

**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](mailto:technical@rutpen.co.uk) - [www.rutpen.co.uk](http://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
Germ cell mutagenicity, Category 1B	H340
Carcinogenicity, Category 1A	H350
Reproductive toxicity, Category 2	H361d
Specific target organ toxicity — Single exposure, Category 3, Narcosis	H336
Specific target organ toxicity — Repeated exposure, Category 2	H373
Hazardous to the aquatic environment — Chronic Hazard, Category 3	H412

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]**

<tx:\_GHS\_PICTOS> (CLP)



Signal word (CLP) : Danger

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according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

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

No additional information available

## 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
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

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Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
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, H335 STOT SE 3, H336
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 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.
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.

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### 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)	
<b>Austria - Occupational Exposure Limits</b>	
Local name	Ethanol
MAK (OEL TWA)	1900 mg/m <sup>3</sup>
MAK (OEL TWA) [ppm]	1000 ppm
MAK (OEL STEL)	3800 mg/m <sup>3</sup> (3x 60(Mow) min)
MAK (OEL STEL) [ppm]	2000 ppm (3x 60(Mow) min)
Regulatory reference	BGBI. II Nr. 238/2018
<b>Belgium - Occupational Exposure Limits</b>	
Local name	Alcool éthylique # Ethanol
OEL TWA	1907 mg/m <sup>3</sup>
OEL TWA [ppm]	1000 ppm
Regulatory reference	Koninklijk besluit/Arrêté royal 19/11/2020
<b>Bulgaria - Occupational Exposure Limits</b>	
Local name	Етилов алкохол
OEL TWA	1000 mg/m <sup>3</sup>
Regulatory reference	Наредба № 13 от 30.12.2003 г. за защита на работещите от рискове, свързани с експозиция на химични агенти при работа (изм. и доп. ДВ. бр. 47 от 2021 г., в сила от 04.06.2021 г.)

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<b>ETHANOL (64-17-5)</b>	
<b>Croatia - Occupational Exposure Limits</b>	
Local name	Etanol; etil-alkohol
GVI (OEL TWA) [1]	1900 mg/m <sup>3</sup>
GVI (OEL TWA) [2]	1000 ppm
Regulatory reference	Pravilnik o izmjenama i dopunama Pravilnika o graničnim vrijednostima izloženosti opasnim tvarima pri radu i o biološkim graničnim vrijednostima (NN 1/2021)
<b>Czech Republic - Occupational Exposure Limits</b>	
Local name	Ethanol (Ethylalkohol)
PEL (OEL TWA)	1000 mg/m <sup>3</sup>
PEL (OEL TWA) [ppm]	522 ppm
NPK-P (OEL Ceiling)	3000 mg/m <sup>3</sup>
NPK-P (OEL Ceiling) [ppm]	1566 ppm
Regulatory reference	Nařízení vlády č. 361/2007 Sb. (Předpis 195/2021 Sb.)
<b>Denmark - Occupational Exposure Limits</b>	
Local name	Ethanol (Ethylalkohol)
OEL TWA [1]	1900 mg/m <sup>3</sup>
OEL TWA [2]	1000 ppm
Regulatory reference	BEK nr 1426 af 28. juni 2021
<b>Estonia - Occupational Exposure Limits</b>	
Local name	Etanool (etüülalkohol)
OEL TWA	1000 mg/m <sup>3</sup>
OEL TWA [ppm]	500 ppm
OEL STEL	1900 mg/m <sup>3</sup>
OEL STEL [ppm]	1000 ppm
Regulatory reference	Vabariigi Valitsuse 20. märtsi 2001. a määruse nr 105 (RT I, 17.10.2019, 2); Vabariigi Valitsuse 10. märtsi 2019. a määruse nr 84
<b>France - Occupational Exposure Limits</b>	
Local name	Alcool éthylique
VME (OEL TWA)	1900 mg/m <sup>3</sup>
VME (OEL TWA) [ppm]	1000 ppm
VLE (OEL Ceiling/STEL)	9500 mg/m <sup>3</sup>
VLE (OEL Ceiling/STEL) [ppm]	5000 ppm
Remark	Valeurs recommandées/admises
Regulatory reference	Circulaire du Ministère du travail (réf.: INRS ED 984, 2016)
<b>Germany - Occupational Exposure Limits (TRGS 900)</b>	
Local name	Ethanol
AGW (OEL TWA) [1]	380 mg/m <sup>3</sup>
AGW (OEL TWA) [2]	200 ppm
Peak exposure limitation factor	2(II)

