

**SECTION 1: Identification of the substance/mixture and of the company/undertaking****1.1. Product identifier**

Product form : Mixture  
Trade name : Lucas Complete Engine Treatment  
Product code : 40016

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

Use of the substance/mixture : Lubricant  
Industrial use  
Professional uses  
Consumer use

**Uses advised against**

Restrictions on use : No additional information available

**1.3. Details of the supplier of the safety data sheet****Supplier**

Lucas Oil Products UK Ltd  
Unit 4 Cunliffe Drive Llangefni Industrial Estate  
LL77 7JA Llangefni, Anglesey  
United Kingdom  
T 01248 723 666  
[Info@LucasOil.co.uk](mailto:Info@LucasOil.co.uk), [www.lucasoil.co.uk](http://www.lucasoil.co.uk)

**Supplier**

Lucas Oil Products Europe Ltd  
Block 3 Harcourt Centre Harcourt Road  
Dublin 2  
Ireland  
T +44 344 225 5400  
[info@lucasoil.eu.com](mailto:info@lucasoil.eu.com), [www.lucasoil.eu.com](http://www.lucasoil.eu.com)

**1.4. Emergency telephone number**

Emergency number : ChemTel  
1-800-255-3924 (USA, Canada, Puerto Rico, US V.I.)  
+1-813-248-0585 (International)

Country/Area	Organisation/Company	Address	Emergency number	Comment
Ireland	National Poisons Information Centre Beaumont Hospital	PO Box 1297 Beaumont Road 9 Dublin	+353 1 809 2566 (Healthcare professionals- 24/7) +353 1 809 2166 (public, 8am - 10pm, 7/7)	

**SECTION 2: Hazards identification****2.1. Classification of the substance or mixture****Classification according to Regulation (EC) No. 1272/2008 [CLP]**

Aspiration hazard, Category 1 H304

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

**Adverse physicochemical, human health and environmental effects**

May be fatal if swallowed and enters airways.

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### 2.2. Label elements

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

Hazard pictograms (CLP)



GHS08

Signal word (CLP) : Danger  
Contains : Distillates (petroleum), hydrotreated light  
Hazard statements (CLP) : H304 - May be fatal if swallowed and enters airways.  
Precautionary statements (CLP) : P101 - If medical advice is needed, have product container or label at hand.  
P102 - Keep out of reach of children.  
P301+P310 - IF SWALLOWED: Immediately call a POISON CENTER, a doctor.  
P331 - Do NOT induce vomiting.  
P405 - Store locked up.  
P501 - Dispose of contents and container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

### 2.3. Other hazards

Contains no PBT and/or vPvB substances  $\geq 0.1\%$  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 substance(s) are 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

### 3.2. Mixtures

Name	Product identifier	Conc.	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Distillates (petroleum), hydrotreated light	CAS-No.: 64742-47-8 EC-No.: 265-149-8 EC Index-No.: 649-422-00-2	$\geq 30 - \leq 50$	Asp. Tox. 1, H304
Benzene substance with national workplace exposure limit(s) (IE); substance with a Community workplace exposure limit	CAS-No.: 71-43-2 EC-No.: 200-753-7 EC Index-No.: 601-020-00-8	< 0.1	Flam. Liq. 2, H225 Carc. 1A, H350 Muta. 1B, H340 STOT RE 1, H372 Asp. Tox. 1, H304 Eye Irrit. 2, H319 Skin Irrit. 2, H315
Toluene substance with national workplace exposure limit(s) (IE); substance with a Community workplace exposure limit	CAS-No.: 108-88-3 EC-No.: 203-625-9 EC Index-No.: 601-021-00-3	< 0.1	Flam. Liq. 2, H225 Repr. 2, H361d Asp. Tox. 1, H304 STOT RE 2, H373 Skin Irrit. 2, H315 STOT SE 3, H336
Methanol substance with national workplace exposure limit(s) (IE); substance with a Community workplace exposure limit	CAS-No.: 67-56-1 EC-No.: 200-659-6 EC Index-No.: 603-001-00-X	< 0.1	Flam. Liq. 2, H225 Acute Tox. 3 (Inhalation), H331 Acute Tox. 3 (Dermal), H311 Acute Tox. 3 (Oral), H301 STOT SE 1, H370

