

according to Regulation (EC) No 1907/2006

Solvent mixture for the determination of the bromine index of aromatic hydrocarbons by electrometric

Revision date: 03.06.2022 Product code: 30301 Page 1 of 16

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

1.1. Product identifier

Solvent mixture for the determination of the bromine index of aromatic hydrocarbons by electrometric

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

<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

Met. Corr. 1; H290 Flam. Liq. 2; H225 Acute Tox. 4; H302 Acute Tox. 4; H312 Acute Tox. 4; H332 Skin Corr. 1B; H314 Eye Dam. 1; H318 Repr. 1B; H360D STOT SE 1; H370 STOT SE 3; H335

Full text of hazard statements: see SECTION 16.

2.2. Label elements

Regulation (EC) No 1272/2008

Hazard components for labelling

acetic acid

N-methyl-2-pyrrolidone



according to Regulation (EC) No 1907/2006

Solvent mixture for the determination of the bromine index of aromatic hydrocarbons by electrometric

Revision date: 03.06.2022 Product code: 30301 Page 2 of 16

Signal word: Danger

Pictograms:









Hazard statements

H225 Highly flammable liquid and vapour.

H290 May be corrosive to metals.

H302+H312+H332 Harmful if swallowed, in contact with skin or if inhaled.

H314 Causes severe skin burns and eye damage.

H360D May damage the unborn child.
 H370 Causes damage to organs.
 H335 May cause respiratory irritation.

Precautionary statements

P201 Obtain special instructions before use.

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

smoking.

P260

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.

P405 Store locked up.

P501 Dispose of contents/container in accordance with local/regional/national/international

regulations.

Special labelling of certain mixtures

Restricted to professional users.

2.3. Other hazards

No information available.

SECTION 3: Composition/information on ingredients

3.2. Mixtures



according to Regulation (EC) No 1907/2006

Solvent mixture for the determination of the bromine index of aromatic hydrocarbons by electrometric

Revision date: 03.06.2022 Product code: 30301 Page 3 of 16

Hazardous components

CAS No	Chemical name				
	EC No	Index No	REACH No		
	Classification (Regulation (EC) No	1272/2008)			
64-19-7	acetic acid			70 - < 75 %	
	200-580-7	607-002-00-6	01-2119475328-30		
	Flam. Liq. 3, Skin Corr. 1A; H226 H314				
872-50-4	N-methyl-2-pyrrolidone		10 - < 15 %		
	212-828-1	606-021-00-7	01-2119472430-46		
	Repr. 1B, Skin Irrit. 2, Eye Irrit. 2, S	5			
67-56-1	methanol				
	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				

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

Specific Conc. Limits, M-factors and ATE

opecine oc	nic. Ellillis, Wi-la	Ctors and ATE				
CAS No	EC No	Chemical name	Quantity			
	Specific Conc.					
64-19-7	200-580-7	acetic acid	70 - < 75 %			
	l l	inhalation: LC50 = 11,4 mg/l (vapours); oral: LD50 = 3310 mg/kg Skin Corr. 1A; H314: >= 90 - 100 Skin Corr. 1B; H314: >= 25 - < 90 Skin Irrit. 2; H315: >= 10 - < 25 Eye Irrit. 2; H319: >= 10 - < 25				
872-50-4	212-828-1	N-methyl-2-pyrrolidone	10 - < 15 %			
	dermal: LD50	= > 5000 mg/kg; oral: LD50 = 4150 mg/kg STOT SE 3; H335: >= 10 - 100				
67-56-1	200-659-6	methanol	10 - < 15 %			
	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					

Further Information

No data available

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.

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

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.



according to Regulation (EC) No 1907/2006

Solvent mixture for the determination of the bromine index of aromatic hydrocarbons by electrometric

Revision date: 03.06.2022 Product code: 30301 Page 4 of 16

After ingestion

Rinse mouth immediately and drink plenty of water.

Observe risk of aspiration if vomiting occurs.

Call a physician immediately.

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

corrosive. Irritant.

Dizziness. Anaesthetic state

Agitation, Spasms

Inebriation, Vomiting

Headache, Impairment of vision

Dizziness

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

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

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

Nitrogen oxides (NOx)

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.

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

Avoid contact with skin, eyes and clothes.

