Print date: 01.06.2022



Safety Data Sheet

according to Regulation (EC) No 1907/2006

Chloroform / Hydranal®-Gemisch zur Analyse volumetrisch 2:1 gemischt

Revision date: 01.06.2022 Product code: 28472 Page 1 of 16

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

1.1. Product identifier

Chloroform / Hydranal®-Gemisch zur Analyse volumetrisch 2:1 gemischt

UFI: MFUH-V2UR-X00A-QUW3

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

Use of the substance/mixture

Laboratory chemicals

Industrial uses: Uses of substances as such or in preparations at industrial sites

Professional uses: Public domain (administration, education, entertainment, services, craftsmen)

Uses advised against

Do not use for private purposes (household).

1.3. Details of the supplier of the safety data sheet

Company name: Fa. Bernd Kraft GmbH Street: Stempelstraße 6 Place: D-47167 Duisburg

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

e-mail: info@berndkraft.de

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

e-mail: produktsicherheit@berndkraft.de

Internet: www.berndkraft.de

Responsible Department: Abteilung Produktsicherheit

1.4. Emergency telephone 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. 4; H302 Acute Tox. 4; H312

Skin Corr. 1C; H314 Eye Dam. 1; H318

Muta. 2; H341 Carc. 2: H351

Repr. 1B; H360D STOT SE 1; H370 STOT SE 3; H336

STOT RE 1; H372

Full text of hazard statements: see SECTION 16.

2.2. Label elements

Regulation (EC) No 1272/2008



according to Regulation (EC) No 1907/2006

Chloroform / Hydranal®-Gemisch zur Analyse volumetrisch 2:1 gemischt

Revision date: 01.06.2022 Product code: 28472 Page 2 of 16

Hazard components for labelling

trichloromethane methanol imidazole sulphur dioxide

Signal word: Danger

Pictograms:









Hazard statements

H226 Flammable liquid and vapour.

H302+H312 Harmful if swallowed or in contact with skin.
H314 Causes severe skin burns and eye damage.

H331 Toxic if inhaled.

H336 May cause drowsiness or dizziness.
H341 Suspected of causing genetic defects.
H351 Suspected of causing cancer.
H360D May damage the upborn child

H360D May damage the unborn child. H370 Causes damage to organs.

H372 Causes 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.

P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with

water or shower.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if

present and easy to do. Continue rinsing.

P310 Immediately call a POISON CENTER/doctor.

Special labelling of certain mixtures

Restricted to professional users. For use in industrial installations only.

2.3. Other hazards

No information available.

SECTION 3: Composition/information on ingredients

3.2. Mixtures



according to Regulation (EC) No 1907/2006

Chloroform / Hydranal®-Gemisch zur Analyse volumetrisch 2:1 gemischt

Revision date: 01.06.2022 Product code: 28472 Page 3 of 16

Hazardous components

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	Classification (Regulation (EC) No	1272/2008)		
67-66-3	trichloromethane			75 - < 80 %
	200-663-8	602-006-00-4	01-2119486657-20	
	Carc. 2, Muta. 2, Repr. 2, Acute T RE 1; H351 H341 H361d H331 H	ox. 3, Acute Tox. 4, Skin Irrit. 2, Eye 302 H315 H319 H336 H372	Irrit. 2, STOT SE 3, STOT	
67-56-1	methanol			15 - < 20 %
	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; H2	225 H331 H311 H301 H370	
288-32-4	imidazole			1 - < 5 %
	206-019-2	613-319-00-0	01-2119485825-24	
	Repr. 1B, Acute Tox. 4, Skin Corr	. 1C; H360D H302 H314		
7446-09-5	sulphur dioxide			1 - < 5 %
	231-195-2	016-011-00-9		
	Compressed gas, Acute Tox. 3, S			

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	
67-66-3	200-663-8	trichloromethane	75 - < 80 %
	inhalation: AT mg/kg	E = 3 mg/l (vapours); inhalation: ATE = 0,5 mg/l (dusts or mists); oral: LD50 = 908	
67-56-1	200-659-6	methanol	15 - < 20 %
		50 = 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; 10	
288-32-4	206-019-2	imidazole	1 - < 5 %
	oral: LD50 = c	a. 970 mg/kg	
7446-09-5	231-195-2	sulphur dioxide	1 - < 5 %
	inhalation: AT	E = 3 mg/l (vapours); inhalation: ATE = 0,5 mg/l (dusts or mists)	

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! Remove affected person from the danger area and lay down.

