

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878 Issue date: 11/28/2014 Revision date: 9/14/2023 Supersedes version of: 9/17/2021 Version: 6.4

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

1.1. Product identifier

Product form : Mixture

Product name : THINNERS - FP <21C

Synonyms : THINNERS FLASH POINT BELOW 21C

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

1.2.1. Relevant identified uses

No additional information available

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Rutpen Ltd Membury Airfield Industrial Estate Lambourn RG17 7TJ – Berkshire T 01488 71926

technical@rutpen.co.uk - www.rutpen.co.uk

1.4. Emergency telephone number

Emergency number : 0333 333 9962

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Flammable liquids, Category 2 H225 Acute toxicity (inhalation:dust,mist) Category 4 H332 Skin corrosion/irritation, Category 2 H315 Serious eye damage/eye irritation, Category 2 H319 H340 Germ cell mutagenicity, Category 1B H350 Carcinogenicity, Category 1A Reproductive toxicity, Category 2 H361d Specific target organ toxicity - Single exposure, Category 3, H336

Narcosis

Specific target organ toxicity – Repeated exposure, Category 2 H373 Hazardous to the aquatic environment – Chronic Hazard, H412

Category 3

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

Adverse physicochemical, human health and environmental effects

Highly flammable liquid and vapour. May cause cancer. May cause genetic defects. Suspected of damaging fertility or the unborn child. May cause damage to organs through prolonged or repeated exposure. May cause drowsiness or dizziness. Harmful if inhaled. Causes skin irritation. Causes serious eye irritation. Harmful to aquatic life with long lasting effects.

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP)





GHS02

GHS07

GHS08

Signal word (CLP) : Danger

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Contains : XYLENE; N-BUTYL ACETATE; METHANOL; BUTAN-1-OL; 4-METHYLPENTAN-2-ONE;

ACETONE; PROPAN-2-OL; MEK; ETHYL ACETATE; TOLUENE; LOW BOILING POINT

NAPHTHA - UNSPECIFIED - SOLVENT NAPHTHA (PETROLEUM), LIGHT AROM.

Hazard statements (CLP) : H225 - Highly flammable liquid and vapour.

H315 - Causes skin irritation. H319 - Causes serious eye irritation.

H332 - Harmful if inhaled.

H336 - May cause drowsiness or dizziness.

H340 - May cause genetic defects.

H350 - May cause cancer.

H361d - Suspected of damaging the unborn child.

H373 - May cause damage to organs through prolonged or repeated exposure.

H412 - Harmful to aquatic life with long lasting effects.

Precautionary statements (CLP) : P201 - Obtain special instructions before use.

P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources.

No smoking.

P261 - Avoid breathing dust/fume/gas/mist/vapours/spray.
P264 - Wash hands, forearms and face thoroughly after handling.

P280 - Wear protective gloves/protective clothing/eye protection/face protection/hearing

protection.

P308+P313 - IF exposed or concerned: Get medical advice/attention.

2.3. Other hazards

Contains no PBT/vPvB substances ≥ 0.1% assessed in accordance with REACH Annex XIII

The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0,1 %

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
XYLENE	CAS-No.: 1330-20-7 EC-No.: 215-535-7 EC Index-No.: 601-022-00-9	≥ 25 – < 50	Flam. Liq. 3, H226 Acute Tox. 4 (Dermal), H312 Acute Tox. 4 (Inhalation), H332 Acute Tox. 4 (Inhalation:dust,mist), H332 Skin Irrit. 2, H315 Aquatic Chronic 2, H411
MEK	CAS-No.: 78-93-3 EC-No.: 201-159-0 EC Index-No.: 606-002-00-3	≥ 15 – < 25	Flam. Liq. 2, H225 Eye Irrit. 2, H319 STOT SE 3, H336
LOW BOILING POINT NAPHTHA - UNSPECIFIED - SOLVENT NAPHTHA (PETROLEUM), LIGHT AROM.	CAS-No.: 64742-95-6 EC-No.: 265-199-0 EC Index-No.: 649-356-00-4	≥ 5 – < 15	Flam. Liq. 3, H226 Muta. 1B, H340 Carc. 1A, H350 STOT SE 3, H335 Asp. Tox. 1, H304 Aquatic Chronic 2, H411