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<b>ETHANOL (64-17-5)</b>	
Remark	DFG - Senatskommission zur Prüfung gesundheitsschädlicher Arbeitsstoffe der DFG (MAK-Kommission); Y - Ein Risiko der Fruchtschädigung braucht bei Einhaltung des Arbeitsplatzgrenzwertes und des biologischen Grenzwertes (BGW) nicht befürchtet zu werden
Regulatory reference	TRGS900
<b>Greece - Occupational Exposure Limits</b>	
Local name	Αιθνόλη
OEL TWA	1900 mg/m <sup>3</sup>
OEL TWA [ppm]	1000 ppm
Regulatory reference	Π.Δ. 90/1999 - Προστασία της υγείας των εργαζομένων που εκτίθενται σε ορισμένους χημικούς παράγοντες κατά τη διάρκεια της εργασίας τους
<b>Hungary - Occupational Exposure Limits</b>	
Local name	ETIL-ALKOHOL
AK (OEL TWA)	1900 mg/m <sup>3</sup>
CK (OEL STEL)	3800 mg/m <sup>3</sup>
Remark	N (Irritáló anyagok, egyszerű fojtógázok, csekély egészségkárosító hatással bíró anyagok)
Regulatory reference	5/2020. (II. 6.) ITM rendelet - A kémiai kóroki tényezők hatásának kitett munkavállalók egészségének és biztonságának védelméről
<b>Ireland - Occupational Exposure Limits</b>	
Local name	Ethanol [Ethyl alcohol]
OEL STEL [ppm]	1000 ppm
Regulatory reference	Chemical Agents Code of Practice 2021
<b>Latvia - Occupational Exposure Limits</b>	
Local name	Etilspirts (etanols)
OEL TWA	1000 mg/m <sup>3</sup>
Regulatory reference	Ministru kabineta 2007. gada 15. maija noteikumiem Nr. 325
<b>Lithuania - Occupational Exposure Limits</b>	
Local name	Etanolis (etilo alkoholis)
IPRV (OEL TWA)	1000 mg/m <sup>3</sup>
IPRV (OEL TWA) [ppm]	500 ppm
TPRV (OEL STEL)	1900 mg/m <sup>3</sup>
TPRV (OEL STEL) [ppm]	1000 ppm
Regulatory reference	LIETUVOS HIGIENOS NORMA HN 23:2011 (Nr. V-695/A1-272, 2018-06-12)
<b>Netherlands - Occupational Exposure Limits</b>	
Local name	Ethanol
TGG-8u (OEL TWA)	260 mg/m <sup>3</sup>
TGG-15min (OEL STEL)	1900 mg/m <sup>3</sup>
Remark	Kankerverwekkende stof. H (Huidopname) Stoffen die relatief gemakkelijk door de huid kunnen worden opgenomen, hetgeen een substantiële bijdrage kan betekenen aan de totale inwendige blootstelling, hebben in de lijst een H-aanduiding. Bij deze stoffen moeten naast maatregelen tegen inademing ook adequate maatregelen ter voorkoming van huidcontact worden genomen.

