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Revision date / version: 13.08.2018 / 0010
Replacing version dated / version: 25.09.2017 / 0009
Valid from: 13.08.2018
PDF print date: 13.08.2018
THINNER 5000 ML
Art.: 9021676

Safety data sheet
according to Regulation (EC) No 1907/2006, Annex II

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

1.1 Product identifier

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

Relevant identified uses of the substance or mixture:

Thinners

Sector of use [SU]:

SU 0 - Other

SU 1 - Agriculture, forestry, fishery

SU19 - Building and construction work

SU22 - Professional uses: Public domain (administration, education, entertainment, services, craftsmen)

Chemical product category [PC]:

PC35 - Washing and cleaning products

Process category [PROC]:

PROC 8b - Transfer of substance or mixture (charging and discharging) at dedicated facilities

PROC10 - Roller application or brushing

PROC11 - Non industrial spraying

Uses advised against:

No information available at present.

1.3 Details of the supplier of the safety data sheet



BTI Befestigungstechnik GmbH & Co. KG, Salzstr. 51, 74653 Ingelfingen, Germany
Phone:+49 7940 141 256, Fax:+49 7940 141 9256
Stefan.Haug@bti.de, www.bti.de

Qualified person's e-mail address: info@chemical-check.de, k.schnurbusch@chemical-check.de Please DO NOT use for requesting Safety Data Sheets.

1.4 Emergency telephone number

Emergency information services / official advisory body:

Telephone number of the company in case of emergencies:

+49 (0) 700 / 24 112 112 (BRC)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) 1272/2008 (CLP)

Hazard class	Hazard category	Hazard statement
Flam. Liq.	2	H225-Highly flammable liquid and vapour.

Acute Tox.	4	H332-Harmful if inhaled.
Skin Irrit.	2	H315-Causes skin irritation.
Eye Dam.	1	H318-Causes serious eye damage.
Asp. Tox.	1	H304-May be fatal if swallowed and enters airways.
STOT SE	3	H336-May cause drowsiness or dizziness.
Aquatic Chronic	3	H412-Harmful to aquatic life with long lasting effects.

2.2 Label elements

Labeling according to Regulation (EC) 1272/2008 (CLP)



Danger

H225-Highly flammable liquid and vapour. H332-Harmful if inhaled. H315-Causes skin irritation. H318-Causes serious eye damage. H304-May be fatal if swallowed and enters airways. H336-May cause drowsiness or dizziness. H412-Harmful to aquatic life with long lasting effects.

P101-If medical advice is needed, have product container or label at hand. P102-Keep out of reach of children. P210-Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P261-Avoid breathing vapours or spray. P271-Use only outdoors or in a well-ventilated area. P280-Wear protective gloves and eye protection / face protection.

P301+P310+P331-IF SWALLOWED: Immediately call a POISON CENTER / doctor. Do NOT induce vomiting. P305+P351+P338-IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P315-Get immediate medical advice / attention.

P403+P233-Store in a well-ventilated place. Keep container tightly closed. P405-Store locked up.

P501-Dispose of contents / container safely.

butan-1-ol

Xylene (mixture of isomers)

Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane

n-butyl acetate

2.3 Other hazards

The mixture does not contain any vPvB substance (vPvB = very persistent, very bioaccumulative) or is not included under XIII of the regulation (EC) 1907/2006 (< 0,1 %).

The mixture does not contain any PBT substance (PBT = persistent, bioaccumulative, toxic) or is not included under XIII of the regulation (EC) 1907/2006 (< 0,1 %).

SECTION 3: Composition/information on ingredients



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3.1 Substance

n.a.

3.2 Mixture

Xylene (mixture of isomers)	Substance for which an EU exposure limit value applies.
Registration number (REACH)	01-2119488216-32-XXXX
Index	601-022-00-9
EINECS, ELINCS, NLP	215-535-7
CAS	1330-20-7
content %	25-50
Classification according to Regulation (EC) 1272/2008 (CLP)	Flam. Liq. 3, H226 Acute Tox. 4, H332 Acute Tox. 4, H312 Skin Irrit. 2, H315

Ethyl acetate	Substance for which an EU exposure limit value applies.
Registration number (REACH)	01-2119475103-46-XXXX
Index	607-022-00-5
EINECS, ELINCS, NLP	205-500-4
CAS	141-78-6
content %	10-20
Classification according to Regulation (EC) 1272/2008 (CLP)	Flam. Liq. 2, H225 Eye Irrit. 2, H319 STOT SE 3, H336

Acetone	Substance for which an EU exposure limit value applies.
Registration number (REACH)	01-2119471330-49-XXXX
Index	606-001-00-8
EINECS, ELINCS, NLP	200-662-2
CAS	67-64-1
content %	10-20
Classification according to Regulation (EC) 1272/2008 (CLP)	Flam. Liq. 2, H225 Eye Irrit. 2, H319 STOT SE 3, H336

Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane	
Registration number (REACH)	01-2119475514-35-XXXX
Index	---
EINECS, ELINCS, NLP	921-024-6 (REACH-IT List-No.)
CAS	---
content %	10-20
Classification according to Regulation (EC) 1272/2008 (CLP)	Flam. Liq. 2, H225 Asp. Tox. 1, H304 Skin Irrit. 2, H315 STOT SE 3, H336 Aquatic Chronic 2, H411

butan-1-ol	
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Registration number (REACH)	01-2119484630-38-XXXX
Index	603-004-00-6
EINECS, ELINCS, NLP	200-751-6
CAS	71-36-3
content %	5-<10
Classification according to Regulation (EC) 1272/2008 (CLP)	Flam. Liq. 3, H226 Acute Tox. 4, H302 STOT SE 3, H335 Skin Irrit. 2, H315 Eye Dam. 1, H318 STOT SE 3, H336

Toluene	Substance for which an EU exposure limit value applies.
Registration number (REACH)	01-2119471310-51-XXXX
Index	601-021-00-3
EINECS, ELINCS, NLP	203-625-9
CAS	108-88-3
content %	1-<3
Classification according to Regulation (EC) 1272/2008 (CLP)	Flam. Liq. 2, H225 Repr. 2, H361d Asp. Tox. 1, H304 STOT RE 2, H373 Skin Irrit. 2, H315 STOT SE 3, H336

For the text of the H-phrases and classification codes (GHS/CLP), see Section 16.
 The substances named in this section are given with their actual, appropriate classification!
 For substances that are listed in appendix VI, table 3.1 of the regulation (EC) no. 1272/2008 (CLP regulation) this means that all notes that may be given here for the named classification have been taken into account.

SECTION 4: First aid measures

4.1 Description of first aid measures

First-aiders should ensure they are protected!
 Never pour anything into the mouth of an unconscious person!

Inhalation

Remove person from danger area.
 Supply person with fresh air and consult doctor according to symptoms.
 Respiratory arrest - Artificial respiration apparatus necessary.
 If the person is unconscious, place in a stable side position and consult a doctor.

Skin contact

Remove polluted, soaked clothing immediately, wash thoroughly with plenty of water and soap, in case of irritation of the skin (flare), consult a doctor.

Unsuitable cleaning product:

Solvent

Eye contact

Remove contact lenses.
 Wash thoroughly for several minutes using copious water. Seek medical help if necessary.

Ingestion



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Do not induce vomiting - give copious water to drink. Consult doctor immediately.

Danger of aspiration

In case of vomiting, keep head low so that the stomach content does not reach the lungs.

4.2 Most important symptoms and effects, both acute and delayed

If applicable delayed symptoms and effects can be found in section 11 and the absorption route in section 4.1.