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Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
TOLUENE	CAS-No.: 108-88-3 EC-No.: 203-625-9 EC Index-No.: 601-021-00-3	≥ 5 – < 15	Flam. Liq. 2, H225 Skin Irrit. 2, H315 Repr. 2, H361d STOT SE 3, H336 STOT RE 2, H373 Asp. Tox. 1, H304 Aquatic Chronic 1, H410
N-BUTYL ACETATE	CAS-No.: 123-86-4 EC-No.: 204-658-1 EC Index-No.: 607-025-00-1	≥ 5 – < 15	Flam. Liq. 3, H226 STOT SE 3, H336 Aquatic Chronic 3, H412
ACETONE	CAS-No.: 67-64-1 EC-No.: 200-662-2 EC Index-No.: 606-001-00-8	≥ 5 – < 15	Flam. Liq. 2, H225 Eye Irrit. 2, H319 STOT SE 3, H336
ETHYL ACETATE	CAS-No.: 141-78-6 EC-No.: 205-500-4 EC Index-No.: 607-022-00-5	≥1-<5	Flam. Liq. 2, H225 Eye Irrit. 2, H319 STOT SE 3, H336
BUTAN-1-OL	CAS-No.: 71-36-3 EC-No.: 200-751-6 EC Index-No.: 603-004-00-6	≥1-<5	Flam. Liq. 3, H226 Acute Tox. 4 (Oral), H302 Skin Irrit. 2, H315 Eye Dam. 1, H318 STOT SE 3, H336 STOT SE 3, H335
METHANOL	CAS-No.: 67-56-1 EC-No.: 200-659-6 EC Index-No.: 603-001-00-X	≥1-<5	Flam. Liq. 2, H225 Acute Tox. 3 (Oral), H301 Acute Tox. 3 (Dermal), H311 Acute Tox. 3 (Inhalation), H331 Acute Tox. 3 (Inhalation:dust,mist), H331 STOT SE 1, H370
4-METHYLPENTAN-2-ONE	CAS-No.: 108-10-1 EC-No.: 203-550-1 EC Index-No.: 606-004-00-4	≥1-<5	Flam. Liq. 2, H225 Acute Tox. 4 (Inhalation), H332 Acute Tox. 4 (Inhalation:dust,mist), H332 Eye Irrit. 2, H319 Carc. 2, H351 STOT SE 3, H335
PROPAN-2-OL	CAS-No.: 67-63-0 EC-No.: 200-661-7 EC Index-No.: 603-117-00-0	≥1-<5	Flam. Liq. 2, H225 Eye Irrit. 2, H319 STOT SE 3, H336

Specific concentration limits:			
Name Product identifier		Specific concentration limits (%)	
METHANOL	CAS-No.: 67-56-1 EC-No.: 200-659-6 EC Index-No.: 603-001-00-X	(3 ≤ C ≤ 10) STOT SE 2, H371 (10 ≤ C < 100) STOT SE 1, H370	

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

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general

: IF exposed or concerned: Get medical advice/attention. Call a poison center or a doctor if you feel unwell.

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First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing. Call a poison center or a

doctor if you feel unwell.

First-aid measures after skin contact : Rinse skin with water/shower. Take off immediately all contaminated clothing. If skin

irritation occurs: Get medical advice/attention.

First-aid measures after eye contact : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy

to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

First-aid measures after ingestion : Call a poison center or a doctor if you feel unwell.

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

Symptoms/effects : May cause drowsiness or dizziness.

Symptoms/effects after skin contact : Irritation.
Symptoms/effects after eye contact : Eye irritation.

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

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Water spray. Dry powder. Foam. Carbon dioxide.

5.2. Special hazards arising from the substance or mixture

Fire hazard : Highly flammable liquid and vapour. Hazardous decomposition products in case of fire : Toxic fumes may be released.

5.3. Advice for firefighters

Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained

breathing apparatus. Complete protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Emergency procedures : No open flames, no sparks, and no smoking. Only qualified personnel equipped with

suitable protective equipment may intervene. Do not breathe

dust/fume/gas/mist/vapours/spray.

6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information

refer to section 8: "Exposure controls/personal protection".