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Name	Product identifier	Conc.	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Naphthalene substance with national workplace exposure limit(s) (IE); substance with a Community workplace exposure limit	CAS-No.: 91-20-3 EC-No.: 202-049-5 EC Index-No.: 601-052-00-2	< 0.1	Carc. 2, H351 Acute Tox. 4 (Oral), H302 Aquatic Acute 1, H400 (M=1) Aquatic Chronic 1, H410 (M=1)

### Specific concentration limits:

Name	Product identifier	Specific concentration limits (Conc.)
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 after inhalation	: If inhaled and if breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. If you feel unwell, seek medical advice.
First-aid measures after skin contact	: Wash skin thoroughly with mild soap and water. Take off contaminated clothing and wash it before reuse. Get medical attention if symptoms occur.
First-aid measures after eye contact	: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if symptoms occur.
First-aid measures after ingestion	: If swallowed, seek medical advice immediately and show this container or label. Do not induce vomiting/risk of damage to lungs exceeds poisoning risk. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Never give anything by mouth to an unconscious person.

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

Symptoms/effects after inhalation	: At high concentrations, the vapours can be irritating to the respiratory system.
Symptoms/effects after skin contact	: Rednesses. Itching. Swelling.
Symptoms/effects after eye contact	: Blurred vision. Redness, itching, tears.
Symptoms/effects after ingestion	: May be fatal if swallowed and enters airways. Ingestion may cause nausea and vomiting. Swallowing the liquid may cause aspiration into the lungs with the risk of chemical pneumonitis.

### 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	: Dry powder. Carbon dioxide. Water spray. Foam. Use extinguishing agent suitable for surrounding fire.
Unsuitable extinguishing media	: Do not use a heavy water stream.

### 5.2. Special hazards arising from the substance or mixture

Fire hazard	: Presents no particular fire or explosion hazard. Burning produces stinking and toxic fumes. In case of fire and/or explosion do not breathe fumes.
Hazardous decomposition products in case of fire	: Toxic fumes may be released. Carbon dioxide. Carbon monoxide.

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### 5.3. Advice for firefighters

- Firefighting instructions : Evacuate the danger area. Move containers from fire area if it can be done without personal risk. Use water spray or fog for cooling exposed containers. Fight fire from safe distance and protected location. Use extinguishing media appropriate for surrounding fire. Prevent fire fighting water from entering the environment.
- Protection during firefighting : Wear a self contained breathing apparatus. Wear fire/flame resistant/retardant clothing. Do not attempt to take action without suitable protective equipment.

## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

- General measures : Avoid all contact with skin, eyes, or clothing.

#### For non-emergency personnel

- Protective equipment : Wear recommended personal protective equipment.
- Emergency procedures : Evacuate unnecessary personnel. Ventilate spillage area. Avoid contact with skin and eyes. Avoid breathing vapours. Do not touch or walk on the spilled product. No action shall be taken without appropriate training or involving any personal risk.

#### For emergency responders

- Protective equipment : Do not attempt to take action without suitable protective equipment.
- Emergency procedures : Evacuate unnecessary personnel. Ventilate area.

### 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

- For containment : Stop leak without risks if possible. Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams. Caution : this product can cause the floor to be slippery.
- Methods for cleaning up : Move containers from spill area. Recover small spills with a suitable absorbent, like diatomaceous earth. For large spills, confine the spill in a dike and charge it with wet sand or earth for subsequent safe disposal. Ventilate spillage area. Clean contaminated surfaces with an excess of water. Prevent entry to sewers and public waters.
- Other information : Dispose of via an authorised person/ licensed waste disposal contractor or by other suitable waste treatment techniques. Dispose of materials or solid residues at an authorized site.

### 6.4. Reference to other sections

For further information refer to section 13. For further information refer to section 8: "Exposure controls/personal protection".

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

- Precautions for safe handling : Take all necessary technical measures to avoid or minimize the release of the product on the workplace. Ensure good ventilation of the work station. Provide local exhaust or general room ventilation. Do not breathe vapours. Wear personal protective equipment. Do not get in eyes, on skin, or on clothing.
- Hygiene measures : Handle in accordance with good industrial hygiene and safety procedures. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Do not eat, drink or smoke when using this product. Wash contaminated clothing before reuse.

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### 7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Keep only in the original container in a cool, well ventilated place away from : Direct sunlight, Strong oxidizers, Store in a dry place. Keep away from food, drink and animal feedingstuffs. Keep container tightly closed. Containers which are opened should be properly resealed and kept upright to prevent leakage. Store in accordance with local, regional, national or international regulation.

