

Safety Data Sheet

according to Regulation (EC) No 1907/2006

Reagent 130+R4991

Revision: 07.01.2025

Product code: 130+R4991

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SECTION 1: Identification of the substance/mixture and of the company/undertaking**1.1. Product identifier**

Reagent 130+R4991

EC No: 200-659-6
UFI: 5A5K-GR8E-J303-2Q45

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

1.4. Emergency telephone number:

For Hazardous Materials [or Dangerous Goods] Incidents Spill, Leak, Fire, 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. 2; H300
Acute Tox. 3; H311
Acute Tox. 3; H301
Skin Irrit. 2; H315
Eye Irrit. 2; H319
STOT SE 1; H370
STOT RE 2; H373

Full text of hazard statements: see SECTION 16.

2.2. Label elements**Regulation (EC) No 1272/2008****Hazard components for labelling**

methanol
nitric acid
mercury dithiocyanate

according to Regulation (EC) No 1907/2006

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Signal word: Danger**Pictograms:****Hazard statements**

H226	Flammable liquid and vapour.
H330	Fatal if inhaled.
H301+H311	Toxic if swallowed or in contact with skin.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H370	Causes damage to organs.
H373	May cause damage to organs through prolonged or repeated exposure.

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.
P280	Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.
P308+P311	IF exposed or concerned: Call a POISON CENTER/doctor.
P403+P235	Store in a well-ventilated place. Keep cool.
P405	Store locked up.

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 (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			
7697-37-2	nitric acid			1 - < 5 %
	231-714-2	007-030-00-3	01-2119487297-23	
	Ox. Liq. 3, Met. Corr. 1, Acute Tox. 3, Skin Corr. 1A, Eye Dam. 1; H272 H290 H331 H314 H318 EUH071			
7782-61-8	Iron(III) nitrate nonahydrate			1 - < 5 %
	233-899-5			
	Ox. Sol. 3, Skin Irrit. 2, Eye Irrit. 2; H272 H315 H319			
592-85-8	mercury dithiocyanate			< 1 %
	209-773-0	080-002-00-6		
	Acute Tox. 1, Acute Tox. 2, Acute Tox. 2, STOT RE 2, Aquatic Acute 1, Aquatic Chronic 1; H310 H330 H300 H373 H400 H410 EUH032			

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

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Specific Conc. Limits, M-factors and ATE

CAS No	EC No	Chemical name	Quantity
		Specific Conc. Limits, M-factors and ATE	
67-56-1	200-659-6	methanol	40 - < 45 %
		inhalation: LC50 = 128,2 mg/l (vapours); inhalation: ATE = 0,5 mg/l (dusts or mists); dermal: ATE = 300 mg/kg; oral: LD50 = 6000 mg/kg STOT SE 1; H370: >= 10 - 100 STOT SE 2; H371: >= 3 - < 10	
7697-37-2	231-714-2	nitric acid	1 - < 5 %
		inhalation: ATE 2,65 mg/l (vapours) Ox. Liq. 3; H272: >= 65 - 100 Skin Corr. 1A; H314: >= 20 - 100 Skin Corr. 1B; H314: >= 5 - < 20	
7782-61-8	233-899-5	Iron(III) nitrate nonahydrate	1 - < 5 %
		dermal: LD50 = > 2000 mg/kg; oral: LD50 = > 2000 mg/kg	
592-85-8	209-773-0	mercury dithiocyanate	< 1 %
		inhalation: ATE = 0,5 mg/l (vapours); inhalation: ATE = 0,05 mg/l (dusts or mists); dermal: ATE = 5 mg/kg; oral: ATE = 5 mg/kg STOT RE 2; H373: >= 0,1 - 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!

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.

For Hg compounds applies: they act in a cytotoxic and protoplasmatoxic. Symptoms of poisoning: Eye contact leads to severe lesions. Ingestion and inhalation of dusts (acute): Diarrhea metallic taste, nausea, vomiting, abdominal pain, bloody diarrhea, intestinal burns, glottal edema, aspiration pneumonia, reduction in blood

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pressure, cardiac dysrhythmia, circulatory collapse, and renal failure (chronic): Mouth inflammation with loss of teeth and mercurial line. Speech, vision, hearing, and sensitivity, loss of memory, irritability, hallucinations, delirium

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

Mercury and mercury compounds

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****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

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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.

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 exhaust 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.