After inhalation

Provide fresh air. If breathing is irregular or stopped, administer artificial respiration. No mouth-to-mouth or mouth-to-nose resuscitation. Use Ambu bag or ventilator. 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.



according to Regulation (EC) No 1907/2006

Chloroform / Hydranal®-Gemisch zur Analyse volumetrisch 2:1 gemischt

Revision date: 01.06.2022 Product code: 28472 Page 4 of 16

After contact with eyes

In case of contact with eyes flush immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart and consult an ophthalmologist.

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

After ingestion

Rinse mouth immediately and drink plenty of water.

Call a physician immediately.

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

No data available

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

No data available

SECTION 5: Firefighting measures

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 (CO2), Carbon monoxide

Hydrogen chloride (HCI)

Sulphur oxides

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

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

Additional information

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

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

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

SECTION 6: Accidental release measures

$\underline{\textbf{6.1. Personal precautions, protective equipment and emergency procedures}}$

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

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

For emergency responders

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

Print date: 01.06.2022



Safety Data Sheet

according to Regulation (EC) No 1907/2006

Chloroform / Hydranal®-Gemisch zur Analyse volumetrisch 2:1 gemischt

Revision date: 01.06.2022 Product code: 28472 Page 5 of 16

6.2. Environmental precautions

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

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

Keep away from food, drink and animal feedingstuffs.

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. Store in a place accessible by authorized persons only.

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

Further information on storage conditions

Keep cool. Protect from sunlight.

7.3. Specific end use(s)

Laboratory chemicals

SECTION 8: Exposure controls/personal protection



according to Regulation (EC) No 1907/2006

Chloroform / Hydranal®-Gemisch zur Analyse volumetrisch 2:1 gemischt

Revision date: 01.06.2022 Product code: 28472 Page 6 of 16

8.1. Control parameters

Occupational exposure limits

CAS No	Substance	ppm	mg/m³	fib/cm³	Category	Origin
67-66-3	Chloroform	2	9.8		TWA (8 h)	
67-56-1	Methyl alcohol	200	260		TWA (8 h)	
7446-09-5	Sulphur dioxide	0.5	1.3		TWA (8 h)	
		1	2.7		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			
DNEL type		Exposure route	Effect	Value
67-66-3	trichloromethane			
Worker DNEL,	long-term	inhalation	systemic	2,5 mg/m³
Worker DNEL,	acute	inhalation	systemic	333 mg/m³
Worker DNEL,	long-term	inhalation	local	2,5 mg/m³
Worker DNEL,	long-term	dermal	systemic	0,94 mg/kg bw/day
Consumer DNE	EL, long-term	inhalation	systemic	0,18 mg/m³
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 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
288-32-4	imidazole			
Worker DNEL,	long-term	inhalation	systemic	10,6 mg/m³
Worker DNEL,	long-term	dermal	systemic	1,5 mg/kg bw/day



according to Regulation (EC) No 1907/2006

Chloroform / Hydranal®-Gemisch zur Analyse volumetrisch 2:1 gemischt

Revision date: 01.06.2022 Product code: 28472 Page 7 of 16

PNEC values

CAS No	Substance	
Environment	tal compartment	Value
67-66-3	trichloromethane	
Freshwater		0,146 mg/l
Freshwater ((intermittent releases)	0,133 mg/l
Marine wate	г	0,015 mg/l
Freshwater	sediment	0,45 mg/kg
Marine sedir	ment	0,09 mg/kg
Micro-organi	sms in sewage treatment plants (STP)	0,048 mg/l
Soil		0,56 mg/kg
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 sedir	ment	7,7 mg/kg
Micro-organi	sms in sewage treatment plants (STP)	100 mg/l
Soil		100 mg/kg
288-32-4	imidazole	
Freshwater		0,13 mg/l
Freshwater (intermittent releases)		1,3 mg/l
Marine water		0,013 mg/l
Freshwater sediment		0,336 mg/kg
Marine sedir	nent	0,034 mg/kg
Micro-organi	sms in sewage treatment plants (STP)	10 mg/l
Soil		0,043 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.