Inhalation:

Irritation of the respiratory tract

Headaches

Dizziness

Nausea

Cramps

Effects/damages the central nervous system

Coordination disorders

Unconsciousness

Liver and kidney damage

Skin contact:

Product removes fat.

Drying of the skin.

Dermatitis (skin inflammation)

Skin resorption

Ingestion:

Danger of aspiration

Lung damage

Oedema of the lungs

In certain cases, the symptoms of poisoning may only appear after an extended period / after several hours.

4.3 Indication of any immediate medical attention and special treatment needed

Gastric lavage (stomach washing) only under endotracheal intubation.

Subsequent observation for pneumonia and pulmonary oedema.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media

Water jet spray / alcohol resistant foam / CO₂ / dry extinguisher

Unsuitable extinguishing media

High volume water jet

5.2 Special hazards arising from the substance or mixture

In case of fire the following can develop:

Oxides of carbon

Oxides of nitrogen

Toxic pyrolysis products.

Explosive vapour/air or gas/air mixtures.

Dangerous vapours heavier than air.

In case of spreading near the ground, flashback to distance sources of ignition is possible.

5.3 Advice for firefighters

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

Protective respirator with independent air supply.

According to size of fire

Full protection, if necessary.

Cool container at risk with water.



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Dispose of contaminated extinction water according to official regulations.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Remove possible causes of ignition - do not smoke.

Ensure sufficient supply of air.

Avoid inhalation, and contact with eyes or skin.

If applicable, caution - risk of slipping.

6.2 Environmental precautions

Prevent from entering drainage system.

Prevent surface and ground-water infiltration, as well as ground penetration.

If leakage occurs, dam up.

Resolve leaks if this possible without risk.

If accidental entry into drainage system occurs, inform responsible authorities.

6.3 Methods and material for containment and cleaning up

Soak up with absorbent material (e.g. universal binding agent, sand, diatomaceous earth) and dispose of according to Section 13.

Use no flammable substances.

6.4 Reference to other sections

For personal protective equipment see Section 8 and for disposal instructions see Section 13.

SECTION 7: Handling and storage

In addition to information given in this section, relevant information can also be found in section 8 and 6.1.

7.1 Precautions for safe handling

7.1.1 General recommendations

Avoid inhalation of the vapours.

Ensure good ventilation.

If applicable, suction measures at the workstation or on the processing machine necessary.

Keep away from sources of ignition - Do not smoke.

Take precautions against electrostatic charges.

Use explosion-proof equipment.

Floors must be electrically conductive.

Handle and open container with care.

Do not use pressurised air for filling, unloading or handling.

Avoid contact with eyes or skin.

Eating, drinking, smoking, as well as food-storage, is prohibited in work-room.

Observe directions on label and instructions for use.

Use working methods according to operating instructions.

During transfer operations:

Earth devices.

7.1.2 Notes on general hygiene measures at the workplace

General hygiene measures for the handling of chemicals are applicable.

Wash hands before breaks and at end of work.

Keep away from food, drink and animal feedingstuffs.

Remove contaminated clothing and protective equipment before entering areas in which food is consumed.

7.2 Conditions for safe storage, including any incompatibilities

Keep out of access to unauthorised individuals.

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Do not store with flammable or self-igniting materials.
 Observe special storage conditions.
 Store product closed and only in original packing.
 Not to be stored in gangways or stair wells.
 Solvent resistant floor
 Protect from direct sunlight and warming.
 Store at room temperature.
 Store in a well ventilated place.
 Store in a dry place.

7.3 Specific end use(s)

No information available at present.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Workplace exposure limit (WEL) of the total hydrocarbon solvent content of the mixture (RCP method according to EH40):
 800 mg/m³

Ⓢ	Chemical Name	Xylene (mixture of isomers)	Content %:25-50
	WEL-TWA: 50 ppm (220 mg/m ³) (WEL), 50 ppm (221 mg/m ³) (EU)	WEL-STEL: 100 ppm (441 mg/m ³) (WEL), 100 ppm (442 mg/m ³) (EU)	---
	Monitoring procedures:	<ul style="list-style-type: none"> - Compur - KITA-143 SA (550 325) - Compur - KITA-143 SB (505 998) - Draeger - Xylene 10/a (67 33 161) MTA/MA-030/A92 (Determination of aromatic hydrocarbons (benzene, toluene, ethylbenzene, p-xylene, 1,2,4-trimethylbenzene) in air - Charcoal tube method / Gas chromatography) - 1992 - EU project BC/CEN/ENTR/000/2002-16 card 47-1 (2004)	
	BMGV: 650 mmol methyl hippuric acid/mol creatinine in urine, post shift (Xylene, o-, m-, p- or mixed isomers) (BMGV)	Other information: Sk (WEL)	

Ⓢ	Chemical Name	Ethyl acetate	Content %:10-20
	WEL-TWA: 200 ppm (WEL-TWA), 200 ppm (734 mg/m ³) (EU)	WEL-STEL: 400 ppm (WEL-STEL), 400 ppm (1468 mg/m ³) (EU)	---
	Monitoring procedures:	<ul style="list-style-type: none"> - Compur - KITA-111 SA (549 160) - Compur - KITA-111 U(C) (549 178) - Draeger - Ethyl Acetate 200/a (CH 20 201) DFG (D) (Loesungsmittelgemische 2), DFG (E) (Solvent mixtures 2) - 1998, 2002 DFG (D) (Loesungsmittelgemische 3), DFG (E) (Solvent mixtures 3) - 1998, 2002 DFG (D) (Loesungsmittelgemische 4), DFG (E) (Solvent mixtures 4) - 1998, 2002 DFG (D) (Loesungsmittelgemische 5), DFG (E) (Solvent mixtures 5) - 1998, 2002	
	BMGV: ---	Other information: ---	

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Chemical Name	Acetone	Content %:10-20
WEL-TWA: 500 ppm (1210 mg/m ³) (WEL, EU)	WEL-STEL: 1500 ppm (3620 mg/m ³) (WEL)	---
Monitoring procedures:	<ul style="list-style-type: none"> - Compur - KITA-102 SA (548 534) - Compur - KITA-102 SC (548 550) - Compur - KITA-102 SD (551 109) - Draeger - Acetone 40/a (5) (81 03 381) - Draeger - Acetone 100/b (CH 22 901) MTA/MA-031/A96 (Determination of ketones (acetone, methyl ethyl ketone, methyl isobutyl ketone) in air - Charcoal tube method / Gas chromatography) - 1996 - EU project - BC/CEN/ENTR/000/2002-16 card 67-1 (2004) MDHS 72 (Volatile organic compounds in air – Laboratory method using pumped solid sorbent tubes, thermal desorption and gas chromatography) - 1993 	
BMGV: ---	Other information: ---	
Chemical Name	Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane	Content %:10-20
WEL-TWA: 800 mg/m ³	WEL-STEL: ---	---
Monitoring procedures:	- Compur - KITA-187 S (551 174)	
BMGV: ---	Other information: (WEL acc. to RCP-method, EH40)	
Chemical Name	butan-1-ol	Content %:5-<10
WEL-TWA: ---	WEL-STEL: 50 ppm (154 mg/m ³)	---
Monitoring procedures:	<ul style="list-style-type: none"> - Compur - KITA-190 U(C) (548 873) - Draeger - Alcohol 25/a n-Butanol (81 01 631) DFG (D) (Loesungsmittelgemische), DFG (E) (Solvent mixtures 6) - 1998, 2002 - EU project BC/CEN/ENTR/000/2002-16 card 70-3 (2004) - Draeger - Alcohol 100/a (CH 29 701) 	
BMGV: ---	Other information: Sk	
Chemical Name	Toluene	Content %:1-<3
WEL-TWA: 191 mg/m ³ (50 ppm) (WEL), 192 mg/m ³ (50 ppm) (EU)	WEL-STEL: 384 mg/m ³ (100 ppm) (WEL, EU)	---
Monitoring procedures:	<ul style="list-style-type: none"> - Compur - KITA-124 SA (550 226) - Compur - KITA-124 SB (551 398) - Compur - KITA-124 SH (509 834) - Draeger - Toluene 5/b (81 01 661) - Draeger - Toluene 50/a (81 01 701) - Draeger - Toluene 100/a (81 01 731) MTA/MA-030/A92 (Determination of aromatic hydrocarbons (benzene, toluene, ethylbenzene, p-xylene, 1,2,4-trimethylbenzene) in air - Charcoal tube method / Gas chromatography) - 1992 - EU project BC/CEN/ENTR/000/2002-16 card 17-1 (2004) - DFG Meth. Nr. 1 (D) (Loesungsmittelgemische), DFG (E) (Solvent mixtures 1) - 1998, 2002 	
BMGV: ---	Other information: Sk (WEL, EU)	