6.2. Environmental precautions

Avoid release to the environment. Notify authorities if product enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Take up liquid spill into absorbent material. Notify authorities if product enters sewers or

public waters.

Other information : Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

For further information refer to section 13.

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SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling

: Ensure good ventilation of the work station. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Ground/bond container and receiving equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Flammable vapours may accumulate in the container. Use explosion-proof equipment. Wear personal protective equipment. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Take all necessary technical measures to avoid or minimize the release of the product on the workplace. Limit quantities of product at the minimum necessary for handling and limit the number of exposed workers. Provide local exhaust or general room ventilation. Floors, walls and other surfaces in the hazard area must be cleaned regularly. Do not breathe dust/fume/gas/mist/vapours/spray. Avoid contact with skin and eyes.

Hygiene measures

Separate working clothes from town clothes. Launder separately. Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures

: Ground/bond container and receiving equipment.

Storage conditions

: Store in a well-ventilated place. Keep cool. Keep container tightly closed. Store locked up.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1 National occupational exposure and biological limit values

ETHANOL (64-17-5)		
United Kingdom - Occupational Exposure Limits		
Local name	Ethanol	
WEL TWA (OEL TWA) [1]	1920 mg/m³	
WEL TWA (OEL TWA) [2]	1000 ppm	
Regulatory reference	EH40/2005 (Fourth edition, 2020). HSE	

8.1.2. Recommended monitoring procedures

No additional information available

8.1.3. Air contaminants formed

No additional information available

8.1.4. DNEL and PNEC

No additional information available

8.1.5. Control banding

No additional information available

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8.2. Exposure controls

8.2.1. Appropriate engineering controls

Appropriate engineering controls:

Ensure good ventilation of the work station.

8.2.2. Personal protection equipment

Personal protective equipment symbol(s):







8.2.2.1. Eye and face protection

Eye protection:

Safety glasses

8.2.2.2. Skin protection

Skin and body protection:

Wear suitable protective clothing

Hand protection:

Protective gloves

8.2.2.3. Respiratory protection

Respiratory protection:

[In case of inadequate ventilation] wear respiratory protection.

8.2.2.4. Thermal hazards

No additional information available

8.2.3. Environmental exposure controls

Environmental exposure controls:

Avoid release to the environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Liquid Colour : Colourless.

Odour : Characteristic odour.

Odour threshold Not available Melting point Not applicable Freezing point Not available Boiling point > 35 °C Flammability Not applicable Lower explosion limit Not available Upper explosion limit Not available Flash point < 21 °C Auto-ignition temperature Not available Decomposition temperature Not available Not available рΗ Viscosity, kinematic Not available Solubility Not available Partition coefficient n-octanol/water (Log Kow) : Not available Vapour pressure : Not available Vapour pressure at 50°C : Not available Density Not available

Relative density : 0.8
Relative vapour density at 20°C : Not available

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Particle characteristics : Not applicable

9.2. Other information

9.2.1. Information with regard to physical hazard classes

No additional information available

9.2.2. Other safety characteristics

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

Highly flammable liquid and vapour.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

Avoid contact with hot surfaces. Heat. No flames, no sparks. Eliminate all sources of ignition.

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

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

Acute toxicity (oral) : Not classified
Acute toxicity (dermal) : Not classified
Acute toxicity (inhalation) : Harmful if inhaled.

Acute toxicity (inhalation) :	Harmful if innaled.
THINNERS - FP <21C	
ATE CLP (dust,mist)	3.947 mg/l/4h
XYLENE (1330-20-7)	
LD50 dermal rabbit	12126 mg/kg bodyweight Animal: rabbit, Animal sex: male
METHANOL (67-56-1)	
LD50 oral rat	1187 – 2769 mg/kg bodyweight Animal: rat
BUTAN-1-OL (71-36-3)	
LD50 oral rat	≈ 2292 mg/kg bodyweight Animal: rat, Animal sex: female, Guideline: OECD Guideline 401 (Acute Oral Toxicity)
LD50 dermal rabbit	≈ 3430 mg/kg bodyweight Animal: rabbit, Animal sex: male, Guideline: OECD Guideline 402 (Acute Dermal Toxicity)
	102 (route 2011 in 10xiolity)
4-METHYLPENTAN-2-ONE (108-10-1)	102 (Total Politicity)