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<b>ETHANOL (64-17-5)</b>	
Regulatory reference	Arbetsomstandighedenregeling 2021
<b>Poland - Occupational Exposure Limits</b>	
Local name	Etanol (alkohol etylowy)
NDS (OEL TWA)	1900 mg/m <sup>3</sup>
Regulatory reference	Dz. U. 2018 poz. 1286
<b>Portugal - Occupational Exposure Limits</b>	
Local name	Etanol (Álcool etílico)
OEL STEL [ppm]	1000 ppm
Remark	A3 (Agente carcinogénico confirmado nos animais de laboratorio con relevância desconhecida no Homem)
Regulatory reference	Norma Portuguesa NP 1796:2014
<b>Romania - Occupational Exposure Limits</b>	
Local name	Alcool etilic/Etanol
OEL TWA	1900 mg/m <sup>3</sup>
OEL TWA [ppm]	1000 ppm
OEL STEL	9500 mg/m <sup>3</sup>
OEL STEL [ppm]	5000 ppm
Regulatory reference	Hotărârea Guvernului nr. 1.218/2006 (Hotărârea nr. 53/2021)
<b>Slovakia - Occupational Exposure Limits</b>	
Local name	Etylalkohol (etanol)
NPHV (OEL TWA) [1]	960 mg/m <sup>3</sup>
NPHV (OEL TWA) [2]	500 ppm
NPHV (OEL STEL)	1920 mg/m <sup>3</sup>
NPHV (OEL STEL) [ppm]	1000 ppm
Regulatory reference	Nariadenie vlády č. 355/2006 Z. z. (236/2020 Z. z.)
<b>Slovenia - Occupational Exposure Limits</b>	
Local name	etanol (etilalkohol)
OEL TWA	960 mg/m <sup>3</sup>
OEL TWA [ppm]	500 ppm
OEL STEL	1920 mg/m <sup>3</sup>
OEL STEL [ppm]	1000 ppm
Remark	Y (Snovi, pri katerih ni nevarnosti za zarodek ob upoštevanju mejnih vrednosti in bat vrednosti)
Regulatory reference	Uradni list RS, št. 72/2021 z dne 11.5.2021
<b>Spain - Occupational Exposure Limits</b>	
Local name	Etanol (Alcohol etílico)
VLA-EC (OEL STEL)	1910 mg/m <sup>3</sup>
VLA-EC (OEL STEL) [ppm]	1000 ppm



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<b>ETHANOL (64-17-5)</b>	
Remark	s (Esta sustancia tiene prohibida total o parcialmente su comercialización y uso como fitosanitario y/o como biocida. Para una información detallada acerca de las prohibiciones consúltese: Base de datos de productos biocidas: <a href="http://www.msssi.gob.es/ciudadanos/productos.do?tipo=plaguicidas">http://www.msssi.gob.es/ciudadanos/productos.do?tipo=plaguicidas</a> Base de datos de productos fitosanitarios <a href="http://www.magrama.gob.es/agricultura/pags/fitos/registro/fichas/pdf/Lista_sa.pdf">http://www.magrama.gob.es/agricultura/pags/fitos/registro/fichas/pdf/Lista_sa.pdf</a> ).
Regulatory reference	Límites de Exposición Profesional para Agentes Químicos en España 2021. INSHT
<b>Sweden - Occupational Exposure Limits</b>	
Local name	Etanol
NGV (OEL TWA)	1000 mg/m <sup>3</sup>
NGV (OEL TWA) [ppm]	500 ppm
KTV (OEL STEL)	1900 mg/m <sup>3</sup>
KTV (OEL STEL) [ppm]	1000 ppm
Remark	V (Vägledande korttidsgränsvärde ska användas som ett rekommenderat högsta värde som inte bör överskridas)
Regulatory reference	Hygieniska gränsvärden (AFS 2018:1)
<b>United Kingdom - Occupational Exposure Limits</b>	
Local name	Ethanol
WEL TWA [1]	1920 mg/m <sup>3</sup>
WEL TWA [2]	1000 ppm
Regulatory reference	EH40/2005 (Fourth edition, 2020). HSE
<b>Iceland - Occupational Exposure Limits</b>	
Local name	Etanól (etýlalkóhól)
OEL TWA	1900 mg/m <sup>3</sup>
OEL TWA [ppm]	1000 ppm
Regulatory reference	Reglugerð um mengunarmörk og aðgerðir til að draga úr mengun á vinnustöðum (Nr. 390/2009)
<b>Norway - Occupational Exposure Limits</b>	
Local name	Etanol
Grenseverdi (OEL TWA) [1]	950 mg/m <sup>3</sup>
Grenseverdi (OEL TWA) [2]	500 ppm
Regulatory reference	FOR-2021-06-28-2248
<b>Switzerland - Occupational Exposure Limits</b>	
Local name	Ethanol / Ethanol [Ethylalkohol]
MAK (OEL TWA) [1]	960 mg/m <sup>3</sup>
MAK (OEL TWA) [2]	500 ppm
KZGW (OEL STEL)	1920 mg/m <sup>3</sup>
KZGW (OEL STEL) [ppm]	1000 ppm
Critical toxicity	Formel / Formal
Notation	SS <sub>c</sub> / SS <sub>c</sub>
Remark	INRS, NIOSH