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Chemical Name	n-butyl acetate	Content %:
WEL-TWA: 150 ppm (724 mg/m ³)	WEL-STEL: 200 ppm (966 mg/m ³)	---
Monitoring procedures:	- Compur - KITA-139 SB(C) (549 731) - Compur - KITA-138 U (548 857)	
BMGV: ---	Other information: ---	

Ⓒ WEL-TWA = Workplace Exposure Limit - Long-term exposure limit (8-hour TWA (= time weighted average) reference period) EH40. AGW = "Arbeitsplatzgrenzwert" (workplace limit value, Germany). (8) = Inhalable fraction (2017/164/EU, 2017/2398/EU). (9) = Respirable fraction (2017/164/EU, 2017/2398/EU). | WEL-STEL = Workplace Exposure Limit - Short-term exposure limit (15-minute reference period). (8) = Inhalable fraction (2017/164/EU, 2017/2398/EU). (9) = Respirable fraction (2017/164/EU, 2017/2398/EU). (10) = Short-term exposure limit value in relation to a reference period of 1 minute (2017/164/EU). | BMGV = Biological monitoring guidance value EH40. BGW = "Biologischer Grenzwert" (biological limit value, Germany) | Other information: Sen = Capable of causing occupational asthma. Sk = Can be absorbed through skin. Carc = Capable of causing cancer and/or heritable genetic damage.
 ** = The exposure limit for this substance is repealed through the TRGS 900 (Germany) of January 2006 with the goal of revision.

8.2 Exposure controls

Xylene (mixture of isomers)						
Area of application	Exposure route / Environmental compartment	Effect on health	Descriptor	Value	Unit	Note
	Environment - freshwater		PNEC	0,327	mg/l	
	Environment - sewage treatment plant		PNEC	6,58	mg/l	
	Environment - sediment		PNEC	12,46	mg/kg	
	Environment - soil		PNEC	2,31	mg/kg	
	Environment - water, sporadic (intermittent) release		PNEC	0,327	mg/kg	
	Environment - marine		PNEC	0,25	mg/l	
	Environment - sediment, marine		PNEC	14,33	mg/kg	
	Environment - water		PNEC	0,25	mg/l	
	Environment - sporadic (intermittent) release		PNEC	2,41	mg/kg	
Consumer	Human - inhalation	Short term, local effects	DNEL	260	mg/m ³	
Consumer	Human - inhalation	Long term, systemic effects	DNEL	65,3	mg/m ³	
Consumer	Human - oral	Long term, systemic effects	DNEL	12,5	mg/kg	
Workers / employees	Human - inhalation	Short term, systemic effects	DNEL	442	mg/m ³	



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Workers / employees	Human - inhalation	Long term, systemic effects	DNEL	221	mg/m ³	
Workers / employees	Human - dermal	Long term, systemic effects	DNEL	180	mg/kg	
Workers / employees	Human - inhalation	Long term, systemic effects	DNEL	77	mg/m ³	

Ethyl acetate						
Area of application	Exposure route / Environmental compartment	Effect on health	Descriptor	Value	Unit	Note
	Environment - freshwater		PNEC	0,26	mg/l	
	Environment - marine		PNEC	0,026	mg/l	
	Environment - water, sporadic (intermittent) release		PNEC	1,65	mg/l	
	Environment - sediment, freshwater		PNEC	0,34	mg/kg	
	Environment - sediment, marine		PNEC	0,125	mg/kg	
	Environment - soil		PNEC	0,22	mg/kg	
	Environment - sewage treatment plant		PNEC	650	mg/l	
	Environment - oral (animal feed)		PNEC	200	mg/kg	
Consumer	Human - oral	Long term, systemic effects	DNEL	4,5	mg/kg	
Consumer	Human - dermal	Long term, systemic effects	DNEL	37	mg/kg	
Consumer	Human - inhalation	Long term, systemic effects	DNEL	367	mg/m ³	
Consumer	Human - inhalation	Long term, local effects	DNEL	367	mg/m ³	
Consumer	Human - inhalation	Short term, systemic effects	DNEL	734	mg/m ³	
Consumer	Human - inhalation	Short term, local effects	DNEL	734	mg/m ³	
Workers / employees	Human - dermal	Long term, systemic effects	DNEL	63	mg/kg	
Workers / employees	Human - inhalation	Long term, systemic effects	DNEL	734	mg/m ³	
Workers / employees	Human - inhalation	Long term, local effects	DNEL	734	mg/m ³	
Workers / employees	Human - inhalation	Short term, systemic effects	DNEL	1468	mg/m ³	
Workers / employees	Human - inhalation	Short term, local effects	DNEL	1468	mg/m ³	

Acetone						
Area of application	Exposure route / Environmental compartment	Effect on health	Descriptor	Value	Unit	Note
	Environment - marine		PNEC	1,06	mg/l	Assessment factor 500
	Environment - freshwater		PNEC	10,6	mg/l	Assessment factor 50
	Environment - sediment, freshwater		PNEC	30,4	mg/l	
	Environment - sediment, marine		PNEC	3,04	mg/l	
	Environment - soil		PNEC	29,5	mg/kg dw	
	Environment - sewage treatment plant		PNEC	19,5	mg/l	
	Environment - sporadic (intermittent) release		PNEC	21	mg/l	Assessment factor 100
	Environment - sewage treatment plant		PNEC	100	mg/l	
Consumer	Human - oral	Long term, systemic effects	DNEL	62	mg/kg bw/day	Overall assessment factor 2
Consumer	Human - dermal	Long term, systemic effects	DNEL	62	mg/kg bw/day	Overall assessment factor 20
Consumer	Human - inhalation	Long term, systemic effects	DNEL	200	mg/m ³	Overall assessment factor 5
Workers / employees	Human - dermal	Long term, systemic effects	DNEL	186	mg/kg bw/day	
Workers / employees	Human - inhalation	Short term, local effects	DNEL	2420	mg/m ³	
Workers / employees	Human - inhalation	Long term, systemic effects	DNEL	1210	mg/m ³	

Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane						
Area of application	Exposure route / Environmental compartment	Effect on health	Descriptor	Value	Unit	Note
Consumer	Human - dermal	Long term, systemic effects	DNEL	699	mg/kg bw/day	



