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

1.1. Product identifier
Product name : Cat & Lambda Cleaner
Product code : W24463

1.2. Relevant identified uses of the substance or mixture and uses advised against
1.2.1. Relevant identified uses
Use of the substance/mixture : Petrol additive.
Function or use category : Fuel additives

1.2.2. Uses advised against
No additional information available

1.3. Details of the supplier of the safety data sheet
Wynn's Belgium
Industriepark-West 46
9100 Sint-Niklaas - Belgium
T +32 3 766 60 20 - F +32 3 778 16 56
msds@wynns.eu - www.wynns.com

1.4. Emergency telephone number
Emergency number : BIG: +32(0)14/58.45.45 (NL FR EN DE)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture
Classification according to Regulation (EC) No. 1272/2008 [CLP]
Flam. Liq. 3 H226
Acute Tox. 4 (Inhalation:dust,mist) H332
Skin Irrit. 2 H315
Eye Irrit. 2 H319
Muta. 2 H341
STOT SE 3 H335
STOT RE 2 H373
Asp. Tox. 1 H304

Full text of H statements : see section 16

Adverse physicochemical, human health and environmental effects
No additional information available

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]
Hazard pictograms (CLP) : GHS02 GHS07 GHS08

Signal word (CLP) : Danger
Hazardous ingredients : 2-butoxyethanol; 2-ethylhexan-1-ol; Di-tert-butyl peroxide; reaction mass of ethylbenzene and xylene ; distillates (Fischer-Tropsch), C8-26, branched and linear

Hazard statements (CLP) : H226 - Flammable liquid and vapour.
H304 - May be fatal if swallowed and enters airways.
H315 - Causes skin irritation.
H319 - Causes serious eye irritation.
H332 - Harmful if inhaled.
H335 - May cause respiratory irritation.
H341 - Suspected of causing genetic defects.
H373 - May cause damage to organs through prolonged or repeated exposure.

Precautionary statements (CLP) : P102 - Keep out of reach of children.
P405 - Store locked up.
P210 - Keep away from heat, hot surfaces, open flames, sparks. No smoking.
P260 - Do not breathe vapours.
P280 - Wear face shield, protective gloves, protective clothing.
P301+P310 - IF SWALLOWED: Immediately call a POISON CENTER/docotor
P331 - Do NOT induce vomiting.
P337+P313 - If eye irritation persists: 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

<table>
<thead>
<tr>
<th>Name</th>
<th>Product identifier</th>
<th>% w</th>
<th>Classification according to Regulation (EC) No. 1272/2008 [CLP]</th>
</tr>
</thead>
<tbody>
<tr>
<td>distillates (Fischer-Tropsch), C8-26, branched and linear (CAS-No.) 848301-67-7 (REACH-no) 01-0000020119-75</td>
<td>10 - 25</td>
<td></td>
<td>Asp. Tox. 1, H304</td>
</tr>
<tr>
<td>2-butoxyethanol (CAS-No.) 111-76-2 (EC-No.) 203-905-0 (REACH-no) 01-2119475108-36</td>
<td>10 - 25</td>
<td></td>
<td>Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Dermal), H312 Acute Tox. 4 (Inhalation), H332 Skin Irrit. 2, H315 Skin Irrit. 2, H319 Eye Irrit. 2, H319</td>
</tr>
<tr>
<td>2-ethylhexan-1-ol (CAS-No.) 104-76-7 (EC-No.) 203-234-3 (REACH-no) 01-2119487289-20</td>
<td>10 - 25</td>
<td></td>
<td>Acute Tox. 4 (Inhalation,dust,mist), H332 Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335</td>
</tr>
<tr>
<td>reaction mass of ethylbenzene and xylene (EC-No.) 905-588-0 (REACH-no) 01-2119488216-32</td>
<td>10 - 25</td>
<td></td>
<td>Flam. Liq. 3, H226 Acute Tox. 4 (Dermal), H312 Acute Tox. 4 (Inhalation), H332 Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335 STOT RE 2, H373 Asp. Tox. 1, H304</td>
</tr>
<tr>
<td>polyetheramine (CAS-No.) 224622-34-8</td>
<td>10 - 25</td>
<td></td>
<td>Skin Irrit. 2, H315 Aquatic Chronic 3, H412</td>
</tr>
<tr>
<td>hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, aromatics (2-25%) (EC-No.) 919-164-8 (REACH-no) 01-2119473977-17</td>
<td>1 - 2,5</td>
<td></td>
<td>STOT RE 1, H372 Asp. Tox. 1, H304 Aquatic Chronic 3, H412</td>
</tr>
</tbody>
</table>

Full text of H-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures


First-aid measures after inhalation : If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER/docotor if you feel unwell.