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### ETHANOL (64-17-5)

Regulatory reference      www.suva.ch, 01.01.2021

#### 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

### 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	: No data available
pH	: No data available
Relative evaporation rate (butylacetate=1)	: No data available
Melting point	: Not applicable

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Freezing point	: No data available
Boiling point	: > 35 °C
Flash point	: < 21 °C
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability (solid, gas)	: Not applicable
Vapour pressure	: No data available
Relative vapour density at 20 °C	: No data available
Relative density	: 0.8
Solubility	: No data available
Partition coefficient n-octanol/water (Log Pow)	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available
Explosive limits	: No data available

### 9.2. Other information

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 toxicological effects

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

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ATE CLP (dust,mist)	3.947 mg/l/4h
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#### XYLENE (1330-20-7)

LD50 dermal rabbit	12126 mg/kg bodyweight Animal: rabbit, Animal sex: male
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#### METHANOL (67-56-1)

LD50 oral rat	1187 – 2769 mg/kg bodyweight Animal: rat
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<b>BUTAN-1-OL (71-36-3)</b>	
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)
<b>4-METHYLPENTAN-2-ONE (108-10-1)</b>	
LD50 oral rat	2080 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 401 (Acute Oral Toxicity), 95% CL: 1,91 - 2,27
LC50 Inhalation - Rat	11.6 mg/l air Animal: rat, Animal sex: male, Guideline: OECD Guideline 403 (Acute Inhalation Toxicity)
<b>ACETONE (67-64-1)</b>	
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
<b>PROPAN-2-OL (67-63-0)</b>	
LD50 oral rat	5840 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 401 (Acute Oral Toxicity)
<b>ETHYL ACETATE (141-78-6)</b>	
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
<b>TOLUENE (108-88-3)</b>	
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
<b>LOW BOILING POINT NAPHTHA - UNSPECIFIED - SOLVENT NAPHTHA (PETROLEUM), LIGHT AROM. (64742-95-6)</b>	
LD50 oral rat	> 5000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 401 (Acute Oral Toxicity)
Skin corrosion/irritation	: Causes skin irritation.
Serious eye damage/irritation	: Causes serious eye irritation.
Respiratory or skin sensitisation	: Not classified
Germ cell mutagenicity	: May cause genetic defects.
Carcinogenicity	: May cause cancer.
Reproductive toxicity	: Suspected of damaging the unborn child.
<b>METHANOL (67-56-1)</b>	
NOAEL (animal/male, F0/P)	< 1000 mg/kg bodyweight Animal: mouse, Animal sex: male
<b>ACETONE (67-64-1)</b>	
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.
<b>N-BUTYL ACETATE (123-86-4)</b>	
STOT-single exposure	May cause drowsiness or dizziness.
<b>METHANOL (67-56-1)</b>	
STOT-single exposure	Causes damage to organs.

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<b>BUTAN-1-OL (71-36-3)</b>	
STOT-single exposure	May cause respiratory irritation. May cause drowsiness or dizziness.
<b>4-METHYLPENTAN-2-ONE (108-10-1)</b>	
STOT-single exposure	May cause respiratory irritation.
<b>ACETONE (67-64-1)</b>	
STOT-single exposure	May cause drowsiness or dizziness.
<b>PROPAN-2-OL (67-63-0)</b>	
STOT-single exposure	May cause drowsiness or dizziness.
<b>MEK (78-93-3)</b>	
STOT-single exposure	May cause drowsiness or dizziness.
<b>ETHYL ACETATE (141-78-6)</b>	
STOT-single exposure	May cause drowsiness or dizziness.
<b>TOLUENE (108-88-3)</b>	
STOT-single exposure	May cause drowsiness or dizziness.
<b>LOW BOILING POINT NAPHTHA - UNSPECIFIED - SOLVENT NAPHTHA (PETROLEUM), LIGHT AROM. (64742-95-6)</b>	
STOT-single exposure	May cause respiratory irritation.
STOT-repeated exposure	: May cause damage to organs through prolonged or repeated exposure.
<b>XYLENE (1330-20-7)</b>	
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)
<b>BUTAN-1-OL (71-36-3)</b>	
LOAEL (oral, rat, 90 days)	500 mg/kg bodyweight Animal: rat
NOAEL (oral, rat, 90 days)	125 mg/kg bodyweight Animal: rat
<b>4-METHYLPENTAN-2-ONE (108-10-1)</b>	
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)
<b>ETHYL ACETATE (141-78-6)</b>	
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)
<b>TOLUENE (108-88-3)</b>	
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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<b>TOLUENE (108-88-3)</b>	
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