### 7.3. Specific end use(s)

No additional information available

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

#### National occupational exposure and biological limit values

Benzene (71-43-2)	
<b>EU - Binding Occupational Exposure Limit (BOEL)</b>	
Local name	Benzene
BOEL TWA	0.66 mg/m <sup>3</sup> (Limit value from 5 April 2026) 1.65 mg/m <sup>3</sup> (Limit value until 5 April 2026)
	0.2 ppm (Limit value from 5 April 2026) 0.5 ppm (Limit value until 5 April 2026)
Notes	Skin (Substantial contribution to the total body burden via dermal exposure possible)
Regulatory reference	DIRECTIVE (EU) 2022/431 (amending Directive 2004/37/EC)
<b>EU - Biological Limit Value (BLV)</b>	
Local name	Benzene
BLV	28 µg/l Parameter: benzene - Medium: blood - Sampling time: immediately end of shift 46 µg/g creatinine Parameter: phenylmercapturic - Medium: urine - Sampling time: end of exposure/shift
Regulatory reference	SCOEL List of recommended health-based BLVs and BGVs
<b>Ireland - Occupational Exposure Limits</b>	
Local name	Benzene
OEL TWA	0.66 mg/m <sup>3</sup> Limit value from 5th April 2026 1.65 mg/m <sup>3</sup> Limit value until 5th April 2026
	0.2 ppm Limit value from 5th April 2026 0.5 ppm Limit value until 5th April 2026
Remark	BOELV (Binding Occupational Exposure Limit Values), Skin (Substances which have the capacity to penetrate intact skin when they come in contact with it and be absorbed into the body. A substantial contribution to the total body burden via dermal exposure is possible), Carc.1A (Substances known to have carcinogenic potential for humans), Muta.1B (Substances which should be regarded as if they induce heritable mutations in the germ cells of humans)
Regulatory reference	Chemical Agents Code of Practice 2024
<b>Ireland - Biological limit values</b>	
Local name	Benzene
Ireland - BMGV	25 µg/g creatinine Parameter: S-Phenylmercapturic acid - Medium: urine - Sampling time: End of shift - Notations: B (Background) 50 µg/g creatinine Parameter: t,t-Muconic acid - Medium: urine - Sampling time: End of shift - Notations: B (Background)

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<b>Benzene (71-43-2)</b>	
Regulatory reference	Biological Monitoring Guidelines (HSA, 2011)
<b>Toluene (108-88-3)</b>	
<b>EU - Indicative Occupational Exposure Limit (IOEL)</b>	
Local name	Toluene
IOEL TWA	192 mg/m <sup>3</sup>
	50 ppm
IOEL STEL	384 mg/m <sup>3</sup>
	100 ppm
Remark	Skin
Regulatory reference	COMMISSION DIRECTIVE 2006/15/EC
<b>Ireland - Occupational Exposure Limits</b>	
Local name	Toluene
OEL TWA	192 mg/m <sup>3</sup>
	50 ppm
OEL STEL	384 mg/m <sup>3</sup>
	100 ppm
Remark	IOELV (Indicative Occupational Exposure Limit Values), Skin (Substances which have the capacity to penetrate intact skin when they come in contact with it and be absorbed into the body. A substantial contribution to the total body burden via dermal exposure is possible)
Regulatory reference	Chemical Agents Code of Practice 2024
<b>Ireland - Biological limit values</b>	
Local name	Toluene
Ireland - BMGV	0.02 mg/l Parameter: toluene - Medium: blood - Sampling time: Prior to last shift of workweek 0.03 mg/l Parameter: toluene - Medium: urine - Sampling time: End of shift 0.3 mg/g creatinine Parameter: o-cresol - Medium: urine - Sampling time: End of shift - Notations: B (Background)
Regulatory reference	Biological Monitoring Guidelines (HSA, 2011)
<b>Methanol (67-56-1)</b>	
<b>EU - Indicative Occupational Exposure Limit (IOEL)</b>	
Local name	Methanol
IOEL TWA	260 mg/m <sup>3</sup>
	200 ppm
Remark	Skin
Regulatory reference	COMMISSION DIRECTIVE 2006/15/EC
<b>Ireland - Occupational Exposure Limits</b>	
Local name	Methanol [Methyl alcohol]
OEL TWA	260 mg/m <sup>3</sup>
	200 ppm

