 Causes damage to organs (eyes, central nervous system).

H370 Causes damage to organs.

Further Information

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 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.

Provide appropriate information, instructions and training to users



Safety Data Sheet

according to Regulation (EC) No 1907/2006

Fixing solution R Reag. Ph. Eur., chapter 4.1.1

Revision: 06.12.2023 Product code: 11304 Page 16 of 16

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