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4-METHYLPENTAN-2-ONE (108-10-1)			
LC50 Inhalation - Rat	11.6 mg/l air Animal: rat, Animal sex: male, Guideline: OECD Guideline 403 (Acute Inhalation Toxicity)		
ACETONE (67-64-1)			
LD50 oral rat	5800 mg/kg bodyweight Animal: rat, Animal sex: female		
LC50 Inhalation - Rat	76 mg/l air Animal: rat, Animal sex: female, 95% CL: 65,2 - 88,4		
PROPAN-2-OL (67-63-0)			
LD50 oral rat	5840 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 401 (Acute Oral Toxicity)		
ETHYL ACETATE (141-78-6)			
LD50 oral	4934 mg/kg bodyweight Animal: rabbit, Guideline: OECD Guideline 401 (Acute Oral Toxicity)		
LD50 dermal rabbit	> 20000 mg/kg bodyweight Animal: rabbit, Animal sex: male		
TOLUENE (108-88-3)			
LD50 oral rat	5580 mg/kg bodyweight Animal: rat, Animal sex: male, Guideline: EU Method B.1 (Acute Toxicity (Oral)), 95% CL: 5300 - 5910		
LD50 dermal rabbit	> 5000 mg/kg bodyweight Animal: rabbit, Animal sex: male, 95% CL: 9,63 - 20,77		
LOW BOILING POINT NAPHTHA - UNSPECIFIE	ED - SOLVENT NAPHTHA (PETROLEUM), LIGHT AROM. (64742-95-6)		
LD50 oral rat	> 5000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 401 (Acute Oral Toxicity)		
Skin corrosion/irritation :	Causes skin irritation.		
N-BUTYL ACETATE (123-86-4)			
рН	6.2 Temp.: 20 °C Concentration: (≈)5 g/L		
	Causes serious eye irritation.		
N-BUTYL ACETATE (123-86-4)			
рН	6.2 Temp.: 20 °C Concentration: (≈)5 g/L		
• •	Not classified		
	May cause genetic defects. May cause cancer.		
	Suspected of damaging the unborn child.		
METHANOL (67-56-1)			
NOAEL (animal/male, F0/P)	< 1000 mg/kg bodyweight Animal: mouse, Animal sex: male		
ACETONE (67-64-1)			
LOAEL (animal/female, F0/P)	11298 mg/kg bodyweight Animal: mouse, Animal sex: female		
NOAEL (animal/male, F0/P)	900 mg/kg bodyweight Animal: rat, Animal sex: male, Remarks on results: other:Generation not specified (migrated information)		
STOT-single exposure :	May cause drowsiness or dizziness.		
N-BUTYL ACETATE (123-86-4)			
STOT-single exposure	May cause drowsiness or dizziness.		
METHANOL (67-56-1)			
STOT-single exposure	Causes damage to organs.		