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Methanol (67-56-1)	
Remark	IOELV (Indicative Occupational Exposure Limit Values), Skin (Substances which have the capacity to penetrate intact skin when they come in contact with it and be absorbed into the body. A substantial contribution to the total body burden via dermal exposure is possible)
Regulatory reference	Chemical Agents Code of Practice 2024
Ireland - Biological limit values	
Local name	Methanol
Ireland - BMGV	15 mg/l Parameter: methanol - Medium: urine - Sampling time: End of shift - Notations: B (Background), Ns (Non-specific)
Regulatory reference	Biological Monitoring Guidelines (HSA, 2011)
Naphthalene (91-20-3)	
EU - Indicative Occupational Exposure Limit (IOEL)	
Local name	Naphthalene
IOEL TWA	50 mg/m <sup>3</sup> 10 ppm
Remark	(Year of adoption 2010)
Regulatory reference	COMMISSION DIRECTIVE 91/322/EEC; SCOEL Recommendations
Ireland - Occupational Exposure Limits	
Local name	Naphthalene
OEL TWA	50 mg/m <sup>3</sup> 10 ppm
Remark	IOELV (Indicative Occupational Exposure Limit Values)
Regulatory reference	Chemical Agents Code of Practice 2024

### Recommended monitoring procedures

Monitoring methods	
Monitoring methods	Refer to all applicable national, international and local regulations or provisions. Workplace exposure - General requirements for the performance of procedures for the measurement of chemical agents. Workplace atmospheres. Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy. Workplace atmospheres. Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents.

## 8.2. Exposure controls

### Appropriate engineering controls

#### Appropriate engineering controls:

Provide local exhaust or general room ventilation. Ensure exposure is below occupational exposure limits (where available). Handle in accordance with good industrial hygiene and safety procedures. Avoid all unnecessary exposure.

### Personal protection equipment

#### Personal protective equipment:

Wear recommended personal protective equipment. Personal protective equipment should be chosen according to the CEN standards and in discussion with the supplier of the protective equipment.

### Eye and face protection

#### Eye protection:

Safety glasses. ISO 16321-1

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### Skin protection

#### Skin and body protection:

Wear suitable protective clothing. Skin protection appropriate to the conditions of use should be provided

#### Hand protection:

Chemical resistant gloves (according to European standard ISO 374-1 or equivalent). Neoprene or nitrile rubber gloves. Please follow the instructions related to the permeability and the penetration time provided by the manufacturer

### Respiratory protection

#### Respiratory protection:

No respiratory protection needed under normal use conditions. Where excessive vapour, mist, or dust may result, use approved respiratory protection equipment. EN 149

### Environmental exposure controls

#### Environmental exposure controls:

Avoid release to the environment. Technical onsite conditions and measures to reduce or limit discharges, air emissions and releases to soil.

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Colour	: Amber.
Odour	: petroleum.
Odour threshold	: Not available
Melting point	: Not available
Freezing point	: Not available
Boiling point	: Not available
Flammability	: Not applicable
Lower explosion limit	: Not available
Upper explosion limit	: Not available
Flash point	: > 71.1 °C
Auto-ignition temperature	: Not available
Decomposition temperature	: Not available
pH	: Not available
Viscosity, kinematic	: 8.52 mm <sup>2</sup> /s @ 40 °C
Solubility	: Insoluble in water.
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	: 0.837
Relative vapour density at 20°C	: Not available
Particle characteristics	: Not applicable

### 9.2. Other information

No additional information available

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

### 10.2. Chemical stability

Stable under normal conditions of use.

### 10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use. Hazardous polymerisation: Will not occur.



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### 10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7). Protect from sunlight. Overheating. Extremely high or low temperatures.

### 10.5. Incompatible materials

Oxidising agents.

### 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 (Based on available data, the classification criteria are not met)  
Acute toxicity (dermal) : Not classified (Based on available data, the classification criteria are not met)  
Acute toxicity (inhalation) : Not classified (Based on available data, the classification criteria are not met)

#### Distillates (petroleum), hydrotreated light (64742-47-8)

LD50 oral rat	> 5000 mg/kg
LD50 dermal rabbit	> 2000 mg/kg
LC50 Inhalation - Rat	> 5.28 mg/l/4h

#### Benzene (71-43-2)

LD50 oral rat	5970 mg/kg OECD 401
LD50 dermal rabbit	> 9.4 mg/kg OECD 402
LC50 Inhalation - Rat	43.7 mg/l/4h OECD 403

#### Toluene (108-88-3)

LD50 oral rat	5580 mg/kg (OECD 401)
LD50 dermal rabbit	> 5000 mg/kg
LC50 Inhalation - Rat	> 28.1 mg/l/4h