## SECTION 12: Ecological information

### 12.1. Toxicity

Ecology - general : Harmful to aquatic life with long lasting effects.  
Hazardous to the aquatic environment, short-term (acute) : Not classified  
Hazardous to the aquatic environment, long-term (chronic) : Harmful to aquatic life with long lasting effects.  
Not rapidly degradable

<b>XYLENE (1330-20-7)</b>	
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'

<b>N-BUTYL ACETATE (123-86-4)</b>	
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'

<b>METHANOL (67-56-1)</b>	
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'

<b>BUTAN-1-OL (71-36-3)</b>	
LC50 - Fish [1]	1376 mg/l Test organisms (species): Pimephales promelas
EC50 - Crustacea [1]	1328 mg/l Test organisms (species): Daphnia magna
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'

<b>4-METHYLPENTAN-2-ONE (108-10-1)</b>	
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

<b>ACETONE (67-64-1)</b>	
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'

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<b>PROPAN-2-OL (67-63-0)</b>	
LC50 - Fish [1]	10000 mg/l Test organisms (species): Pimephales promelas
LC50 - Fish [2]	9640 mg/l Test organisms (species): Pimephales promelas
<b>MEK (78-93-3)</b>	
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)
<b>ETHYL ACETATE (141-78-6)</b>	
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'
<b>TOLUENE (108-88-3)</b>	
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. 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
<b>14.1. UN number</b>				
UN 1993	UN 1993	UN 1993	UN 1993	UN 1993

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ADR	IMDG	IATA	ADN	RID
<b>14.2. UN proper shipping name</b>				
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.
<b>Transport document description</b>				
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
<b>14.3. Transport hazard class(es)</b>				
3	3	3	3	3
				
<b>14.4. Packing group</b>				
I	I	I	I	I
<b>14.5. Environmental hazards</b>				
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 available				

### 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 (ADR) : TP1, TP27  
Tank code (ADR) : L4BN  
Vehicle for tank carriage : FL  
Transport category (ADR) : 1  
Special provisions for carriage - Operation (ADR) : S2, S20  
Hazard identification number (Kemler No.) : 33  
Orange plates :



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

#### Transport by sea

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



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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  
Excepted quantities (RID) : E3  
Packing instructions (RID) : P001  
Mixed packing provisions (RID) : MP7, MP17  
Portable tank and bulk container instructions (RID) : T11  
Portable tank and bulk container special provisions (RID) : TP1, TP27  
Tank codes for RID tanks (RID) : L4BN  
Transport category (RID) : 1  
Hazard identification number (RID) : 33

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

Not applicable

## SECTION 15: Regulatory information

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

#### 15.1.1. EU-Regulations

Contains no REACH substances with Annex XVII restrictions

Contains no substance on the REACH candidate list

Contains no REACH Annex XIV substances

Contains no substance subject to Regulation (EU) No 649/2012 of the European Parliament and of the Council of 4 July 2012 concerning the export and import of hazardous chemicals.

Contains no substance subject to Regulation (EU) No 2019/1021 of the European Parliament and of the Council of 20 June 2019 on persistent organic pollutants

Contains substance subject to Regulation (EU) 2019/1148 of the European Parliament and of the Council of 20 June 2019 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.