Individual protection measures, such as personal protective equipment

Eye/face protection

goggles

Face protection umbrella

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):



according to Regulation (EC) No 1907/2006

Chloroform / Hydranal®-Gemisch zur Analyse volumetrisch 2:1 gemischt

Revision date: 01.06.2022 Product code: 28472 Page 8 of 16

By long-term hand contact

Trade name/designation KCL 890 Vitoject®
Suitable material: FKM (fluoro rubber) 0,7 mm
Wearing time with permanent contact: > 480 min

By short-term hand contact

Trade name/designation KCL 890 Vitoject® Suitable material: FKM (fluoro rubber) 0,7 mm

Wearing time with occasional contact (splashes): > 480 min

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

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

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

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: light yellow
Odour threshold: No data available

Changes in the physical state

Melting point/freezing point:

Boiling point or initial boiling point and

>35 °C

boiling range:

Sublimation point:

Softening point:

No data available

Flash point: >23 °C

Flammability

Solid/liquid: not applicable
Gas: not applicable

Explosive properties

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

Lower explosion limits:

Upper explosion limits:

not determined

not determined

No data available



according to Regulation (EC) No 1907/2006

Chloroform / Hydranal®-Gemisch zur Analyse volumetrisch 2:1 gemischt

Revision date: 01.06.2022 Product code: 28472 Page 9 of 16

Self-ignition temperature

Solid: not applicable Gas: not applicable Pecomposition temperature: not determined pH-Value: 5,7
Viscosity / dynamic: No data available Viscosity / kinematic: No data available Flow time: No data available Water solubility: No

Solubility in other solvents

not determined

No data available Dissolution rate: Partition coefficient n-octanol/water: not determined Dispersion stability: No data available Vapour pressure: No data available Vapour pressure: No data available Density: 1,2864 g/cm³ Bulk density: No data available Relative vapour density: not determined Particle characteristics: No data available

9.2. Other information

Information with regard to physical hazard classes

Sustaining combustion:

No data available

Oxidizing properties Not oxidising.

Other safety characteristics

Solvent separation test:

Solvent content:

No data available

No data available

Solid content:

not determined

Evaporation rate:

not determined

Further InformationNo data available

SECTION 10: Stability and reactivity

10.1. Reactivity

Vapours may 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

10.4. Conditions to avoid

Keep away from sources of heat (e.g. hot surfaces), sparks and open flames. Vapours can form explosive mixtures with air.

10.5. Incompatible materials

No information available.



according to Regulation (EC) No 1907/2006

Chloroform / Hydranal®-Gemisch zur Analyse volumetrisch 2:1 gemischt

Revision date: 01.06.2022 Product code: 28472 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

There are no data available on the mixture itself.

Acute toxicity

Toxic if inhaled.

Harmful if swallowed.

Harmful in contact with skin.

ATEmix calculated

ATE (oral) 398,0 mg/kg; ATE (dermal) 1853,7 mg/kg; ATE (inhalation vapour) 3,15 mg/l; ATE (inhalation dust/mist) 0,524 mg/l

CAS No	Chemical name							
	Exposure route	Dose		Species	Source	Method		
67-66-3	trichloromethane							
	oral	LD50 mg/kg	908	Rat	Toxicology and Applied Pharmacology 52,	OECD Guideline 401		
	inhalation vapour	ATE	3 mg/l					
	inhalation dust/mist	ATE	0,5 mg/l					
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					
288-32-4	imidazole							
	oral	LD50 mg/kg	ca. 970	Rat	Study report (1956)	OECD Guideline 401		
7446-09-5	sulphur dioxide							
	inhalation vapour	ATE	3 mg/l					
	inhalation dust/mist	ATE	0,5 mg/l					

Irritation and corrosivity

Causes severe skin burns and eye damage.