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

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.

Corrosive to metals.

For non-emergency personnel

Provide adequate ventilation.

Use personal protection equipment.

Avoid contact with skin, eyes and clothes.



according to Regulation (EC) No 1907/2006

Solvent mixture for the determination of the bromine index of aromatic hydrocarbons by electrometric

Revision date: 03.06.2022 Product code: 30301 Page 5 of 16

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

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. Unsuitable container/equipment material: Metal.



according to Regulation (EC) No 1907/2006

Solvent mixture for the determination of the bromine index of aromatic hydrocarbons by electrometric

Revision date: 03.06.2022 Product code: 30301 Page 6 of 16

Further information on storage conditions

Keep cool. Protect from sunlight.

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
872-50-4	1-Methyl-2-pyrrolidone	25	101		TWA (8 h)	
64-19-7	Acetic acid	10	25		TWA (8 h)	
		20	50		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
872-50-4	N-Methyl-2-pyrrolidone	2-HMSI	20 mg/g		End of shift (measured morning after shift (8hrs))
67-56-1	Methanol	Methanol	15 mg/L	Urine	End of shift



according to Regulation (EC) No 1907/2006

Solvent mixture for the determination of the bromine index of aromatic hydrocarbons by electrometric

Revision date: 03.06.2022 Product code: 30301 Page 7 of 16

DNEL/DMEL values

CAS No	Substance			
DNEL type		Exposure route	Effect	Value
64-19-7	acetic acid	·	·	•
Worker DNEL,	long-term	inhalation	local	25 mg/m³
Worker DNEL,	acute	inhalation	local	25 mg/m³
Consumer DN	EL, long-term	inhalation	local	25 mg/m³
Consumer DN	EL, acute	inhalation	local	25 mg/m³
872-50-4	N-methyl-2-pyrrolidone			
Worker DNEL,	long-term	inhalation	systemic	14,4 mg/m³
Worker DNEL,	long-term	inhalation	local	40 mg/m³
Worker DNEL,	long-term	dermal	systemic	4,8 mg/kg bw/day
Consumer DN	EL, long-term	dermal	systemic	2,4 mg/kg bw/day
Consumer DN	EL, long-term	oral	systemic	0,85 mg/kg bw/day
Consumer DN	EL, long-term	inhalation	local	4,5 mg/m³
Consumer DN	EL, long-term	inhalation	systemic	3,6 mg/m³
67-56-1	methanol			
Consumer DN	EL, acute	inhalation	systemic	50 mg/m³
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/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 DN	EL, long-term	inhalation	systemic	50 mg/m³
Consumer DN	EL, long-term	inhalation	local	50 mg/m³
Consumer DNEL, acute		inhalation	local	50 mg/m³
Consumer DNEL, long-term		dermal	systemic	8 mg/kg bw/day
Consumer DNEL, acute		dermal	systemic	8 mg/kg bw/day
Consumer DN	EL, long-term	oral	systemic	8 mg/kg bw/day
Consumer DN	EL, acute	oral	systemic	8 mg/kg bw/day



according to Regulation (EC) No 1907/2006

Solvent mixture for the determination of the bromine index of aromatic hydrocarbons by electrometric

Revision date: 03.06.2022 Product code: 30301 Page 8 of 16

PNEC values

	••		
CAS No	Substance		
Environment	al compartment	Value	
64-19-7	acetic acid		
Freshwater		3,058 mg/l	
Freshwater ((intermittent releases)	30,58 mg/l	
Marine water	r	0,306 mg/l	
Freshwater s	sediment	11,36 mg/kg	
Marine sedin	nent	1,136 mg/kg	
Micro-organi	sms in sewage treatment plants (STP)	85 mg/l	
Soil		0,47 mg/kg	
872-50-4	N-methyl-2-pyrrolidone		
Freshwater	0,25 mg/l		
Freshwater (5 mg/l		
Marine water	r	0,025 mg/l	
Freshwater s	sediment	1,09 mg/kg	
Marine sedin	nent	0,109 mg/kg	
Micro-organi	sms in sewage treatment plants (STP)	10 mg/l	
Soil		0,07 mg/kg	
67-56-1	methanol		
Freshwater		20,8 mg/l	
Freshwater (intermittent releases)	1540 mg/l	
Marine water	2,08 mg/l		
Freshwater s	77 mg/kg		
Marine sedin	Marine sediment		
Micro-organi	sms in sewage treatment plants (STP)	100 mg/l	
Soil		100 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