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Consumer	Human - inhalation	Long term, systemic effects	DNEL	608	mg/m ³	
Consumer	Human - oral	Long term, systemic effects	DNEL	699	mg/kg bw/day	
Workers / employees	Human - dermal	Long term, systemic effects	DNEL	773	mg/kg bw/day	
Workers / employees	Human - inhalation	Long term, systemic effects	DNEL	2035	mg/m ³	

butan-1-ol						
Area of application	Exposure route / Environmental compartment	Effect on health	Description	Value	Unit	Note
	Environment - freshwater		PNEC	0,082	mg/l	
	Environment - marine		PNEC	0,0082	mg/l	
	Environment - sewage treatment plant		PNEC	2476	mg/l	
	Environment - sediment, freshwater		PNEC	0,178	mg/kg	
	Environment - sediment, marine		PNEC	0,0178	mg/l	
	Environment - soil		PNEC	0,015	mg/kg	
	Environment - water, sporadic (intermittent) release		PNEC	2,25	mg/kg	
Consumer	Human - inhalation	Long term, local effects	DNEL	55	mg/m ³	
Workers / employees	Human - oral	Long term, systemic effects	DNEL	3125	mg/kg	
Workers / employees	Human - inhalation	Long term, systemic effects	DNEL	310	mg/m ³	

Toluene						
Area of application	Exposure route / Environmental compartment	Effect on health	Description	Value	Unit	Note
	Environment - freshwater		PNEC	0,68	mg/kg	
	Environment - sediment, freshwater		PNEC	16,39	mg/kg dw	
	Environment - soil		PNEC	2,89	mg/kg dw	
	Environment - sewage treatment plant		PNEC	13,61	mg/l	
	Environment - marine		PNEC	0,68	mg/l	



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	Environment - water, sporadic (intermittent) release		PNEC	0,68	mg/l	
	Environment - sediment		PNEC	16,39	mg/kg	
Consumer	Human - inhalation	Short term, systemic effects	DNEL	384	mg/m ³	
Consumer	Human - inhalation	Short term, local effects	DNEL	226	mg/m ³	
Consumer	Human - inhalation	Short term, systemic effects	DNEL	226	mg/m ³	
Consumer	Human - inhalation	Long term, systemic effects	DNEL	56,5	mg/m ³	
Consumer	Human - dermal	Long term, systemic effects	DNEL	226	mg/kg bw/day	
Consumer	Human - oral	Long term, systemic effects	DNEL	8,13	mg/kg body weight/day	
Workers / employees	Human - inhalation	Long term, local effects	DNEL	192	mg/m ³	
Workers / employees	Human - inhalation	Long term, systemic effects	DNEL	192	mg/m ³	
Workers / employees	Human - dermal	Long term, systemic effects	DNEL	384	mg/kg body weight/day	
Workers / employees	Human - inhalation	Short term, local effects	DNEL	384	mg/m ³	

n-butyl acetate						
Area of application	Exposure route / Environmental compartment	Effect on health	Descriptor	Value	Unit	Note
	Environment - freshwater		PNEC	0,18	mg/l	
	Environment - marine		PNEC	0,018	mg/l	
	Environment - periodic release		PNEC	0,36	mg/l	
	Environment - sediment, freshwater		PNEC	0,981	mg/kg	
	Environment - sediment, marine		PNEC	0,0981	mg/kg	
	Environment - soil		PNEC	0,0903	mg/kg	
	Environment - sewage treatment plant		PNEC	35,6	mg/l	
Consumer	Human - dermal	Long term, systemic effects	DNEL	6	mg/kg bw/d	

Consumer	Human - inhalation	Short term, systemic effects	DNEL	300	mg/m ³	
Consumer	Human - inhalation	Long term, systemic effects	DNEL	35,7	mg/m ³	
Consumer	Human - inhalation	Short term, local effects	DNEL	300	mg/m ³	
Consumer	Human - inhalation	Long term, local effects	DNEL	35,7	mg/m ³	
Consumer	Human - dermal	Short term, systemic effects	DNEL	6	mg/kg bw/day	
Consumer	Human - oral	Long term, systemic effects	DNEL	2	mg/kg bw/day	
Consumer	Human - oral	Short term, systemic effects	DNEL	2	mg/kg bw/day	
Workers / employees	Human - inhalation	Short term, systemic effects	DNEL	600	mg/m ³	
Workers / employees	Human - inhalation	Long term, systemic effects	DNEL	300	mg/m ³	
Workers / employees	Human - dermal	Long term, systemic effects	DNEL	11	mg/kg bw/d	
Workers / employees	Human - dermal	Short term, systemic effects	DNEL	11	mg/kg bw/day	
Workers / employees	Human - inhalation	Short term, local effects	DNEL	600	mg/m ³	
Workers / employees	Human - inhalation	Long term, local effects	DNEL	300	mg/m ³	

8.2.1 Appropriate engineering controls

Ensure good ventilation. This can be achieved by local suction or general air extraction.

If this is insufficient to maintain the concentration under the WEL or AGW values, suitable breathing protection should be worn.

Applies only if maximum permissible exposure values are listed here.

Suitable assessment methods for reviewing the effectiveness of protection measures adopted include metrological and non-metrological investigative techniques.

These are specified by e.g. BS EN 14042.

BS EN 14042 "Workplace atmospheres. Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents".

8.2.2 Individual protection measures, such as personal protective equipment

General hygiene measures for the handling of chemicals are applicable.

Wash hands before breaks and at end of work.

Keep away from food, drink and animal feedingstuffs.

Remove contaminated clothing and protective equipment before entering areas in which food is consumed.

Eye/face protection:

Tight fitting protective goggles with side protection (EN 166).

Skin protection - Hand protection:

Solvent resistant protective gloves (EN 374).

Recommended



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Protective Neoprene® / polychloroprene gloves (EN 374).
Protective gloves made of polyvinyl alcohol (EN 374)
Protective nitrile gloves (EN 374)
Protective gloves in butyl rubber (EN 374).
Minimum layer thickness in mm:
0,7

Permeation time (penetration time) in minutes:
> 30

Protective hand cream recommended.

The breakthrough times determined in accordance with EN 16523-1 were not obtained under practical conditions.

The recommended maximum wearing time is 50% of breakthrough time.

Skin protection - Other:

Protective working garments (e.g. safety shoes EN ISO 20345, long-sleeved protective working garments).
According to operation.

Protective working garment, antistatic (EN1149)

Natural fibre or heat-resistant synthetic fibre

Respiratory protection:

If OES or MEL is exceeded.

Gas mask filter A (EN 14387), code colour brown

At high concentrations:

Respiratory protection appliance (insulation device) (e.g. EN 137 or EN 138)

Observe wearing time limitations for respiratory protection equipment.

Thermal hazards:

Not applicable

Additional information on hand protection - No tests have been performed.

In the case of mixtures, the selection has been made according to the knowledge available and the information about the contents.

Selection of materials derived from glove manufacturer's indications.

Final selection of glove material must be made taking the breakthrough times, permeation rates and degradation into account.

Selection of a suitable glove depends not only on the material but also on other quality characteristics and varies from manufacturer to manufacturer.

In the case of mixtures, the resistance of glove materials cannot be predicted and must therefore be tested before use.

The exact breakthrough time of the glove material can be requested from the protective glove manufacturer and must be observed.