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Hints on joint storage

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

Further information on storage conditions

Protect against: Light

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/m ³	fib/cm ³	Category	Origin
67-56-1	Methyl alcohol	200	260		TWA (8 h)	
7697-37-2	Nitric acid	1	2.6		STEL (15 min)	

Biological limit values

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

DNEL/DMEL values

CAS No	Substance	Exposure route	Effect	Value
67-56-1	methanol			
Consumer DNEL, acute	inhalation	systemic	50 mg/m ³	
Worker DNEL, long-term	inhalation	systemic	260 mg/m ³	
Worker DNEL, acute	inhalation	systemic	260 mg/m ³	
Worker DNEL, long-term	inhalation	local	260 mg/m ³	
Worker DNEL, acute	inhalation	local	260 mg/m ³	
Worker DNEL, long-term	dermal	systemic	40 mg/kg bw/day	
Worker DNEL, acute	dermal	systemic	40 mg/kg bw/day	
Consumer DNEL, long-term	inhalation	systemic	50 mg/m ³	
Consumer DNEL, long-term	inhalation	local	50 mg/m ³	
Consumer DNEL, acute	inhalation	local	50 mg/m ³	
Consumer DNEL, long-term	dermal	systemic	8 mg/kg bw/day	
Consumer DNEL, acute	dermal	systemic	8 mg/kg bw/day	
Consumer DNEL, long-term	oral	systemic	8 mg/kg bw/day	
Consumer DNEL, acute	oral	systemic	8 mg/kg bw/day	
7782-61-8	Iron(III) nitrate nonahydrate			
Worker DNEL, long-term	inhalation	systemic	12 mg/m ³	
Worker DNEL, long-term	dermal	systemic	17 mg/kg bw/day	
Consumer DNEL, long-term	inhalation	systemic	3 mg/m ³	
Consumer DNEL, long-term	dermal	systemic	8,6 mg/kg bw/day	
Consumer DNEL, long-term	oral	systemic	1,2 mg/kg bw/day	

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PNEC values

CAS No	Substance	
Environmental compartment		Value
67-56-1	methanol	
Freshwater		20,8 mg/l
Freshwater (intermittent releases)		1540 mg/l
Marine water		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		100 mg/kg
7782-61-8	Iron(III) nitrate nonahydrate	
Freshwater		0,024 mg/l
Freshwater (intermittent releases)		0,24 mg/l
Marine water		0,002 mg/l
Freshwater sediment		0,2 mg/kg
Marine sediment		0,02 mg/kg
Micro-organisms in sewage treatment plants (STP)		500 mg/l
Soil		0,026 mg/kg

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 890 Vitoject®

Recommended material: FKM (fluoro rubber) 0,7 mm

Wearing time with occasional contact (splashes): > 120 min

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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 entrepreneur 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:	Liquid	
Colour:	orange	
Odour:	like: Methanol	
Odour threshold:	No data available	
Melting point/freezing point:		No data available
Boiling point or initial boiling point and boiling range:		No data available
Flammability:		not applicable
Lower explosion limits:		No data available
Upper explosion limits:		No data available
Flash point:		29 °C
Auto-ignition temperature:		No data available
Decomposition temperature:		No data available
pH-Value:		1,1
Viscosity / kinematic:		No data available
Water solubility:		No data available
Solubility in other solvents		
No data available		
Partition coefficient n-octanol/water:		No data available
Vapour pressure:		No data available
Vapour pressure:		No data available
Density:		0,935 g/cm³
Bulk density:		No data available
Relative vapour density:		No data available

9.2. Other information**Information with regard to physical hazard classes**

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Explosive properties

Vapours can form explosive mixtures with air.

Sustained combustibility:

Sustained combustibility

Self-ignition temperature

Solid:

not applicable

Gas:

not applicable

Oxidizing properties

No data available

Other safety characteristics

Evaporation rate:

No data available

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

Flow time:

No data available

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

10.6. Hazardous decomposition products

SECTION 5: Firefighting measures

Further information

No data available

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SECTION 11: Toxicological information**11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008****Toxicokinetics, metabolism and distribution**

Avoid exposure - obtain special instructions before use.

Acute toxicity

Fatal if swallowed.

Toxic in contact with skin.

Toxic if swallowed.