Solvent mixture for the determination of the bromine index of aromatic hydrocarbons by electrometric

Revision date: 03.06.2022 Product code: 30301 Page 9 of 16

By long-term hand contact

Trade name/designation KCL 730 Camatril® Velours Suitable 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® Suitable material: FKM (fluoro rubber) 0,7 mm

Wearing time with occasional contact (splashes): > 60 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

Respiratory protection necessary at: aerosol or mist formation

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: clear

Odour threshold: No data available

Changes in the physical state

Melting point/freezing point: No data available Boiling point or initial boiling point and >35 °C

boiling range:

No data available Sublimation point: Softening point: No data available No data available Pour point: No data available <21 °C Flash point:

Flammability

Solid/liquid: not applicable Gas: not applicable

Explosive properties

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

No data available Lower explosion limits: Upper explosion limits: No data available



according to Regulation (EC) No 1907/2006

Solvent mixture for the determination of the bromine index of aromatic hydrocarbons by electrometric

Revision date: 03.06.2022 Product code: 30301 Page 10 of 16

Auto-ignition temperature: No data available

Self-ignition temperature

Solid: not applicable Gas: not applicable No data available Decomposition temperature: pH-Value: acidic Viscosity / dynamic: No data available Viscosity / kinematic: No data available Flow time: No data available No data available Water solubility:

Solubility in other solvents

not determined

Partition coefficient n-octanol/water:

Vapour pressure:

No data available

Vapour pressure:

No data available

No data available

Density:

1,01400 g/cm³

Bulk density:

No data available

Relative vapour density:

No data available

9.2. Other information

Information with regard to physical hazard classes

Oxidizing properties Not oxidising.

Other safety characteristics

Solvent separation test:

Solvent content:

No data available
Solid content:

No data available
Evaporation rate:

No data available
No data available

Further Information
No data available

SECTION 10: Stability and reactivity

10.1. Reactivity

Corrosive to metals. Highly flammable.

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

Metal

Plastic articles



according to Regulation (EC) No 1907/2006

Solvent mixture for the determination of the bromine index of aromatic hydrocarbons by electrometric

Revision date: 03.06.2022 Product code: 30301 Page 11 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

Harmful if swallowed.

Harmful in contact with skin.

Harmful if inhaled.

CAS No	No Chemical name							
	Exposure route	Dose		Species	Source	Method		
64-19-7	acetic acid							
	oral	LD50 mg/kg	3310	Rat	J Ind Hyg Toxicol, Vol 23, PP 78-82 (194	The sodium salt of acetic acid was admin		
	inhalation (4 h) vapour	LC50	11,4 mg/l	Rat	Study report (1980)	OECD Guideline 403		
872-50-4	N-methyl-2-pyrrolidone							
	oral	LD50 mg/kg	4150	Rat	Fd. Chem. Toxicol. 26, No. 5: 475-479 (1	OECD Guideline 401		
	dermal	LD50 mg/kg	> 5000	Rat	Int. Res. Comm. System Med. Sci. 12: 296	OECD Guideline 402		
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					

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

May damage the unborn child. (N-methyl-2-pyrrolidone)

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

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

STOT-single exposure

Causes damage to organs. (methanol)

May cause respiratory irritation. (N-methyl-2-pyrrolidone)

STOT-repeated exposure

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



according to Regulation (EC) No 1907/2006

Solvent mixture for the determination of the bromine index of aromatic hydrocarbons by electrometric

Revision date: 03.06.2022 Product code: 30301 Page 12 of 16

Aspiration hazard

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

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

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

Solvent mixture for the determination of the bromine index of aromatic hydrocarbons by electrometric