8.2.3 Environmental exposure controls

No information available at present.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state:

Liquid

Colour:

Colourless



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Odour:	Characteristic
Odour threshold:	Not determined
pH-value:	n.a.
Melting point/freezing point:	Not determined
Initial boiling point and boiling range:	56-180 °C ((1013hPa))
Flash point:	-17 °C (DIN 51755 (Abel-Pensky, closed cup))
Evaporation rate:	Not determined
Flammability (solid, gas):	Not determined
Lower explosive limit:	0,6 Vol-%
Upper explosive limit:	13,5 Vol-%
Vapour pressure:	Not determined
Vapour density (air = 1):	Vapours heavier than air.
Density:	0,847 g/cm ³ (20°C)
Bulk density:	Not determined
Solubility(ies):	Not determined
Water solubility:	partially
Partition coefficient (n-octanol/water):	Not determined
Auto-ignition temperature:	240 °C (Ignition temperature)
Decomposition temperature:	Not determined
Viscosity:	<7 mm ² /s (40°C)
Explosive properties:	Possible build up of explosive/highly flammable vapour/air mixture. Product is not explosive.
Oxidising properties:	Not determined
9.2 Other information	
Miscibility:	Not determined
Fat solubility / solvent:	Not determined
Conductivity:	Not determined
Surface tension:	Not determined
Solvents content:	100 %

SECTION 10: Stability and reactivity

10.1 Reactivity

The product has not been tested.

10.2 Chemical stability

Stable with proper storage and handling.

10.3 Possibility of hazardous reactions

No decomposition if used as intended.

10.4 Conditions to avoid

See also section 7.

Heating, open flame, ignition sources

Electrostatic charge

10.5 Incompatible materials

See also section 7.

Avoid contact with oxidizing agents.

Avoid contact with strong alkalis.

Avoid contact with strong acids.

10.6 Hazardous decomposition products

See also section 5.2

No decomposition when used as directed.



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SECTION 11: Toxicological information

11.1 Information on toxicological effects

Possibly more information on health effects, see Section 2.1 (classification).

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Toxicity / effect	Endpoint	Value	Unit	Organism	Test method	Notes
Acute toxicity, by oral route:	ATE	>2000	mg/kg			calculated value
Acute toxicity, by dermal route:	ATE	>2000	mg/kg			calculated value
Acute toxicity, by inhalation:	ATE	>20	mg/l/4h			calculated value, Vapours
Acute toxicity, by inhalation:	ATE	>3-6	mg/l/4h			calculated value, Aerosol
Skin corrosion/irritation:						n.d.a.
Serious eye damage/irritation:						n.d.a.
Respiratory or skin sensitisation:						n.d.a.
Germ cell mutagenicity:						n.d.a.
Carcinogenicity:						n.d.a.
Reproductive toxicity:						n.d.a.
Specific target organ toxicity - single exposure (STOT-SE):						n.d.a.
Specific target organ toxicity - repeated exposure (STOT-RE):						n.d.a.
Aspiration hazard:						n.d.a.
Symptoms:						n.d.a.
Other information:						Classification according to calculation procedure.

Xylene (mixture of isomers)						
Toxicity / effect	Endpoint	Value	Unit	Organism	Test method	Notes
Acute toxicity, by oral route:	LD50	3523	mg/kg	Rat		
Acute toxicity, by dermal route:	LD50	4350	mg/kg	Rabbit		Does not conform with EU classification

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Acute toxicity, by inhalation:	LC50	26	mg/l/4h	Rat		Does not conform with EU classification References, Vapours
Skin corrosion/irritation:				Rabbit		Irritant
Serious eye damage/irritation:				Rabbit		Slightly irritant
Respiratory or skin sensitisation:					(Patch-Test)	Negative
Germ cell mutagenicity:					OECD 471 (Bacterial Reverse Mutation Test)	Negative
Symptoms:						breathing difficulties, drying of the skin., drowsiness, unconsciousness, burning of the membranes of the nose and throat, vomiting, skin afflictions, heart/circulatory disorders, coughing, headaches, drowsiness, dizziness, nausea

Ethyl acetate						
Toxicity / effect	Endpoint	Value	Unit	Organism	Test method	Notes
Acute toxicity, by oral route:	LD50	4934	mg/kg	Rabbit	OECD 401 (Acute Oral Toxicity)	
Acute toxicity, by dermal route:	LD50	>20000	mg/kg	Rabbit		
Acute toxicity, by inhalation:	LC0	29,3	mg/l/4h	Rat		Vapours



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Skin corrosion/irritation:		24	h	Rabbit		Not irritant, Repeated exposure may cause skin dryness or cracking.
Serious eye damage/irritation:				Rabbit	OECD 405 (Acute Eye Irritation/Corrosion)	Eye Irrit. 2
Respiratory or skin sensitisation:				Guinea pig	OECD 406 (Skin Sensitisation)	No (skin contact)
Germ cell mutagenicity:				Salmonella typhimurium	OECD 471 (Bacterial Reverse Mutation Test)	Negative
Germ cell mutagenicity:				Mammalian	OECD 473 (In Vitro Mammalian Chromosome Aberration Test)	Negative
Germ cell mutagenicity:				Mammalian	OECD 474 (Mammalian Erythrocyte Micronucleus Test)	Negative
Carcinogenicity:						Negative
Reproductive toxicity:						Negative
Aspiration hazard:						No

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Symptoms:						lack of appetite, breathing difficulties, drowsiness, unconsciousness, drop in blood pressure, cornea opacity, coughing, headaches, gastrointestinal disturbances, intoxication, drowsiness, mucous membrane irritation, dizziness, salivation, nausea and vomiting.
Specific target organ toxicity - repeated exposure (STOT-RE), oral:	NOAEL	900	mg/kg bw/d	Rat	Regulation (EC) 440/2008 B.26 (SUB-CHRONIC ORAL TOXICITY TEST REPEATED DOSE 90 - DAY (RODENTS))	
Specific target organ toxicity - repeated exposure (STOT-RE), inhalat.:	NOAEL	0,002	mg/kg	Rat	Regulation (EC) 440/2008 B.29 (SUB-CHRONIC INHALATION TOXICITY STUDY 90-DAY REPEATED (RODENTS))	

Acetone						
Toxicity / effect	Endpoint	Value	Unit	Organism	Test method	Notes
Acute toxicity, by oral route:	LD50	5800	mg/kg	Rat	OECD 401 (Acute Oral Toxicity)	
Acute toxicity, by dermal route:	LD50	>15800	mg/kg	Rat		
Acute toxicity, by inhalation:	LC50	~76	mg/l/4h	Rat		



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Skin corrosion/irritation:				Guinea pig		Slightly irritant, Repeated exposure may cause skin dryness or cracking.
Serious eye damage/irritation:				Rabbit	OECD 405 (Acute Eye Irritation/Corrosion)	Irritant
Respiratory or skin sensitisation:				Guinea pig	OECD 406 (Skin Sensitisation)	Not sensitising
Germ cell mutagenicity:					OECD 471 (Bacterial Reverse Mutation Test)	Negative
Germ cell mutagenicity:					OECD 473 (In Vitro Mammalian Chromosome Aberration Test)	Negative
Germ cell mutagenicity:					OECD 476 (In Vitro Mammalian Cell Gene Mutation Test)	Negative
Symptoms:						unconsciousness, vomiting, headaches, gastrointestinal disturbances, fatigue, mucous membrane irritation, dizziness, nausea

Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane						
Toxicity / effect	Endpoint	Value	Unit	Organism	Test method	Notes
Acute toxicity, by inhalation:	LC50	>25,2	mg/l/4h	Rat	OECD 403 (Acute Inhalation Toxicity)	Vapours
Skin corrosion/irritation:					OECD 404 (Acute Dermal Irritation/Corrosion)	Irritant

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Serious eye damage/irritation:					OECD 405 (Acute Eye Irritation/Corrosion)	Mild irritant (Analogous conclusion)
Respiratory or skin sensitisation:					OECD 406 (Skin Sensitisation)	Analogous conclusion, No (inhalation and skin contact)
Germ cell mutagenicity:					OECD 471 (Bacterial Reverse Mutation Test)	Analogous conclusion, Negative
Carcinogenicity:						Analogous conclusion, Negative
Reproductive toxicity:					OECD 414 (Prenatal Developmental Toxicity Study)	Analogous conclusion, Negative
Specific target organ toxicity - single exposure (STOT-SE):						May cause drowsiness or dizziness.
Specific target organ toxicity - repeated exposure (STOT-RE):						Negative
Aspiration hazard:						Yes
Symptoms:						drowsiness, unconsciousness, heart/circulatory disorders, headaches, cramps, drowsiness, mucous membrane irritation, dizziness, nausea and vomiting.
Specific target organ toxicity - single exposure (STOT-SE), inhalative:						Not irritant (respiratory tract).