First-aid measures after skin contact : Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse. If skin irritation or rash occurs: Get medical advice/attention.
First-aid measures after eye contact: IF IN EYES: 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: If swallowed, rinse mouth. Do NOT induce vomiting. Call a POISON CENTER/doctor if you feel unwell. Ingestion of large quantities: immediately to hospital.

4.2. Most important symptoms and effects, both acute and delayed
Symptoms/effects: Suspected of causing genetic defects.
Symptoms/effects after inhalation: Harmful if inhaled.
Symptoms/effects after skin contact: Repeated exposure may cause skin dryness or cracking. Harmful in contact with skin. Causes skin irritation.
Symptoms/effects after eye contact: Causes serious eye irritation.

4.3. Indication of any immediate medical attention and special treatment needed
No additional information available

SECTION 5: Firefighting measures
5.1. Extinguishing media
Suitable extinguishing media: Water spray. AFFF foam. ABC-powder.
Unsuitable extinguishing media: Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture
Fire hazard: Flammable liquid and vapour. Take precautionary measures against static discharges. The vapours are denser than air and may travel along the ground. Distance ignition possible.
Explosion hazard: No direct explosion hazard.

5.3. Advice for firefighters
Firefighting instructions: Contain the extinguishing fluids by bunding. Prevent fire fighting water from entering the environment.
Protection during firefighting: Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6: Accidental release measures
6.1. Personal precautions, protective equipment and emergency procedures
General measures: Prevent from entering sewers, basements and workpits, or any place where its accumulation can be dangerous. Use special care to avoid static electric charges. No open flames. No smoking.

6.1.1. For non-emergency personnel
Protective equipment: Wear suitable gloves and eye/face protection. protective clothing.
Emergency procedures: Mark the danger area. Ventilate spillage area. Prevent flow to low areas. In confined space use self-contained breathing apparatus. Take off contaminated clothing.

6.1.2. For emergency responders
Protective equipment: Equip cleanup crew with proper protection.

6.2. Environmental precautions
Prevent entry to sewers and public waters. Avoid release to the environment.

6.3. Methods and material for containment and cleaning up
For containment: Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams. Contain leaking substance, pump over in suitable containers.
Methods for cleaning up: Small quantities of liquid spill: take up in non-combustible absorbent material and shovel into container for disposal. Clean preferably with a detergent - Avoid the use of solvents.

6.4. Reference to other sections
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: Meet the legal requirements. Repeated exposure may cause skin dryness or cracking. Provide good ventilation in process area to prevent formation of vapour. Presents no particular risk when handled in accordance with good occupational hygiene practice.

Hygiene measures: Use good personal hygiene practices. Take off immediately all contaminated clothing and wash it before reuse. IF ON SKIN: Gently wash with plenty of soap and water.

7.2. Conditions for safe storage, including any incompatibilities
Technical measures: Take precautionary measures against static discharge. Does not require any specific or particular technical measures.

Storage conditions: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Protect from sunlight. Store in a well-ventilated place. Meet the legal requirements. Keep container tightly closed.

Storage temperature: < 45 °C

Storage area: Meet the legal requirements. Protect from heat and direct sunlight. Fireproof storeroom. Ventilation along the floor.

Special rules on packaging: Keep only in original container. Labelling according to.

7.3. Specific end use(s)
Read label before use. Observe the label precautions. See product bulletin for detailed information.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

2-butoxyethanol (111-76-2)