Causes serious eye damage.

Sensitising effects

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

Carcinogenic/mutagenic/toxic effects for reproduction

Suspected of causing genetic defects. (trichloromethane)

Suspected of causing cancer. (trichloromethane)

May damage the unborn child. (imidazole)

Print date: 01.06.2022



Safety Data Sheet

according to Regulation (EC) No 1907/2006

Chloroform / Hydranal®-Gemisch zur Analyse volumetrisch 2:1 gemischt

Revision date: 01.06.2022 Product code: 28472 Page 11 of 16

STOT-single exposure

Causes damage to organs. (methanol)

May cause drowsiness or dizziness. (trichloromethane)

STOT-repeated exposure

Causes damage to organs through prolonged or repeated exposure. (trichloromethane)

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

There are no data available on the mixture itself.

Further information

There are no data available on the mixture itself.

SECTION 12: Ecological information

12.1. Toxicity

There are no data available on the mixture itself.



according to Regulation (EC) No 1907/2006

Chloroform / Hydranal®-Gemisch zur Analyse volumetrisch 2:1 gemischt

Revision date: 01.06.2022 Product code: 28472 Page 12 of 16

CAS No	Chemical name								
	Aquatic toxicity	Dose		[h] [d]	Species	Source	Method		
67-66-3	trichloromethane								
	Acute fish toxicity	LC50 171 mg/l	103 -	96 h	Pimephales promelas	Bulletin of Environmental Contamination	Method after: Procedures recommended by		
	Acute algae toxicity	ErC50 mg/l	13,3	72 h	Chlamydomonas reinhardtii	Environmental Science and Pollution Rese	A modified cell multiplication inhibitio		
	Acute crustacea toxicity	EC50 mg/l	152,5	48 h	other aquatic mollusc: Crassostrea gigas	Study report (2002)	other: ASTM Method E724-94		
	Crustacea toxicity	NOEC	13 mg/l	21 d	Daphnia magna	Water Research 23(4), 501-510 (1989)	other: Recommendation of the		
	Acute bacteria toxicity	(EC50 mg/l)	840	0,5 h	activated sludge of a predominantly domestic sewag	Toxicity Assessment: An International Jo	OECD Guideline 209		
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		
288-32-4	imidazole								
	Acute fish toxicity	LC50 215 mg/l	> 100 - <	96 h	Leuciscus idus	Study report (1989)	other: DIN 38 412		
	Acute algae toxicity	ErC50	133 mg/l	72 h	Desmodesmus subspicatus	Study report (1989)	other: DIN 38412, Part 9		
	Acute crustacea toxicity	EC50 mg/l	341,5	48 h	Daphnia magna	Study report (1988)	EU Method C.2		
	Acute bacteria toxicity	(EC50 mg/l)	> 1000	0,5 h	activated sludge, domestic	Study report (2003)	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
67-66-3	trichloromethane	1,97
67-56-1	methanol	-0,77
288-32-4	imidazole	-0,02



according to Regulation (EC) No 1907/2006

Chloroform / Hydranal®-Gemisch zur Analyse volumetrisch 2:1 gemischt

Revision date: 01.06.2022 Product code: 28472 Page 13 of 16

BCF

CAS No	Chemical name	BCF	Species	Source
67-66-3	trichloromethane	690	Selenastrum capricornutum	Environmental Scienc
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.

There are no data available on the mixture itself.

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

Do not allow to enter into surface water or drains.

Further information

Avoid release to the environment.

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.