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Toxicity / effect	Endpoint	Value	Unit	Organism	Test method	Notes



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Acute toxicity, by oral route:	LD50	2292	mg/kg	Rat	OECD 401 (Acute Oral Toxicity)	Does not conform with EU classification
Acute toxicity, by dermal route:	LD50	3430	mg/kg	Rabbit	OECD 402 (Acute Dermal Toxicity)	
Acute toxicity, by inhalation:	LC50	24	mg/l/4h	Rat		
Skin corrosion/irritation:				Rabbit		Irritant
Serious eye damage/irritation:						Eye Dam. 1
Respiratory or skin sensitisation:						No indications of such an effect.
Germ cell mutagenicity:					OECD 471 (Bacterial Reverse Mutation Test)	References, Negative
Symptoms:						respiratory distress, drowsiness, unconsciousness, drop in blood pressure, heart/circulatory disorders, coughing, headaches, intoxication, drowsiness, mucous membrane irritation, dizziness, nausea and vomiting.

Toluene						
Toxicity / effect	Endpoint	Value	Unit	Organism	Test method	Notes
Skin corrosion/irritation:				Rabbit	OECD 404 (Acute Dermal Irritation/Corrosion)	Irritant
Aspiration hazard:						Yes

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Symptoms:						respiratory distress, drowsiness, unconsciousness, headaches, cramps, circulatory collapse, intoxication, drowsiness, mucous membrane irritation, dizziness, sweating, nausea and vomiting.
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n-butyl acetate						
Toxicity / effect	Endpoint	Value	Unit	Organism	Test method	Notes
Acute toxicity, by oral route:	LD50	10760	mg/kg	Rat	OECD 423 (Acute Oral Toxicity - Acute Toxic Class Method)	
Acute toxicity, by dermal route:	LD50	>14112	mg/kg	Rabbit	OECD 402 (Acute Dermal Toxicity)	
Acute toxicity, by inhalation:	LC50	21,1	mg/l/4h	Rat	OECD 403 (Acute Inhalation Toxicity)	Mist
Skin corrosion/irritation:				Rabbit	OECD 404 (Acute Dermal Irritation/Corrosion)	Not irritant
Serious eye damage/irritation:				Rabbit	OECD 405 (Acute Eye Irritation/Corrosion)	Not irritant
Respiratory or skin sensitisation:				Guinea pig	OECD 406 (Skin Sensitisation)	Not sensitising
Germ cell mutagenicity:					OECD 471 (Bacterial Reverse Mutation Test)	Negative
Specific target organ toxicity - single exposure (STOT-SE):						Vapours may cause drowsiness and dizziness.



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Specific target organ toxicity - repeated exposure (STOT-RE):							Negative
Symptoms:							drowsiness, unconsciousness, headaches, drowsiness, mucous membrane irritation, dizziness, nausea and vomiting.

SECTION 12: Ecological information

Possibly more information on environmental effects, see Section 2.1 (classification).

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Toxicity / effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes
12.1. Toxicity to fish:							n.d.a.
12.1. Toxicity to daphnia:							n.d.a.
12.1. Toxicity to algae:							n.d.a.
12.2. Persistence and degradability:							n.d.a.
12.3. Bioaccumulative potential:							n.d.a.
12.4. Mobility in soil:							n.d.a.
12.5. Results of PBT and vPvB assessment							n.d.a.
12.6. Other adverse effects:							n.d.a.

Xylene (mixture of isomers)							
Toxicity / effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes
12.1. Toxicity to fish:	LC50	96h	86	mg/l	Leuciscus idus		
12.1. Toxicity to fish:	LC50	96h	8,2	mg/l	Oncorhynchus mykiss		
12.1. Toxicity to daphnia:	EC50	24h	75,5	mg/l	Daphnia magna		



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12.1. Toxicity to algae:	IC50	72h	10	mg/l			
12.2. Persistence and degradability:							Readily biodegradable
12.3. Bioaccumulative potential:	Log Pow		3,12				
12.3. Bioaccumulative potential:	BCF		0,6-15				

Ethyl acetate							
Toxicity / effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes
12.1. Toxicity to fish:	NOEC/NOEL	32d	>9,65	mg/l	Pimephales promelas		
12.1. Toxicity to fish:	LC50	96h	230	mg/l	Pimephales promelas		
12.1. Toxicity to daphnia:	EC50	48h	610	mg/l	Daphnia magna	DIN 38412 T.11	
12.1. Toxicity to daphnia:	NOEC/NOEL	21d	2,4	mg/l	Daphnia magna	OECD 211 (Daphnia magna Reproduction Test)	
12.1. Toxicity to daphnia:	EC50	48h	165	mg/l			Daphnia cucullata
12.1. Toxicity to algae:	EC50	48h	5600	mg/l	Desmodesmus subspicatus	DIN 38412 T.9	
12.1. Toxicity to algae:	NOEC/NOEL	96h	2000	mg/l	Scenedesmus subspicatus	OECD 201 (Alga, Growth Inhibition Test)	
12.1. Toxicity to algae:	EC50	96h	>2000	mg/l	Pseudokirchneriella subcapitata	OECD 201 (Alga, Growth Inhibition Test)	
12.1. Toxicity to algae:	NOEC/NOEL	72h	>100	mg/l	Desmodesmus subspicatus	OECD 201 (Alga, Growth Inhibition Test)	
12.2. Persistence and degradability:		20d	79	%		OECD 301 D (Ready Biodegradability - Closed Bottle Test)	Readily biodegradable



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12.3. Bioaccumulative potential:	BCF	72h	30				(Fish)
12.3. Bioaccumulative potential:	Log Kow		0,6			OECD 107 (Partition Coefficient (n-octanol/water) - Shake Flask Method)	Bioaccumulation is unlikely (LogPow < 1).
12.4. Mobility in soil:	H (Henry)		0,00012	atm*m/3/mol			
12.4. Mobility in soil:	Koc		3				
12.5. Results of PBT and vPvB assessment							No PBT substance, No vPvB substance
Toxicity to bacteria:	EC10	16h	2900	mg/l	Escherichia coli		
Toxicity to bacteria:	EC50	15min	5870	mg/l	Photobacterium phosphoreum		