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BUTAN-1-OL (71-36-3)		
STOT-single exposure	May cause drowsiness or dizziness. May cause respiratory irritation.	
4-METHYLPENTAN-2-ONE (108-10-1)		
STOT-single exposure	May cause respiratory irritation.	
ACETONE (67-64-1)		
STOT-single exposure	May cause drowsiness or dizziness.	
PROPAN-2-OL (67-63-0)		
STOT-single exposure	May cause drowsiness or dizziness.	
MEK (78-93-3)		
STOT-single exposure	May cause drowsiness or dizziness.	
ETHYL ACETATE (141-78-6)		
STOT-single exposure	May cause drowsiness or dizziness.	
TOLUENE (108-88-3)		
STOT-single exposure	May cause drowsiness or dizziness.	
LOW BOILING POINT NAPHTHA - UNSPECIFI	ED - SOLVENT NAPHTHA (PETROLEUM), LIGHT AROM. (64742-95-6)	
STOT-single exposure	May cause respiratory irritation.	
STOT-repeated exposure :	May cause damage to organs through prolonged or repeated exposure.	
XYLENE (1330-20-7)		
LOAEL (oral, rat, 90 days)	150 mg/kg bodyweight Animal: rat, Animal sex: male, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity in Rodents), Guideline: EPA OPP 82-1 (90-Day Oral Toxicity)	
BUTAN-1-OL (71-36-3)		
LOAEL (oral, rat, 90 days)	500 mg/kg bodyweight Animal: rat	
NOAEL (oral, rat, 90 days)	125 mg/kg bodyweight Animal: rat	
4-METHYLPENTAN-2-ONE (108-10-1)		
LOAEL (oral, rat, 90 days)	1000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity in Rodents)	
NOAEL (oral, rat, 90 days)	250 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 408 (Repeated Dose 90- Day Oral Toxicity in Rodents)	
NOAEC (inhalation, rat, vapour, 90 days)	4.106 mg/l air Animal: rat, Guideline: OECD Guideline 413 (Subchronic Inhalation Toxicity: 90-Day Study)	
ETHYL ACETATE (141-78-6)		
LOAEL (oral, rat, 90 days)	3600 mg/kg bodyweight Animal: rat, Guideline: EPA OTS 795.2600 (Subchronic Oral Toxicity Test)	
NOAEL (oral, rat, 90 days)	900 mg/kg bodyweight Animal: rat, Guideline: EPA OTS 795.2600 (Subchronic Oral Toxicity Test)	
TOLUENE (108-88-3)		
LOAEL (oral, rat, 90 days)	1250 mg/kg bodyweight Animal: rat, Guideline: EU Method B.26 (Sub-Chronic Oral Toxicity Test: Repeated Dose 90-Day Oral Toxicity Study in Rodents)	
NOAEL (oral, rat, 90 days)	625 mg/kg bodyweight Animal: rat, Guideline: EU Method B.26 (Sub-Chronic Oral Toxicity Test: Repeated Dose 90-Day Oral Toxicity Study in Rodents)	

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TOLUENE (108-88-3)		
NOAEC (inhalation, rat, vapour, 90 days)	2.355 mg/l air Animal: rat, Guideline: EU Method B.29 (Sub-Chronic Inhalation Toxicity:90-Day Study)	
STOT-repeated exposure	May cause damage to organs through prolonged or repeated exposure.	
Aspiration hazard : Not classified		
N-BUTYL ACETATE (123-86-4)		
Viscosity, kinematic	0.83 mm²/s Temp.: '20°C' Parameter: 'kinematic viscosity (in mm²/s)'	
BUTAN-1-OL (71-36-3)		
Viscosity, kinematic	3.641 mm²/s	
LOW BOILING POINT NAPHTHA - UNSPECIFIED - SOLVENT NAPHTHA (PETROLEUM), LIGHT AROM. (64742-95-6)		
Viscosity, kinematic < 1 mm²/s Temp.: 'other:37.8°C' Parameter: 'kinematic viscosity (in mm²/s)'		

11.2. Information on other hazards

No additional information available

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : Harmful to aquatic life with long lasting effects.

Hazardous to the aquatic environment, short-term : Not classified

(acute)

Hazardous to the aquatic environment, long-term : Harmful to aquatic life with long lasting effects.

(chronic)