#### Naphthalene (91-20-3)

LD50 oral rat	490 mg/kg
LD50 dermal rabbit	20 g/kg
LC50 Inhalation - Rat	> 340 mg/m <sup>3</sup> 1h

Skin corrosion/irritation : Not classified (Based on available data, the classification criteria are not met)  
Serious eye damage/irritation : Not classified (Based on available data, the classification criteria are not met)  
Respiratory or skin sensitisation : Not classified (Based on available data, the classification criteria are not met)  
Germ cell mutagenicity : Not classified (Based on available data, the classification criteria are not met)  
Carcinogenicity : Not classified (Based on available data, the classification criteria are not met)  
Reproductive toxicity : Not classified (Based on available data, the classification criteria are not met)  
STOT-single exposure : Not classified (Based on available data, the classification criteria are not met)

#### Toluene (108-88-3)

STOT-single exposure	May cause drowsiness or dizziness.
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#### Methanol (67-56-1)

STOT-single exposure	Causes damage to organs.
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STOT-repeated exposure : Not classified (Based on available data, the classification criteria are not met)

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Benzene (71-43-2)	
STOT-repeated exposure	Causes damage to organs through prolonged or repeated exposure.
Toluene (108-88-3)	
STOT-repeated exposure	May cause damage to organs through prolonged or repeated exposure.
Aspiration hazard	: May be fatal if swallowed and enters airways.
Lucas Complete Engine Treatment	
Viscosity, kinematic	8.52 mm <sup>2</sup> /s @ 40 °C

### 11.2. Information on other hazards

#### Endocrine disrupting properties

Adverse health effects caused by endocrine disrupting properties : 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 substance(s) are 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 %

#### Other information

Other information : No experimental study on the product is available. The information given is based on our knowledge of the components and the classification of the product is determined by calculation

## SECTION 12: Ecological information

### 12.1. Toxicity

Hazardous to the aquatic environment, short-term (acute) : Not classified (Based on available data, the classification criteria are not met)

Hazardous to the aquatic environment, long-term (chronic) : Not classified (Based on available data, the classification criteria are not met)

Additional information : No experimental study on the product is available. The information given is based on our knowledge of the components and the classification of the product is determined by calculation.

Distillates (petroleum), hydrotreated light (64742-47-8)	
LC50 - Fish [1]	> 1 mg/l
LC50 - Fish [2]	2200 µg/l <i>Lepomis macrochirus</i>
NOEC chronic fish	0.01 – 0.1 mg/l
NOEC chronic crustacea	0.01 – 0.1 mg/l
Benzene (71-43-2)	
LC50 - Fish [1]	5.3 mg/l OECD 203
EC50 - Crustacea [1]	10 mg/l <i>Daphnia</i> sp. OECD 202
ErC50 algae	100 mg/l OECD 201
LOEC (chronic)	1.6 mg/l
NOEC chronic crustacea	3 mg/l
Naphthalene (91-20-3)	
LC50 - Fish [1]	0.91 (0.91 – 2.82) mg/l <i>Oncorhynchus mykiss</i>
LC50 - Fish [2]	1 (1 – 6.5) mg/l <i>Pimephales promelas</i>
EC50 - Crustacea [1]	1.96 mg/l

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Naphthalene (91-20-3)	
EC50 - Other aquatic organisms [1]	33 mg/l
LOEC (acute)	3.2 mg/l

### 12.2. Persistence and degradability

Lucas Complete Engine Treatment	
Persistence and degradability	Biodegradability in water: no data available.

  

Toluene (108-88-3)	
Persistence and degradability	Readily biodegradable, in water.
Biochemical oxygen demand (BOD)	2.15 g O <sub>2</sub> /g substance
Chemical oxygen demand (COD)	2.52 g O <sub>2</sub> /g substance
ThOD	3.13 g O <sub>2</sub> /g substance
BOD (% of ThOD)	0.69 % ThOD

### 12.3. Bioaccumulative potential

Lucas Complete Engine Treatment	
Bioaccumulative potential	No data available concerning bioaccumulation.

  

Distillates (petroleum), hydrotreated light (64742-47-8)	
Partition coefficient n-octanol/water (Log Kow)	2.1 – 5

  

Benzene (71-43-2)	
BCF - Fish [1]	3.5 – 4.4
Bioconcentration factor (BCF REACH)	0
Partition coefficient n-octanol/water (Log Pow)	1.83

  

Toluene (108-88-3)	
BCF - Fish [2]	90 (72h; Leuciscus idus)
Partition coefficient n-octanol/water (Log Pow)	2.73 (20°C)
Bioaccumulative potential	Low bioaccumulation potential.