SECTION 14: Transport information

Land transport (ADR/RID)

14.1. UN number or ID number: UN 2924

14.2. UN proper shipping name: FLAMMABLE LIQUID, CORROSIVE, N.O.S. (methanol, sulphur dioxide)

14.3. Transport hazard class(es): 14.4. Packing group: Ш Hazard label: 3+8 Classification code: FC **Special Provisions:** 274 5 I Limited quantity: Excepted quantity: E1 Transport category: 3 38 Hazard No: Tunnel restriction code: D/F

Inland waterways transport (ADN)

14.1. UN number or ID number: UN 2924

14.2. UN proper shipping name: FLAMMABLE LIQUID, CORROSIVE, N.O.S. (methanol, sulphur dioxide)

14.3. Transport hazard class(es):314.4. Packing group:IIIHazard label:3+8Classification code:FCSpecial Provisions:274Limited quantity:5 L



according to Regulation (EC) No 1907/2006

Chloroform / Hydranal®-Gemisch zur Analyse volumetrisch 2:1 gemischt

Revision date: 01.06.2022 Product code: 28472 Page 14 of 16

Excepted quantity: E1

Marine transport (IMDG)

14.1. UN number or ID number: UN 2924

14.2. UN proper shipping name: FLAMMABLE LIQUID, CORROSIVE, N.O.S. (methanol, sulphur dioxide)

14.3. Transport hazard class(es):314.4. Packing group:IIIHazard label:3+8Special Provisions:223, 274Limited quantity:5 LExcepted quantity:E1EmS:F-E, S-C

Air transport (ICAO-TI/IATA-DGR)

14.1. UN number or ID number: UN 2924

14.2. UN proper shipping name: FLAMMABLE LIQUID, CORROSIVE, N.O.S. (methanol, sulphur dioxide)

14.3. Transport hazard class(es):314.4. Packing group:IIIHazard label:3+8Special Provisions:A3 A803Limited quantity Passenger:1 LPassenger LQ:Y342Excepted quantity:E1

IATA-packing instructions - Passenger:354IATA-max. quantity - Passenger:5 LIATA-packing instructions - Cargo:365IATA-max. quantity - Cargo:60 L

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: No

14.6. Special precautions for user

Warning: Toxic. strongly corrosive.

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 30, Entry 32, Entry 40, Entry 69

Information according to 2012/18/EU H2 ACUTE TOXIC

(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. Observe employment restrictions for women of

child-bearing age.

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

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

15.2. Chemical safety assessment

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



according to Regulation (EC) No 1907/2006

Chloroform / Hydranal®-Gemisch zur Analyse volumetrisch 2:1 gemischt

Revision date: 01.06.2022 Product code: 28472 Page 15 of 16

SECTION 16: Other information

Changes

This data sheet contains changes from the previous version in section(s): 1,9.

Abbreviations and acronyms

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 ICLP1

Gladdinoation for mixtured and ad-	ed evaluation method according to Regulation (EG) NO 12/2/2000 [CEF]
Classification	Classification procedure
Flam. Liq. 3; H226	On basis of test data
Acute Tox. 3; H331	Calculation method
Acute Tox. 4; H302	Calculation method
Acute Tox. 4; H312	Calculation method
Skin Corr. 1C; H314	Calculation method
Eye Dam. 1; H318	Calculation method
Muta. 2; H341	Calculation method
Carc. 2; H351	Calculation method
Repr. 1B; H360D	Calculation method
STOT SE 1; H370	Calculation method
STOT SE 3; H336	Calculation method
STOT RE 1; H372	Calculation method

Relevant H and EUH statements (number and full text)

H225	Hignly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H280	Contains gas under pressure: may e

Contains gas under pressure; may explode if heated.

Toxic if swallowed. H301 H302 Harmful if swallowed.

Harmful if swallowed or in contact with skin. H302+H312

H311 Toxic in contact with skin. H312 Harmful in contact with skin.

H314 Causes severe skin burns and eye damage.

Causes skin irritation. H315

Causes serious eye damage. H318 Causes serious eye irritation. H319

H331 Toxic if inhaled.

H336 May cause drowsiness or dizziness. Suspected of causing genetic defects. H341

Suspected of causing cancer. H351 May damage the unborn child. H360D

Suspected of damaging the unborn child. H361d

H370 Causes damage to organs.

H372 Causes damage to organs through prolonged or repeated exposure.



according to Regulation (EC) No 1907/2006

Chloroform / Hydranal®-Gemisch zur Analyse volumetrisch 2:1 gemischt

Revision date: 01.06.2022 Product code: 28472 Page 16 of 16

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.

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