Irritation to respiratory tract

ATEmix calculated

ATE (oral) 221,0 mg/kg; ATE (dermal) 585,4 mg/kg; ATE (inhalation vapour) 6,740 mg/l; ATE (inhalation dust/mist) 1,108 mg/l

CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
67-56-1	methanol				
	oral	LD50 6000 mg/kg	Monkey	Amer J Ophthalmol 40: 76-83 (cited in DG)	Determination of the acute toxicity of t
	dermal	ATE 300 mg/kg			
	inhalation (4 h) vapour	LC50 128,2 mg/l	Rat	Study report (1980)	Study performed according to internal co
	inhalation dust/mist	ATE 0,5 mg/l			
7697-37-2	nitric acid				
	inhalation vapour	ATE 2,65 mg/l			
7782-61-8	Iron(III) nitrate nonahydrate				
	oral	LD50 > 2000 mg/kg	Rat	Study report (2002)	OECD Guideline 401
	dermal	LD50 > 2000 mg/kg	Rat	Study report (2004)	OECD Guideline 402
592-85-8	mercury dithiocyanate				
	oral	ATE 5 mg/kg			
	dermal	ATE 5 mg/kg			
	inhalation vapour	ATE 0,5 mg/l			
	inhalation dust/mist	ATE 0,05 mg/l			

Irritation and corrosivity

Skin corrosion/irritation: Causes skin irritation.

Serious eye damage/eye irritation: Causes serious eye irritation.

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.

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STOT-single exposure

Causes damage to organs. (methanol)
(eyes)

STOT-repeated exposure

May cause damage to organs through prolonged or repeated exposure. (mercury dithiocyanate)

Aspiration hazard

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

11.2. Information on other hazards**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

For Hg compounds applies: they act in a cytotoxic and protoplasmatoxic. Symptoms of poisoning: Eye contact leads to severe lesions. Ingestion and inhalation of dusts (acute): Diarrhea metallic taste, nausea, vomiting, abdominal pain, bloody diarrhea, intestinal burns, glottal edema, aspiration pneumonia, reduction in blood pressure, cardiac dysrhythmia, circulatory collapse, and renal failure (chronic): Mouth inflammation with loss of teeth and mercurial line. Speech, vision, hearing, and sensitivity, loss of memory, irritability, hallucinations, delirium

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.

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CAS No	Chemical name					
	Aquatic toxicity	Dose	[h] [d]	Species	Source	Method
67-56-1	methanol					
	Acute fish toxicity	LC50 15400 mg/l	96 h	Lepomis macrochirus	Bulletin of Environmental Contamination	other: EPA-660/3-75-00 9, 1975
	Acute algae toxicity	ErC50 ca. 22000 mg/l	96 h	Pseudokirchneriella subcapitata	Ecotoxicology and Environmental Safety 7	OECD Guideline 201
	Acute crustacea toxicity	EC50 > 10000 mg/l	48 h	Daphnia magna	Water Research 23(4): 495-499 (1989)	other: DIN 38412 Teil 11
	Fish toxicity	NOEC 446,7 mg/l	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
7697-37-2	nitric acid					
	Acute fish toxicity	LC50 1559 mg/l	96 h	Topeka shiner	Environmental Toxicology and Chemistry,	other: ASTM E729-26
	Fish toxicity	NOEC 268 mg/l	30 d	juvenile Topeka shiner and with juvenile Fathead m	Study report (2009)	Growth tests estimated the test chemical
	Algae toxicity	NOEC > 419 mg/l	10 d	several benthic diatoms; see results	Marine Biology 43:307-315 (1977)	Ten cultures of benthic diatoms were iso
	Acute bacteria toxicity	EC50 > 1000 mg/l ()	3 h	Activated sludge	Study report (2008)	OECD Guideline 209
7782-61-8	Iron(III) nitrate nonahydrate					
	Acute fish toxicity	LC50 1010 mg/l	96 h	Pimephales promelas	Scott, G. & Crunkilton, R. (2000). Acute	The study was not carried out to any spe
	Acute algae toxicity	ErC50 130 mg/l	72 h	Pseudokirchneriella subcapitata	Study report (2002)	OECD Guideline 201
	Acute crustacea toxicity	EC50 611 mg/l	48 h	Daphnia magna	Scott, G. & Crunkilton, R. (2000). Acute	The study was not carried out to any spe
	Fish toxicity	NOEC 1,6 mg/l	146 d	Salvelinus namaycush	McGurk, M., Landry, F., Tang, A. & Hanks	No specific guideline followed. However,
	Crustacea toxicity	NOEC 8,1 mg/l	21 d	Daphnia magna	Study report (2002)	OECD Guideline 211

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.