Not rapidly degradable

Not rapidly degradable	
XYLENE (1330-20-7)	
LC50 - Fish [1]	2.6 mg/l Test organisms (species): Oncorhynchus mykiss (previous name: Salmo gairdneri)
EC50 - Crustacea [1]	> 3.4 mg/l Test organisms (species): Ceriodaphnia dubia
NOEC chronic fish	> 1.3 mg/l Test organisms (species): Oncorhynchus mykiss (previous name: Salmo gairdneri) Duration: '56 d'
N-BUTYL ACETATE (123-86-4)	
LC50 - Fish [1]	18 mg/l Test organisms (species): Pimephales promelas
EC50 - Crustacea [1]	44 mg/l Test organisms (species): Daphnia sp.
EC50 72h - Algae [1]	674.7 mg/l Test organisms (species): Desmodesmus subspicatus (previous name: Scenedesmus subspicatus)
NOEC (chronic)	23 mg/l Test organisms (species): Daphnia magna Duration: '21 d'
METHANOL (67-56-1)	
LC50 - Fish [1]	15400 mg/l Test organisms (species): Lepomis macrochirus
EC50 96h - Algae [1]	≈ 22000 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)
NOEC (chronic)	208 mg/l Test organisms (species): Daphnia magna Duration: '21 d'
BUTAN-1-OL (71-36-3)	
LC50 - Fish [1]	1376 mg/l Test organisms (species): Pimephales promelas
EC50 - Crustacea [1]	1328 mg/l Test organisms (species): Daphnia magna
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BUTAN-1-OL (71-36-3)				
EC50 96h - Algae [1]	225 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)			
NOEC (chronic)	4.1 mg/l Test organisms (species): Daphnia magna Duration: '21 d'			
4-METHYLPENTAN-2-ONE (108-10-1)				
LC50 - Fish [1]	> 179 mg/l Test organisms (species): Danio rerio (previous name: Brachydanio rerio)			
EC50 - Crustacea [1]	> 200 mg/l Test organisms (species): Daphnia magna			
ACETONE (67-64-1)				
LOEC (chronic)	> 79 mg/l Test organisms (species): Daphnia magna Duration: '21 d'			
NOEC (chronic)	≥ 79 mg/l Test organisms (species): Daphnia magna Duration: '21 d'			
PROPAN-2-OL (67-63-0)				
LC50 - Fish [1]	10000 mg/l Test organisms (species): Pimephales promelas			
LC50 - Fish [2]	9640 mg/l Test organisms (species): Pimephales promelas			
MEK (78-93-3)				
LC50 - Fish [1]	2993 mg/l Test organisms (species): Pimephales promelas			
EC50 - Crustacea [1]	308 mg/l Test organisms (species): Daphnia magna			
EC50 72h - Algae [1]	1972 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)			
EC50 96h - Algae [1]	2029 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)			
ETHYL ACETATE (141-78-6)				
LC50 - Fish [1]	230 mg/l Test organisms (species): Pimephales promelas			
NOEC (chronic)	2.4 mg/l Test organisms (species): Daphnia magna Duration: '21 d'			
TOLUENE (108-88-3)				
LC50 - Fish [1]	5.5 mg/l Test organisms (species): Oncorhynchus kisutch			
LOEC (chronic)	2.76 mg/l Test organisms (species): Ceriodaphnia dubia Duration: '7 d'			
NOEC (chronic)	0.74 mg/l Test organisms (species): Ceriodaphnia dubia Duration: '7 d'			
NOEC chronic fish	1.39 mg/l Test organisms (species): Oncorhynchus kisutch Duration: '40 d'			

12.2. Persistence and degradability

No additional information available

12.3. Bioaccumulative potential

No additional information available

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Endocrine disrupting properties

No additional information available

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12.7. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.

Additional information : Flammable vapours may accumulate in the container.

SECTION 14: Transport information

In accordance with ADR / IMDG / IATA / ADN / RID

ADR	IMDG	IATA	ADN	RID	
14.1. UN number or ID number					
UN 1993	UN 1993	UN 1993	UN 1993	UN 1993	
14.2. UN proper shippin	g name				
FLAMMABLE LIQUID, N.O.S.	FLAMMABLE LIQUID, N.O.S.	Flammable liquid, n.o.s.	FLAMMABLE LIQUID, N.O.S.	FLAMMABLE LIQUID, N.O.S.	
Transport document descr	iption				
UN 1993 FLAMMABLE LIQUID, N.O.S., 3, I, (D/E)	UN 1993 FLAMMABLE LIQUID, N.O.S., 3, I	UN 1993 Flammable liquid, n.o.s., 3, I	UN 1993 FLAMMABLE LIQUID, N.O.S., 3, I	UN 1993 FLAMMABLE LIQUID, N.O.S., 3, I	
14.3. Transport hazard o	class(es)				
3	3	3	3	3	
3	3	3	3	3	
14.4. Packing group					
I	I	I	I	I	
14.5. Environmental hazards					
Dangerous for the environment: No	Dangerous for the environment: No Marine pollutant: No	Dangerous for the environment: No	Dangerous for the environment: No	Dangerous for the environment: No	
No supplementary information	n available	1		1	

14.6. Special precautions for user

Overland transport

Classification code (ADR) : F1
Special provisions (ADR) : 274
Limited quantities (ADR) : 0
Excepted quantities (ADR) : E3
Packing instructions (ADR) : P001
Mixed packing provisions (ADR) : MP7, MP17
Portable tank and bulk container instructions (ADR) : T11
Portable tank and bulk container special provisions : TP1, TP27