<table>
<thead>
<tr>
<th>Country</th>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>EU</td>
<td>IOELV TWA (mg/m³)</td>
<td>98 mg/m³</td>
</tr>
<tr>
<td>EU</td>
<td>IOELV TWA (ppm)</td>
<td>20 ppm</td>
</tr>
<tr>
<td>EU</td>
<td>IOELV STEL (mg/m³)</td>
<td>246 mg/m³</td>
</tr>
<tr>
<td>EU</td>
<td>IOELV STEL (ppm)</td>
<td>50 ppm</td>
</tr>
<tr>
<td>Belgium</td>
<td>Limit value (mg/m³)</td>
<td>98 mg/m³</td>
</tr>
<tr>
<td>Belgium</td>
<td>Limit value (ppm)</td>
<td>20 ppm</td>
</tr>
<tr>
<td>Belgium</td>
<td>Short time value (mg/m³)</td>
<td>246 mg/m³</td>
</tr>
<tr>
<td>Belgium</td>
<td>Short time value (ppm)</td>
<td>50 ppm</td>
</tr>
<tr>
<td>France</td>
<td>VLE (mg/m³)</td>
<td>246 mg/m³</td>
</tr>
<tr>
<td>France</td>
<td>VLE (ppm)</td>
<td>50 ppm</td>
</tr>
<tr>
<td>France</td>
<td>VME (mg/m³)</td>
<td>49 mg/m³</td>
</tr>
<tr>
<td>France</td>
<td>VME (ppm)</td>
<td>10 ppm</td>
</tr>
<tr>
<td>Netherlands</td>
<td>Grenswaarde TGG 8H (mg/m³)</td>
<td>100 mg/m³</td>
</tr>
<tr>
<td>Netherlands</td>
<td>Grenswaarde TGG 8H (ppm)</td>
<td>20 ppm</td>
</tr>
<tr>
<td>Netherlands</td>
<td>Grenswaarde TGG 15MIN (mg/m³)</td>
<td>246 mg/m³</td>
</tr>
<tr>
<td>Netherlands</td>
<td>Grenswaarde TGG 15MIN (ppm)</td>
<td>50 ppm</td>
</tr>
<tr>
<td>Hungary</td>
<td>AK-érték</td>
<td>98 mg/m³</td>
</tr>
<tr>
<td>Hungary</td>
<td>CK-érték</td>
<td>246 mg/m³</td>
</tr>
</tbody>
</table>

2-ethylhexanol-1-ol (104-76-7)

<table>
<thead>
<tr>
<th>Country</th>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>EU</td>
<td>IOELV TWA (mg/m³)</td>
<td>5,4 mg/m³</td>
</tr>
<tr>
<td>EU</td>
<td>IOELV TWA (ppm)</td>
<td>1 ppm</td>
</tr>
<tr>
<td>Germany</td>
<td>TRGS 900 Occupational exposure limit value (mg/m³)</td>
<td>110 mg/m³</td>
</tr>
<tr>
<td>Germany</td>
<td>TRGS 900 Occupational exposure limit value (ppm)</td>
<td>20 ppm</td>
</tr>
</tbody>
</table>

hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)

<table>
<thead>
<tr>
<th>Country</th>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Belgium</td>
<td>Limit value (mg/m³)</td>
<td>533 mg/m³</td>
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<tr>
<td>Belgium</td>
<td>Limit value (ppm)</td>
<td>100 ppm</td>
</tr>
<tr>
<td>Italy - Portugal - USA</td>
<td>ACGIH TWA (ppm)</td>
<td>100 ppm</td>
</tr>
</tbody>
</table>
## distillates (Fischer-Tropsch), C8-26, branched and linear (848301-67-7)

<table>
<thead>
<tr>
<th>PNEC (Sediment)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>PNEC sediment (freshwater)</td>
<td>2,06 mg/kg dwt</td>
</tr>
<tr>
<td>PNEC (Soil)</td>
<td></td>
</tr>
<tr>
<td>PNEC soil</td>
<td>1,68 mg/kg dwt</td>
</tr>
<tr>
<td>PNEC (STP)</td>
<td></td>
</tr>
<tr>
<td>PNEC sewage treatment plant</td>
<td>10 mg/l</td>
</tr>
</tbody>
</table>

### 2-butoxyethanol (111-76-2)

**DNEL/DMEL (Workers)**
- Acute - systemic effects, dermal: 89 mg/kg bodyweight/day
- Acute - systemic effects, inhalation: 1091 mg/m³
- Long-term - systemic effects, dermal: 125 mg/kg bodyweight/day
- Long-term - systemic effects, inhalation: 98 mg/m³
- Long-term - local effects, inhalation: 246 mg/m³

**DNEL/DMEL (General population)**
- Acute - systemic effects, dermal: 89 mg/kg bodyweight
- Acute - systemic effects, inhalation: 426 mg/m³
- Acute - systemic effects, oral: 26,7 mg/kg bodyweight
- Long-term - systemic effects, oral: 6,3 mg/kg bodyweight/day
- Long-term - systemic effects, inhalation: 59 mg/m³
- Long-term - systemic effects, dermal: 75 mg/kg bodyweight/day
- Long-term - local effects, inhalation: 147 mg/m³