Acetone							
Toxicity / effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes
12.1. Toxicity to daphnia:	NOEC/NOEL	28d	2212	mg/l	Daphnia pulex		
Toxicity to bacteria:	EC10	30min	1000	mg/l	activated sludge	OECD 209 (Activated Sludge, Respiration Inhibition Test (Carbon and Ammonium Oxidation))	
12.2. Persistence and degradability:		28d	91	%		OECD 301 A (Ready Biodegradability - DOC Die-Away Test)	Readily biodegradable
12.1. Toxicity to fish:	LC50	96h	5540	mg/l	Oncorhynchus mykiss		
12.1. Toxicity to fish:	LC50	96h	7500	mg/l	Leuciscus idus		
12.1. Toxicity to daphnia:	EC50	48h	6100-12700	mg/l	Daphnia magna		
12.1. Toxicity to algae:	EC50	48h	4740	mg/l	Pseudokirchneriella subcapitata		



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12.1. Toxicity to algae:	NOEC/NOEL	48h	3400	mg/l	Pseudokirchneriella subcapitata		
12.3. Bioaccumulative potential:	Log Pow		-0,24				
12.3. Bioaccumulative potential:	BCF		0,19				
12.4. Mobility in soil:							No adsorption in soil.
12.5. Results of PBT and vPvB assessment							No PBT substance, No vPvB substance
Toxicity to bacteria:	BOD/COD	16h	1700	mg/l	Pseudomonas putida		
Other information:	BOD5		1760-1900	mg/g			
Other information:	COD		2100	mg/g			
Other information:	AOX		0	%			

Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane

Toxicity / effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes
12.2. Persistence and degradability:		28d	81	%			Analogous conclusion
12.5. Results of PBT and vPvB assessment							No PBT substance, No vPvB substance

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Toxicity / effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes
12.1. Toxicity to fish:	LC50	96h	1376	mg/l	Pimephales promelas	OECD 203 (Fish, Acute Toxicity Test)	
12.1. Toxicity to daphnia:	NOEC/NOEL	21d	4,1	mg/l	Daphnia magna	OECD 211 (Daphnia magna Reproduction Test)	
12.1. Toxicity to algae:	IC50	72h	4787	mg/l	Chlorella vulgaris	OECD 201 (Alga, Growth Inhibition Test)	



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12.2. Persistence and degradability:		28d	98	%		OECD 301 B (Ready Biodegradability - Co2 Evolution Test)	
12.3. Bioaccumulative potential:							Not to be expected
Toxicity to bacteria:	EC10	17h	2476	mg/l	Pseudomonas putida	DIN 38412 T.8	References

Toluene							
Toxicity / effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes
12.2. Persistence and degradability:		20d	86	%			Readily biodegradable

n-butyl acetate							
Toxicity / effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes
12.1. Toxicity to fish:	LC50	96h	18	mg/l	Pimephales promelas	OECD 203 (Fish, Acute Toxicity Test)	
12.1. Toxicity to daphnia:	EC50	48h	44	mg/l	Daphnia magna	OECD 202 (Daphnia sp. Acute Immobilisation Test)	
12.1. Toxicity to daphnia:	NOEC/NOEL	21d	23	mg/l	Daphnia magna	OECD 211 (Daphnia magna Reproduction Test)	
12.1. Toxicity to algae:	EC50	72h	397	mg/l	Scenedesmus subspicatus	OECD 201 (Alga, Growth Inhibition Test)	
12.1. Toxicity to algae:	NOEC/NOEL	72h	200	mg/l	Desmodesmus subspicatus		
12.2. Persistence and degradability:		28d	98	%		OECD 301 D (Ready Biodegradability - Closed Bottle Test)	Readily biodegradable
12.3. Bioaccumulative potential:	Log Pow		1,85-2,3				



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12.5. Results of PBT and vPvB assessment							No PBT substance, No vPvB substance
Toxicity to bacteria:	EC10		959	mg/l	Pseudomonas putida		

SECTION 13: Disposal considerations

13.1 Waste treatment methods

For the substance / mixture / residual amounts

EC disposal code no.:

The waste codes are recommendations based on the scheduled use of this product.

Owing to the user's specific conditions for use and disposal, other waste codes may be allocated under certain circumstances. (2014/955/EU)

14 06 03 other solvents and solvent mixtures

Recommendation:

Sewage disposal shall be discouraged.

Pay attention to local and national official regulations.

E.g. suitable incineration plant.

For contaminated packing material

Pay attention to local and national official regulations.

Empty container completely.

Residues may present a risk of explosion.

Do not perforate, cut up or weld uncleaned container.

Uncontaminated packaging can be recycled.

Dispose of packaging that cannot be cleaned in the same manner as the substance.

SECTION 14: Transport information

General statements

14.1. UN number: 1993

Transport by road/by rail (ADR/RID)

14.2. UN proper shipping name:

UN 1993 FLAMMABLE LIQUID, N.O.S. (XYLENES,ACETONE)

14.3. Transport hazard class(es): 3

14.4. Packing group: II

Classification code: F1

LQ: 1 L

14.5. Environmental hazards: Not applicable

Tunnel restriction code: D/E

Transport by sea (IMDG-code)

14.2. UN proper shipping name:

FLAMMABLE LIQUID, N.O.S. (XYLENES,ACETONE)

14.3. Transport hazard class(es): 3

14.4. Packing group: II

EmS: F-E, S-E

Marine Pollutant: n.a





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14.5. Environmental hazards: Not applicable
Transport by air (IATA)
 14.2. UN proper shipping name:
 Flammable liquid, n.o.s. (XYLENES, ACETONE)
 14.3. Transport hazard class(es): 3
 14.4. Packing group: II
 14.5. Environmental hazards: Not applicable



14.6. Special precautions for user

Persons employed in transporting dangerous goods must be trained.
 All persons involved in transporting must observe safety regulations.
 Precautions must be taken to prevent damage.

14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code

Freighted as packaged goods rather than in bulk, therefore not applicable.
 Minimum amount regulations have not been taken into account.
 Danger code and packing code on request.
 Comply with special provisions.

SECTION 15: Regulatory information

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

Observe restrictions:

Comply with national regulations/laws governing the protection of young people at work (national implementation of the Directive 94/33/EC)!

Regulation (EC) No 1907/2006, Annex XVII

Toluene

Comply with national regulations/laws governing maternity protection (national implementation of the Directive 92/85/EEC)!

Comply with trade association/occupational health regulations.

Directive 2012/18/EU ("Seveso III"), Annex I, Part 1 - The following categories apply to this product (others may also need to be considered according to storage, handling etc.):

Hazard categories	Notes to Annex I	Qualifying quantity (tonnes) of dangerous substances as referred to in Article 3(10) for the application of - Lower-tier requirements	Qualifying quantity (tonnes) of dangerous substances as referred to in Article 3(10) for the application of - Upper-tier requirements
P5c		5000	50000

The Notes to Annex I of Directive 2012/18/EU, in particular those named in the tables here and notes 1-6, must be taken into account when assigning categories and qualifying quantities.

Directive 2010/75/EU (VOC): 100 %

REGULATION (EC) No 648/2004

n.a.

15.2 Chemical safety assessment

A chemical safety assessment is not provided for mixtures.



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SECTION 16: Other information

Revised sections: 8
 Employee training in handling dangerous goods is required.
 These details refer to the product as it is delivered.
 Employee instruction/training in handling hazardous materials is required.

Classification and processes used to derive the classification of the mixture in accordance with the ordinance (EG) 1272/2008 (CLP):

Classification in accordance with regulation (EC) No. 1272/2008 (CLP)	Evaluation method used
Flam. Liq. 2, H225	Classification based on test data.
Acute Tox. 4, H332	Classification according to calculation procedure.
Skin Irrit. 2, H315	Classification according to calculation procedure.
Eye Dam. 1, H318	Classification according to calculation procedure.
Asp. Tox. 1, H304	Classification according to calculation procedure.
STOT SE 3, H336	Classification according to calculation procedure.
Aquatic Chronic 3, H412	Classification according to calculation procedure.