(ADR)

Tank code (ADR) : L4BN
Vehicle for tank carriage : FL
Transport category (ADR) : 1

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Hazard identification number (Kemler No.) : 33

Orange plates :

33 1993

Tunnel restriction code (ADR) : D/E EAC code : •3YE

Transport by sea

Special provisions (IMDG) : 274 Limited quantities (IMDG) : 0 : E3 Excepted quantities (IMDG) : P001 Packing instructions (IMDG) : T11 Tank instructions (IMDG) Tank special provisions (IMDG) : TP1, TP27 : F-E EmS-No. (Fire) : S-E EmS-No. (Spillage) Stowage category (IMDG) : E

Air transport

PCA Excepted quantities (IATA) : E3 PCA Limited quantities (IATA) Forbidden PCA limited quantity max net quantity (IATA) Forbidden PCA packing instructions (IATA) 351 PCA max net quantity (IATA) 1L CAO packing instructions (IATA) 361 CAO max net quantity (IATA) : 30L Special provisions (IATA) : A3 ERG code (IATA) : 3H

Inland waterway transport

Classification code (ADN) : F1 Special provisions (ADN) : 274 Limited quantities (ADN) : 0 Excepted quantities (ADN) : E3 Carriage permitted (ADN) : T Equipment required (ADN) : PP, EX, A Ventilation (ADN) : VE01 Number of blue cones/lights (ADN) : 1

Rail transport

Classification code (RID) : F1 Special provisions (RID) : 274 Limited quantities (RID) : 0 : E3 Excepted quantities (RID) : P001 Packing instructions (RID) Mixed packing provisions (RID) : MP7, MP17 Portable tank and bulk container instructions (RID) T11 Portable tank and bulk container special provisions : TP1, TP27

(RID)

Tank codes for RID tanks (RID) : L4BN
Transport category (RID) : 1
Hazard identification number (RID) : 33

14.7. Maritime transport in bulk according to IMO instruments

Not applicable

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SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

REACH Annex XVII (Restriction List)

Contains no substance(s) listed on REACH Annex XVII (Restriction Conditions)

REACH Annex XIV (Authorisation List)

Contains no substance(s) listed on REACH Annex XIV (Authorisation List)

REACH Candidate List (SVHC)

Contains no substance(s) listed on the REACH Candidate List

PIC Regulation (Prior Informed Consent)

Contains no substance(s) listed on the PIC list (Regulation EU 649/2012 concerning the export and import of hazardous chemicals)

POP Regulation (Persistent Organic Pollutants)

Contains no substance(s) listed on the POP list (Regulation EU 2019/1021 on persistent organic pollutants)

Ozone Regulation (1005/2009)

Contains no substance(s) listed on the Ozone Depletion list (Regulation EU 1005/2009 on substances that deplete the ozone layer)

Explosives Precursors Regulation (2019/1148)

Contains substance(s) listed on the Explosives Precursors list (Regulation EU 2019/1148 on the marketing and use of explosives precursors)

ANNEX II REPORTABLE EXPLOSIVES PRECURSORS

List of substances on their own or in mixtures or in substances for which suspicious transactions and significant disappearances and thefts are to be reported to the relevant national contact point within 24 hours.

Name		Nomenclature	Combined Nomenclature code for mixture without constituents which would determine classification under another CN code
Acetone	67-64-1	2914 11 00	ex 3824 99 92

Please see https://home-affairs.ec.europa.eu/policies/internal-security/counter-terrorism-and-radicalisation/protection/legislation-chemicals-used-home-made-explosives_en

Drug Precursors Regulation (273/2004)

Contains no substance(s) listed on the Drug Precursors list (Regulation EC 273/2004 on the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances)

15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

Indication of changes			
Section	Changed item	Change	Comments
	Substance(s) listed on the REACH Candidate List	Added	
	Revision date	Modified	
2.2	Precautionary statements (CLP)	Modified	

Abbreviations and acronyms:		
ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways	