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Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
67-56-1	methanol	-0,77

BCF

CAS No	Chemical name	BCF	Species	Source
67-56-1	methanol	1	Cyprinus carpio	Comparative Biochemi

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 1992
14.2. UN proper shipping name:	FLAMMABLE LIQUID, TOXIC, N.O.S. (methanol, mercury dithiocyanate)
14.3. Transport hazard class(es):	3
14.4. Packing group:	III
Hazard label:	3+6.1
Classification code:	FT1
Special Provisions:	274
Limited quantity:	5 L
Excepted quantity:	E1
Transport category:	3
Hazard No:	36
Tunnel restriction code:	D/E

Inland waterways transport (ADN)

14.1. UN number or ID number:	UN 1992
14.2. UN proper shipping name:	FLAMMABLE LIQUID, TOXIC, N.O.S. (methanol, mercury dithiocyanate)
14.3. Transport hazard class(es):	3

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14.4. Packing group:

Hazard label: III
 Classification code: 3+6.1
 Special Provisions: FT1
 Limited quantity: 274 802
 Excepted quantity: 5 L
 Excepted quantity: E1

Marine transport (IMDG)

14.1. UN number or ID number: UN 1992
14.2. UN proper shipping name: FLAMMABLE LIQUID, TOXIC, N.O.S. (methanol, mercury dithiocyanate)
14.3. Transport hazard class(es): 3
14.4. Packing group: III
 Hazard label: 3+6.1
 Special Provisions: 223, 274
 Limited quantity: 5 L
 Excepted quantity: E1
 EmS: F-E, S-D

Air transport (ICAO-TI/IATA-DGR)

14.1. UN number or ID number: UN 1992
14.2. UN proper shipping name: FLAMMABLE LIQUID, TOXIC, N.O.S. (methanol, mercury dithiocyanate)
14.3. Transport hazard class(es): 3
14.4. Packing group: III
 Hazard label: 3+6.1
 Special Provisions: A3
 Limited quantity Passenger: 2 L
 Passenger LQ: Y343
 Excepted quantity: E1
 IATA-packing instructions - Passenger: 355
 IATA-max. quantity - Passenger: 60 L
 IATA-packing instructions - Cargo: 366
 IATA-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 18, Entry 40, Entry 69, Entry 75

Information according to Directive H2 ACUTE TOXIC

2012/18/EU (SEVESO III):

Additional information: P5c

Marketing and use of explosives precursors (Regulation (EU) 2019/1148):

This product is regulated by Regulation (EU) 2019/1148: all suspicious transactions, and significant disappearances and thefts should be reported to the relevant national contact point.

National regulatory information

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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**Changes**

This data sheet contains changes from the previous version in section(s): 1,4,5,6,7,8,9,10,11,12,15,16.

Abbreviations and acronyms

Ox. Liq. 3: Oxidising liquids, hazard category 3
 Ox. Sol. 3: Oxidising solids, hazard category 3
 Met. Corr. 1: Corrosive to metals, hazard category 1
 Flam. Liq. 2: Flammable liquids, hazard category 2
 Acute Tox. 1: Acute toxicity, hazard category 1
 Skin Corr. 1A: Skin corrosion, sub-category 1A
 Skin Irrit. 2: Skin irritation, hazard category 2
 Eye Dam. 1: Serious eye damage, hazard category 1
 Eye Irrit. 2: Eye irritation, hazard category 2
 STOT SE 1: Specific target organ toxicity - single exposure, hazard category 1
 STOT RE 2: Specific target organ toxicity - repeated exposure, hazard category 2
 Aquatic Acute 1: Hazardous to the aquatic environment, hazard category: Acute 1
 Aquatic Chronic 1: Hazardous to the aquatic environment, long-term hazard category: Chronic 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. 2; H300	
Acute Tox. 3; H311	Calculation method
Acute Tox. 3; H301	Calculation method
Skin Irrit. 2; H315	Calculation method
Eye Irrit. 2; H319	Calculation method
STOT SE 1; H370	Calculation method
STOT RE 2; H373	Calculation method

Relevant H and EUH statements (number and full text)

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

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H272	May intensify fire; oxidiser.
H290	May be corrosive to metals.
H300	Fatal if swallowed.
H301	Toxic if swallowed.
H301+H311	Toxic if swallowed or in contact with skin.
H310	Fatal in contact with skin.
H311	Toxic in contact with skin.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H330	Fatal if inhaled.
H331	Toxic if inhaled.
H370	Causes damage to organs (eyes, central nervous system).
H370	Causes damage to organs.
H373	May cause damage to organs through prolonged or repeated exposure.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
EUH032	Contact with acids liberates very toxic gas.
EUH071	Corrosive to the respiratory tract.

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

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