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Name	CAS-No.	Combined Nomenclature code (CN)	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://ec.europa.eu/home-affairs/sites/default/files/what-we-do/policies/crisis-and-terrorism/explosives/explosives-precursors/docs/list\\_of\\_competent\\_authorities\\_and\\_national\\_contact\\_points\\_en.pdf](https://ec.europa.eu/home-affairs/sites/default/files/what-we-do/policies/crisis-and-terrorism/explosives/explosives-precursors/docs/list_of_competent_authorities_and_national_contact_points_en.pdf)

### 15.1.2. National regulations

France	
Occupational diseases	
Code	Description
RG 4 BIS	Gastrointestinal disorders caused by benzene, toluene, xylenes and all products containing them
RG 84	Conditions caused by liquid organic solvents for professional use: saturated or unsaturated aliphatic or cyclic liquid hydrocarbons and mixtures thereof; liquid halogenated hydrocarbons; nitrated derivatives of aliphatic hydrocarbons; alcohols; glycols, glycol ethers; ketones; aldehydes; aliphatic and cyclic ethers, including tetrahydrofuran; esters; dimethylformamide and dimethylacetamine; acetonitrile and propionitrile; pyridine; dimethylsulfone and dimethylsulfoxide

#### Germany

Water hazard class (WGK) : WGK 3, Highly hazardous to water (Classification according to AwSV, Annex 1)  
Hazardous Incident Ordinance (12. BImSchV) : Is not subject of the Hazardous Incident Ordinance (12. BImSchV)

#### Netherlands

SZW-lijst van kankerverwekkende stoffen : LOW BOILING POINT NAPHTHA - UNSPECIFIED - SOLVENT NAPHTHA (PETROLEUM), LIGHT AROM. is listed  
SZW-lijst van mutagene stoffen : LOW BOILING POINT NAPHTHA - UNSPECIFIED - SOLVENT NAPHTHA (PETROLEUM), LIGHT AROM. is listed  
SZW-lijst van reprotoxische stoffen – Borstvoeding : None of the components are listed  
SZW-lijst van reprotoxische stoffen – Vruchtbaarheid : None of the components are listed  
SZW-lijst van reprotoxische stoffen – Ontwikkeling : XYLENE,TOLUENE are listed

#### Denmark

Class for fire hazard : Class I-1  
Store unit : 1 liter  
Classification remarks : F <Flam. Liq. 2>; Emergency management guidelines for the storage of flammable liquids must be followed  
Danish National Regulations : Young people below the age of 18 years are not allowed to use the product  
Pregnant/breastfeeding women working with the product must not be in direct contact with the product  
The requirements from the Danish Working Environment Authorities regarding work with carcinogens must be followed during use and disposal

#### Switzerland

Storage class (LK) : LK 3 - Flammable liquids  
Chemicals Ordinance (SR 813.11) : Group 1

### 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
	Supersedes version of	Added	
	Flammability (solid, gas)	Added	

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Indication of changes			
Section	Changed item	Change	Comments
	Revision date	Modified	
	UN-No. (RID)	Added	
	Number of blue cones/lights (ADN)	Added	
	Ventilation (ADN)	Added	
	Equipment required (ADN)	Added	
	Carriage permitted (ADN)	Added	
	Excepted quantities (ADN)	Added	
	Limited quantities (ADN)	Added	
	Danger labels (ADN)	Added	
	Classification code (ADN)	Added	
	Proper Shipping Name (RID)	Added	
	Hazard identification number (RID)	Added	
	Transport category (RID)	Added	
	Tank codes for RID tanks (RID)	Added	
	Portable tank and bulk container special provisions (RID)	Added	
	Portable tank and bulk container instructions (RID)	Added	
	Mixed packing provisions (RID)	Added	
	Packing instructions (RID)	Added	
	Excepted quantities (RID)	Added	
	Limited quantities (RID)	Added	
	Special provisions (RID)	Added	
	Packing group (RID)	Added	
	Classification code (RID)	Added	
	ERG code (IATA)	Added	
	Special provisions (IATA)	Added	
	CAO max net quantity (IATA)	Added	
	CAO packing instructions (IATA)	Added	
	PCA max net quantity (IATA)	Added	
	PCA packing instructions (IATA)	Added	
	PCA limited quantity max net quantity (IATA)	Added	
	PCA Limited quantities (IATA)	Added	
	PCA Excepted quantities (IATA)	Added	
	Danger labels (IATA)	Added	
	Proper Shipping Name (IATA)	Added	
	Proper Shipping Name (IMDG)	Added	
	Danger labels (IMDG)	Added	
	EmS-No. (Spillage)	Added	