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Abbreviations and acronyms:		
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road	
ATE	Acute Toxicity Estimate	
BCF	Bioconcentration factor	
BLV	Biological limit value	
BOD	Biochemical oxygen demand (BOD)	
COD	Chemical oxygen demand (COD)	
DMEL	Derived Minimal Effect level	
DNEL	Derived-No Effect Level	
EC-No.	European Community number	
EC50	Median effective concentration	
EN	European Standard	
IARC	International Agency for Research on Cancer	
IATA	International Air Transport Association	
IMDG	International Maritime Dangerous Goods	
LC50	Median lethal concentration	
LD50	Median lethal dose	
LOAEL	Lowest Observed Adverse Effect Level	
NOAEC	No-Observed Adverse Effect Concentration	
NOAEL	No-Observed Adverse Effect Level	
NOEC	No-Observed Effect Concentration	
OECD	Organisation for Economic Co-operation and Development	
OEL	Occupational Exposure Limit	
PBT	Persistent Bioaccumulative Toxic	
PNEC	Predicted No-Effect Concentration	
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail	
SDS	Safety Data Sheet	
STP	Sewage treatment plant	
ThOD	Theoretical oxygen demand (ThOD)	
TLM	Median Tolerance Limit	
VOC	Volatile Organic Compounds	
CAS-No.	Chemical Abstract Service number	
N.O.S.	Not Otherwise Specified	
vPvB	Very Persistent and Very Bioaccumulative	
ED	Endocrine disrupting properties	

Full text of H- and EUH-statements:	
Acute Tox. 3 (Dermal)	Acute toxicity (dermal), Category 3
Acute Tox. 3 (Inhalation)	Acute toxicity (inhal.), Category 3

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Full text of H- and EUH-statements:		
Acute Tox. 3 (Inhalation:dust,mist)	Acute toxicity (inhalation:dust,mist) Category 3	
Acute Tox. 3 (Oral)	Acute toxicity (oral), Category 3	
Acute Tox. 4 (Dermal)	Acute toxicity (dermal), Category 4	
Acute Tox. 4 (Inhalation)	Acute toxicity (inhal.), Category 4	
Acute Tox. 4 (Inhalation:dust,mist)	Acute toxicity (inhalation:dust,mist) Category 4	
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4	
Aquatic Chronic 1	Hazardous to the aquatic environment – Chronic Hazard, Category 1	
Aquatic Chronic 2	Hazardous to the aquatic environment – Chronic Hazard, Category 2	
Aquatic Chronic 3	Hazardous to the aquatic environment – Chronic Hazard, Category 3	
Asp. Tox. 1	Aspiration hazard, Category 1	
Carc. 1A	Carcinogenicity, Category 1A	
Carc. 2	Carcinogenicity, Category 2	
Eye Dam. 1	Serious eye damage/eye irritation, Category 1	
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2	
Flam. Liq. 2	Flammable liquids, Category 2	
Flam. Liq. 3	Flammable liquids, Category 3	
H225	Highly flammable liquid and vapour.	
H226	Flammable liquid and vapour.	
H301	Toxic if swallowed.	
H302	Harmful if swallowed.	
H304	May be fatal if swallowed and enters airways.	
H311	Toxic in contact with skin.	
H312	Harmful in contact with skin.	
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.	
H336	May cause drowsiness or dizziness.	
H340	May cause genetic defects.	
H350	May cause cancer.	
H351	Suspected of causing cancer.	
H361d	Suspected of damaging the unborn child.	
H370	Causes damage to organs.	
H371	May cause damage to organs.	
H373	May cause damage to organs through prolonged or repeated exposure.	
H410	Very toxic to aquatic life with long lasting effects.	

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Full text of H- and EUH-statements:		
H411	Toxic to aquatic life with long lasting effects.	
H412	Harmful to aquatic life with long lasting effects.	
Muta. 1B	Germ cell mutagenicity, Category 1B	
Repr. 2	Reproductive toxicity, Category 2	
Skin Irrit. 2	Skin corrosion/irritation, Category 2	
STOT RE 2	Specific target organ toxicity – Repeated exposure, Category 2	
STOT SE 1	Specific target organ toxicity – single exposure, Category 1	
STOT SE 2	Specific target organ toxicity – Single exposure, Category 2	
STOT SE 3	Specific target organ toxicity – Single exposure, Category 3, Narcosis	

Safety Data Sheet (SDS), EU

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.