  

Naphthalene (91-20-3)	
BCF - Fish [1]	≥ 427 (427 – 1158)

### 12.4. Mobility in soil

Lucas Complete Engine Treatment	
Ecology - soil	No additional information available.

  

Toluene (108-88-3)	
Surface tension	0.03 N/m (20°C)

### 12.5. Results of PBT and vPvB assessment

No additional information available

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### 12.6. Endocrine disrupting properties

Adverse effects on the environment caused by endocrine disrupting properties : 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 substance(s) are 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 %.

### 12.7. Other adverse effects

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.  
Sewage disposal recommendations : Do not dispose of waste into sewer.  
Product/Packaging disposal recommendations : Dispose in a safe manner in accordance with local/national regulations.  
Ecological waste information : Avoid release to the environment.  
European List of Waste (LoW, EC 2000/532) : Disposal must be carried out using appropriate EWC code

## SECTION 14: Transport information

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

ADR	IMDG	IATA	ADN	RID
<b>14.1. UN number or ID number</b>				
Not regulated for transport				
<b>14.2. UN proper shipping name</b>				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
<b>14.3. Transport hazard class(es)</b>				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
<b>14.4. Packing group</b>				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
<b>14.5. Environmental hazards</b>				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
No supplementary information available				

### 14.6. Special precautions for user

#### Overland transport

Not regulated

#### Transport by sea

Not regulated

#### Air transport

Not regulated

#### Inland waterway transport

Not regulated

#### Rail transport

Not regulated

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### 14.7. Maritime transport in bulk according to IMO instruments

Not applicable

## SECTION 15: Regulatory information

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

#### EU-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 substance(s) listed on the PIC list (Regulation EU 649/2012 concerning the export and import of hazardous chemicals): Benzene (71-43-2)

##### 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)

##### Council Regulation (EC) for the control of dual-use items

Contains no substance subject to the COUNCIL REGULATION (EC) for the control of dual-use items

##### Explosives Precursors Regulation (2019/1148)

Contains no substance(s) listed on the Explosives Precursors list (Regulation EU 2019/1148 on the marketing and use of explosives precursors)

##### Drug Precursors Regulation (273/2004)

Contains 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)

Name	CN designation	CAS-No.	CN code	Category, Subcategory	Threshold	Annex
Toluene		108-88-3	2902 30 00	Category 3		Annex I

### 15.2. Chemical safety assessment

No chemical safety assessment has been carried out

## SECTION 16: Other information

### 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
BLV	Biological limit value
CAS-No.	Chemical Abstract Service number
CLP	Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008
DMEL	Derived Minimal Effect level
DNEL	Derived-No Effect Level

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Abbreviations and acronyms:	
EC50	Median effective concentration
EC-No.	European Community number
EN	European Standard
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
OEL	Occupational Exposure Limit
PBT	Persistent Bioaccumulative Toxic
PNEC	Predicted No-Effect Concentration
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
SDS	Safety Data Sheet
vPvB	Very Persistent and Very Bioaccumulative
WGK	Water Hazard Class

Data sources : ECHA (European Chemicals Agency). Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 and all its amendments and modifications. Supplier's safety documents.

Training advice : Training staff on good practice.

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 (Oral)	Acute toxicity (oral), Category 3
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Aquatic Acute 1	Hazardous to the aquatic environment – Acute Hazard, Category 1
Aquatic Chronic 1	Hazardous to the aquatic environment – Chronic Hazard, Category 1
Asp. Tox. 1	Aspiration hazard, Category 1
Carc. 1A	Carcinogenicity, Category 1A
Carc. 2	Carcinogenicity, Category 2
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Flam. Liq. 2	Flammable liquids, Category 2
H225	Highly flammable liquid and vapour.
H301	Toxic if swallowed.
H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.

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Full text of H- and EUH-statements:	
H311	Toxic in contact with skin.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H331	Toxic if inhaled.
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.
H372	Causes damage to organs through prolonged or repeated exposure.
H373	May cause damage to organs through prolonged or repeated exposure.
H400	Very toxic to aquatic life.
H410	Very toxic 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 1	Specific target organ toxicity – Repeated exposure, Category 1
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

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:		
Asp. Tox. 1	H304	Weight of evidence

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.