<table>
<thead>
<tr>
<th>PNEC (Water)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>PNEC aqua (freshwater)</td>
<td>8,8 mg/l</td>
</tr>
<tr>
<td>PNEC aqua (marine water)</td>
<td>0,88 mg/l</td>
</tr>
<tr>
<td>PNEC aqua (intermittent, freshwater)</td>
<td>9,1 mg/l</td>
</tr>
<tr>
<td>PNEC (Sediment)</td>
<td></td>
</tr>
<tr>
<td>PNEC sediment (freshwater)</td>
<td>34,6 mg/kg dwt</td>
</tr>
<tr>
<td>PNEC sediment (marine water)</td>
<td>3,46 mg/kg dwt</td>
</tr>
<tr>
<td>PNEC (Soil)</td>
<td></td>
</tr>
<tr>
<td>PNEC soil</td>
<td>2,33 mg/kg dwt</td>
</tr>
<tr>
<td>PNEC (STP)</td>
<td></td>
</tr>
<tr>
<td>PNEC sewage treatment plant</td>
<td>463 mg/l</td>
</tr>
</tbody>
</table>

### 2-ethylhexan-1-ol (104-76-7)

**DNEL/DMEL (Workers)**
- Acute - local effects, inhalation: 53,2 mg/m³
- Long-term - systemic effects, dermal: 23 mg/kg bodyweight/day
- Long-term - systemic effects, inhalation: 12,8 mg/m³
- Long-term - local effects, inhalation: 53,2 mg/m³

**DNEL/DMEL (General population)**
- Acute - local effects, inhalation: 26,6 mg/m³
- Long-term - systemic effects, oral: 1,1 mg/kg bodyweight/day
- Long-term - systemic effects, inhalation: 2,3 mg/m³
- Long-term - systemic effects, dermal: 11,4 mg/kg bodyweight/day
- Long-term - local effects, inhalation: 26,6 mg/m³

<table>
<thead>
<tr>
<th>PNEC (Water)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>PNEC aqua (freshwater)</td>
<td>0,017 mg/l</td>
</tr>
<tr>
<td>PNEC aqua (marine water)</td>
<td>0,0017 mg/l</td>
</tr>
<tr>
<td>PNEC aqua (intermittent, freshwater)</td>
<td>0,17 mg/l</td>
</tr>
<tr>
<td>PNEC (Sediment)</td>
<td></td>
</tr>
<tr>
<td>PNEC sediment (freshwater)</td>
<td>0,284 mg/kg dwt</td>
</tr>
<tr>
<td>PNEC sediment (marine water)</td>
<td>0,0284 mg/kg dwt</td>
</tr>
<tr>
<td>PNEC (Soil)</td>
<td></td>
</tr>
<tr>
<td>PNEC soil</td>
<td>0,047 mg/kg dwt</td>
</tr>
<tr>
<td>PNEC (STP)</td>
<td></td>
</tr>
<tr>
<td>PNEC sewage treatment plant</td>
<td>10 mg/l</td>
</tr>
</tbody>
</table>
reaction mass of ethylbenzene and xylene

**DNEL/DMEL (Workers)**

- **Acute - systemic effects, inhalation**: 442 mg/m³
- **Acute - local effects, inhalation**: 442 mg/m³
- **Long-term - systemic effects, dermal**: 212 mg/kg bodyweight/day
- **Long-term - systemic effects, inhalation**: 221 mg/m³
- **Long-term - local effects, inhalation**: 221 mg/m³

**DNEL/DMEL (General population)**

- **Acute - systemic effects, inhalation**: 260 mg/m³
- **Acute - local effects, inhalation**: 260 mg/m³
- **Long-term - systemic effects, oral**: 12.5 mg/kg bodyweight/day
- **Long-term - systemic effects, inhalation**: 65.3 mg/m³
- **Long-term - systemic effects, dermal**: 125 mg/kg bodyweight/day
- **Long-term - local effects, inhalation**: 65.3 mg/m³

**PNEC (Water)**

- **PNEC aqua (freshwater)**: 0.327 mg/l
- **PNEC aqua (marine water)**: 0.327 mg/l
- **PNEC aqua (intermittent, freshwater)**: 0.327 mg/l

**PNEC (Sediment)**

- **PNEC sediment (freshwater)**: 12.46 mg/kg dwt
- **PNEC sediment (marine water)**: 12.46 mg/kg dwt

**PNEC (Soil)**

- **PNEC soil**: 2.31 mg/kg dwt

**Di-tert-butyl peroxide (110-05-4)**

**DNEL/DMEL (Workers)**

- **Long-term - systemic effects, dermal**: 3 mg/kg bodyweight/day
- **Long-term - systemic effects, inhalation**: 20 mg/m³