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Indication of changes			
Section	Changed item	Change	Comments
	EmS-No. (Fire)	Added	
	Limited quantities (IMDG)	Added	
	Stowage category (IMDG)	Added	
	Tank special provisions (IMDG)	Added	
	Tank instructions (IMDG)	Added	
	Excepted quantities (IMDG)	Added	
	Special provisions (IMDG)	Added	
	Special provisions for carriage - Operation (ADR)	Added	
	Tank code (ADR)	Added	
	Portable tank and bulk container special provisions (ADR)	Added	
	Portable tank and bulk container instructions (ADR)	Added	
	Mixed packing provisions (ADR)	Added	
	Packing instructions (ADR)	Added	
	Vehicle for tank carriage	Added	
2.1	Adverse physicochemical, human health and environmental effects	Added	
2.1	Classification according to Regulation (EC) No. 1272/2008 [CLP]	Modified	
2.2	Precautionary statements (CLP)	Modified	
2.2	Hazard statements (CLP)	Modified	
3	Composition/information on ingredients	Modified	
4.1	First-aid measures after inhalation	Added	
4.1	First-aid measures after ingestion	Added	
4.1	First-aid measures after eye contact	Added	
4.1	First-aid measures general	Added	
4.1	First-aid measures after skin contact	Added	
4.2	Symptoms/effects after eye contact	Added	
4.2	Symptoms/effects after skin contact	Added	
4.2	Symptoms/effects	Added	
4.3	Other medical advice or treatment	Added	
5.1	Suitable extinguishing media	Added	
5.2	Hazardous decomposition products in case of fire	Added	
5.2	Fire hazard	Added	
5.3	Protection during firefighting	Added	
5.3	EAC code	Added	
6.1	Protective equipment	Added	

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Indication of changes			
Section	Changed item	Change	Comments
6.1	Emergency procedures	Added	
6.2	Environmental precautions	Added	
6.3	Other information	Added	
6.3	Methods for cleaning up	Added	
6.4	Reference to other sections (8, 13)	Added	
7.1	Hygiene measures	Added	
7.1	Precautions for safe handling	Added	
7.2	Technical measures	Added	
7.2	Storage conditions	Added	
8.2	Environmental exposure controls	Added	
8.2	Hand protection	Added	
8.2	Eye protection	Added	
8.2	Appropriate engineering controls	Added	
8.2	Skin and body protection	Added	
8.2	Respiratory protection	Added	
9.1	Melting point	Added	
10.1	Reactivity	Added	
10.2	Chemical stability	Added	
10.3	Possibility of hazardous reactions	Added	
10.4	Conditions to avoid	Added	
10.6	Hazardous decomposition products	Added	
12.1	Ecology - general	Added	
13.1	Waste treatment methods	Added	
13.1	Additional information	Added	
14.1	UN-No. (ADN)	Added	
14.1	UN-No. (IMDG)	Added	
14.1	UN-No. (IATA)	Added	
14.2	Proper Shipping Name (ADN)	Added	
14.2	Proper Shipping Name (ADR)	Added	
14.3	Danger labels (RID)	Added	
14.3	Danger labels (ADR)	Added	
14.3	Class (ADR)	Added	
14.4	Packing group (ADN)	Added	
14.4	Packing group (IATA)	Added	
14.4	Packing group (IMDG)	Added	
14.4	Packing group (ADR)	Modified	
14.6	Special provisions (ADN)	Added	
14.6	Packing instructions (IMDG)	Added	

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Indication of changes			
Section	Changed item	Change	Comments
14.6	Transport category (ADR)	Added	
14.6	Special provisions (ADR)	Added	
14.6	Excepted quantities (ADR)	Added	
14.6	Limited quantities (ADR)	Added	
14.6	Tunnel restriction code (ADR)	Added	
14.6	Hazard identification number (Kemler No.)	Added	
14.6	Classification code (ADR)	Added	
15.2	Chemical safety assessment	Added	
16	Abbreviations and acronyms	Added	

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

# THINNERS - FP <21C

## Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

### Abbreviations and acronyms:

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
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
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.

# THINNERS - FP <21C

## Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

Full text of H- and EUH-statements:	
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H340	May cause genetic defects.
H350	May cause 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.
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.