The following phrases represent the posted Hazard Class and Risk Category Code (GHS/CLP) of the product and the constituents (specified in Section 2 and 3).

H361d Suspected of damaging the unborn child.
 H225 Highly flammable liquid and vapour.
 H226 Flammable liquid and vapour.
 H302 Harmful if swallowed.
 H304 May be fatal if swallowed and enters airways.
 H312 Harmful in contact with skin.
 H315 Causes skin irritation.
 H318 Causes serious eye damage.
 H319 Causes serious eye irritation.
 H332 Harmful if inhaled.
 H335 May cause respiratory irritation.
 H336 May cause drowsiness or dizziness.
 H373 May cause damage to organs through prolonged or repeated exposure.
 H411 Toxic to aquatic life with long lasting effects.

Flam. Liq. — Flammable liquid
 Acute Tox. — Acute toxicity - inhalation
 Skin Irrit. — Skin irritation
 Eye Dam. — Serious eye damage
 Asp. Tox. — Aspiration hazard
 STOT SE — Specific target organ toxicity - single exposure - narcotic effects
 Aquatic Chronic — Hazardous to the aquatic environment - chronic
 Acute Tox. — Acute toxicity - dermal
 Eye Irrit. — Eye irritation
 Acute Tox. — Acute toxicity - oral
 STOT SE — Specific target organ toxicity - single exposure - respiratory tract irritation
 Repr. — Reproductive toxicity
 STOT RE — Specific target organ toxicity - repeated exposure



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Any abbreviations and acronyms used in this document:

AC Article Categories

acc., acc. to according, according to

ACGIH American Conference of Governmental Industrial Hygienists

ADR Accord européen relatif au transport international des marchandises Dangereuses par Route (= European Agreement concerning the International Carriage of Dangerous Goods by Road)

AOEL Acceptable Operator Exposure Level

AOX Adsorbable organic halogen compounds

approx. approximately

Art., Art. no. Article number

ATE Acute Toxicity Estimate according to Regulation (EC) 1272/2008 (CLP)

BAM Bundesanstalt für Materialforschung und -prüfung (Federal Institute for Materials Research and Testing, Germany)

BAuA Bundesanstalt für Arbeitsschutz und Arbeitsmedizin (= Federal Institute for Occupational Health and Safety, Germany)

BCF Bioconcentration factor

BGV Berufsgenossenschaftliche Vorschrift (= Accident Prevention Regulation)

BHT Butylhydroxytoluol (= 2,6-Di-*t*-butyl-4-methyl-phenol)

BMGV Biological monitoring guidance value (EH40, UK)

BOD Biochemical oxygen demand

BSEF Bromine Science and Environmental Forum

bw body weight

CAS Chemical Abstracts Service

CEC Coordinating European Council for the Development of Performance Tests for Fuels, Lubricants and Other Fluids

CESIO Comité Européen des Agents de Surface et de leurs Intermédiaires Organiques

CIPAC Collaborative International Pesticides Analytical Council

CLP Classification, Labelling and Packaging (REGULATION (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures)

CMR carcinogenic, mutagenic, reproductive toxic

COD Chemical oxygen demand

CTFA Cosmetic, Toiletry, and Fragrance Association

DMEL Derived Minimum Effect Level

DNEL Derived No Effect Level

DOC Dissolved organic carbon

DT50 Dwell Time - 50% reduction of start concentration

DVS Deutscher Verband für Schweißen und verwandte Verfahren e.V. (= German Association for Welding and Allied Processes)

dw dry weight

e.g. for example (abbreviation of Latin 'exempli gratia'), for instance

EC European Community

ECHA European Chemicals Agency

EEA European Economic Area

EEC European Economic Community

EINECS European Inventory of Existing Commercial Chemical Substances

ELINCS European List of Notified Chemical Substances

EN European Norms

EPA United States Environmental Protection Agency (United States of America)

ERC Environmental Release Categories



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ES Exposure scenario
etc. et cetera
EU European Union
EWC European Waste Catalogue
Fax. Fax number
gen. general
GHS Globally Harmonized System of Classification and Labelling of Chemicals
GWP Global warming potential
HET-CAM Hen's Egg Test - Chorionallantoic Membrane
HGWP Halocarbon Global Warming Potential
IARC International Agency for Research on Cancer
IATA International Air Transport Association
IBC Intermediate Bulk Container
IBC (Code) International Bulk Chemical (Code)
IC Inhibitory concentration
IMDG-code International Maritime Code for Dangerous Goods
incl. including, inclusive
IUCLID International Uniform Chemical Information Database
LC lethal concentration
LC50 lethal concentration 50 percent kill
LCLo lowest published lethal concentration
LD Lethal Dose of a chemical
LD50 Lethal Dose, 50% kill
LDLo Lethal Dose Low
LOAEL Lowest Observed Adverse Effect Level
LOEC Lowest Observed Effect Concentration
LOEL Lowest Observed Effect Level
LQ Limited Quantities
MARPOL International Convention for the Prevention of Marine Pollution from Ships
n.a. not applicable
n.av. not available
n.c. not checked
n.d.a. no data available
NIOSH National Institute of Occupational Safety and Health (United States of America)
NOAEC No Observed Adverse Effective Concentration
NOAEL No Observed Adverse Effect Level
NOEC No Observed Effect Concentration
NOEL No Observed Effect Level
ODP Ozone Depletion Potential
OECD Organisation for Economic Co-operation and Development
org. organic
PAH polycyclic aromatic hydrocarbon
PBT persistent, bioaccumulative and toxic
PC Chemical product category
PE Polyethylene
PNEC Predicted No Effect Concentration
POCP Photochemical ozone creation potential
ppm parts per million
PROC Process category
PTFE Polytetrafluorethylene



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REACH Registration, Evaluation, Authorisation and Restriction of Chemicals (REGULATION (EC) No 1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals)

REACH-IT List-No. 9xx-xxx-x No. is automatically assigned, e.g. to pre-registrations without a CAS No. or other numerical identifier. List Numbers do not have any legal significance, rather they are purely technical identifiers for processing a submission via REACH-IT.

RID Règlement concernant le transport International ferroviaire de marchandises Dangereuses (= Regulation concerning the International Carriage of Dangerous Goods by Rail)

SADT Self-Accelerating Decomposition Temperature

SAR Structure Activity Relationship

SU Sector of use

SVHC Substances of Very High Concern

Tel. Telephone

ThOD Theoretical oxygen demand

TOC Total organic carbon

TRGS Technische Regeln für Gefahrstoffe (=Technical Regulations for Hazardous Substances)

UN RTDG United Nations Recommendations on the Transport of Dangerous Goods

VbF Verordnung über brennbare Flüssigkeiten (= Regulation for flammable liquids (Austria))

VOC Volatile organic compounds

vPvB very persistent and very bioaccumulative

WEL-TWA, WEL-STEL WEL-TWA = Workplace Exposure Limit - Long-term exposure limit (8-hour TWA (= time weighted average) reference period), WEL-STEL = Workplace Exposure Limit - Short-term exposure limit (15-minute reference period) (EH40, UK).

WHO World Health Organization

wwt wet weight

The statements made here should describe the product with regard to the necessary safety precautions - they are not meant to guarantee definite characteristics - but they are based on our present up-to-date knowledge.

No responsibility.