Revision date: 03.06.2022 Product code: 30301 Page 13 of 16

CAS No	Chemical name								
	Aquatic toxicity	Dose		[h] [d]	Species	Source	Method		
64-19-7	acetic acid								
	Acute fish toxicity	LC50 mg/l	> 1000	96 h	Oncorhynchus mykiss	Study report (2005)	other: SOP E257		
	Acute algae toxicity	ErC50 mg/l	> 1000	72 h	Skeletonema costatum	Study report (2005)	ISO 10253		
	Acute crustacea toxicity	EC50 mg/l	> 1000	48 h	Daphnia magna	Study report (1990)	OECD Guideline 202		
872-50-4	N-methyl-2-pyrrolidone								
	Acute fish toxicity	LC50 mg/l	> 500	96 h	Oncorhynchus mykiss	Study report (1983)	other: Static fish toxicity test accordi		
	Acute algae toxicity	ErC50 mg/l	600,5	72 h	Desmodesmus subspicatus	Study report (1989)	other: German Industrial Standard DIN 38		
	Crustacea toxicity	NOEC mg/l	12,5	21 d	Daphnia magna	Study report (2001)	OECD Guideline 211		
	Acute bacteria toxicity	(EC50 mg/l)	> 600		activated sludge, industrial	Study report (1987)	ISO 8192		
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		

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
64-19-7	acetic acid	-0,17
872-50-4	N-methyl-2-pyrrolidone	-0,46
67-56-1	methanol	-0,77

BCF

CAS No	Chemical name	BCF	Species	Source
64-19-7	acetic acid	3,16	fish	Environ. Toxicol. Ch
67-56-1	methanol	1	Cyprinus carpio	Comparative Biochemi



according to Regulation (EC) No 1907/2006

Solvent mixture for the determination of the bromine index of aromatic hydrocarbons by electrometric

Revision date: 03.06.2022 Product code: 30301 Page 14 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

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 empty into drains.

Contaminated packaging

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)

111	HIN	number	or ID	number:	UN 2924
14. 1.	UN	number	OI ID	number.	UN ZUZ 4

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

14.3. Transport hazard class(es): 3 П 14.4. Packing group: Hazard label: 3+8 Classification code: FC **Special Provisions:** 274 Limited quantity: 1 L Excepted quantity: F2 Transport category: 2 Hazard No: 338 Tunnel restriction code: D/E

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. (acetic acid, methanol)

14.3. Transport hazard class(es):314.4. Packing group:IIHazard label:3+8Classification code:FCSpecial Provisions:274Limited quantity:1 LExcepted quantity:E2

Marine transport (IMDG)

14.1. UN number or ID number: UN 2924



according to Regulation (EC) No 1907/2006

Solvent mixture for the determination of the bromine index of aromatic hydrocarbons by electrometric

Revision date: 03.06.2022 Product code: 30301 Page 15 of 16

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

14.3. Transport hazard class(es):314.4. Packing group:IIHazard label:3+8Special Provisions:274Limited quantity:1 LExcepted quantity:E2EmS: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. (acetic acid, methanol)

14.3. Transport hazard class(es):314.4. Packing group:IIHazard label:3+8Special Provisions:A3Limited quantity Passenger:0.5 LPassenger LQ:Y340Excepted quantity:E2

IATA-packing instructions - Passenger:352IATA-max. quantity - Passenger:1 LIATA-packing instructions - Cargo:363IATA-max. quantity - Cargo:5 L

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: No

14.6. Special precautions for user

Warning: Combustible liquid. 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

Authorisations (REACH, annex XIV):

Substances of very high concern, SVHC (REACH, article 59):

N-methyl-2-pyrrolidone

Restrictions on use (REACH, annex XVII): Entry 3, Entry 30, Entry 40, Entry 69

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): 1 - slightly 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.

SECTION 16: Other information



according to Regulation (EC) No 1907/2006

Solvent mixture for the determination of the bromine index of aromatic hydrocarbons by electrometric

Revision date: 03.06.2022 Product code: 30301 Page 16 of 16

Changes

This data sheet contains changes from the previous version in section(s): 12.

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%

Relevant H and EUH statements (number and full text)

H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H290	May be corrosive to metals.
H301	Toxic if swallowed.
H302	Harmful if swallowed.
H302+H312+H332	Harmful if swallowed, in contact with skin or if inhaled.
H311	Toxic in contact with skin.
H312	Harmful in contact with skin.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H331	Toxic if inhaled.
H332	Harmful if inhaled.

H335 May cause respiratory irritation.
H360D May damage the unborn child.

H360D May damage the unborn child. 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 data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)