**PNEC (Water)**

- **PNEC aqua (freshwater)**: 0.144 mg/l
- **PNEC aqua (marine water)**: 0.014 mg/l
- **PNEC aqua (intermittent, freshwater)**: 0.36 mg/l

**PNEC (Sediment)**

- **PNEC sediment (freshwater)**: 15 mg/kg dwt
- **PNEC sediment (marine water)**: 1.5 mg/kg dwt

**PNEC (Soil)**

- **PNEC soil**: 2.94 mg/kg dwt

**PNEC (STP)**

- **PNEC sewage treatment plant**: 10 mg/l

### 8.2. Exposure controls

**Appropriate engineering controls**: Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Provide good ventilation in process area to prevent formation of vapour. Does not require any specific or particular technical measures.

**Personal protective equipment**: Gloves. Safety glasses.

**Hand protection**: Neoprene. Nitrile rubber. Choosing the proper glove is a decision that depends not only on the type of material, but also on other quality features, which differ for each manufacturer. Time of penetration is to be checked with the glove producer.

**Other information**: Breakthrough time: >30’. Thickness of the glove material >0.1 mm.

### SECTION 9: Physical and chemical properties

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

**Physical state**: Liquid

**Appearance**: Clear.

**Colour**: Light yellow.
Odour: characteristic.
Odour threshold: No data available
pH:
Relative evaporation rate (butylacetate=1):
refraction index: 1,44
Melting point:
Freezing point:
Boiling point:
Flash point:
Auto-ignition temperature:
Decomposition temperature:
Flammability (solid, gas):
Vapour pressure:
Relative vapour density at 20 °C:
Relative density:
Density @20°C:
848 kg/m³
Solubility:
Log Pow:
Log Kow:
Viscosity, kinematic @40°C:
2,56 mm²/s
Viscosity, dynamic @40°C:
Viscosity:
Viscosity Index:
Explosive properties:
Oxidising properties: Non oxidizing material according to EC criteria.
Explosive limits:
9.2. Other information
VOC content: 85,96 %
Additional information: The physical and chemical data in this section are typical values for this product and are not intended as product specifications.

SECTION 10: Stability and reactivity
10.1. Reactivity
No additional information available
10.2. Chemical stability
Stable under normal conditions.
10.3. Possibility of hazardous reactions
No additional information available
10.4. Conditions to avoid
Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Keep away from strong acids and strong oxidizers.
10.5. Incompatible materials
No additional information available
10.6. Hazardous decomposition products

SECTION 11: Toxicological information
11.1. Information on toxicological effects
Acute toxicity: Harmful: may cause lung damage if swallowed
Cat & Lambda Cleaner
ATE CLP (dust,mist) 2,689 mg/l/4h
distillates (Fischer-Tropsch), C8-26, branched and linear (848301-67-7)
LD50 oral rat > 5000 mg/kg bodyweight Sprague-Dawley
LD50 dermal rat > 2000 mg/kg bodyweight Sprague-Dawley

2-butoxyethanol (111-76-2)
LD50 oral rat 1746 mg/kg bodyweight COBS, CD, BR
LD50 dermal rat > 2000 mg/kg bodyweight Sprague-Dawley
LD50 dermal rabbit 24h 435 mg/kg bodyweight New Zealand White
LC50 inhalation rat (mg/l) 2,2 mg/l/4h Fischer 344
ATE CLP (oral) 1746 mg/kg bodyweight
ATE CLP (dermal) 1100 mg/kg bodyweight
ATE CLP (vapours) 2,2 mg/l/4h
ATE CLP (dust,mist) 2,2 mg/l/4h

2-ethylhexan-1-ol (104-76-7)
LD50 oral rat 3290 mg/kg
LD50 dermal rabbit > 3000 mg/kg
LC50 inhalation rat (mg/l) 1,1 mg/l/4h
ATE CLP (oral) 3290 mg/kg bodyweight
ATE CLP (dermal) 3000 mg/kg bodyweight
ATE CLP (vapours) 1,1 mg/l/4h
ATE CLP (dust,mist) 1,1 mg/l/4h

reaction mass of ethylbenzene and xylene
LD50 oral rat 3523 mg/kg bodyweight F344/N
LD50 dermal rabbit 12126 mg/kg bodyweight New Zealand White
ATE CLP (oral) 3523 mg/kg bodyweight
ATE CLP (dermal) 1100 mg/kg bodyweight
ATE CLP (gases) 4500 ppmv/4h
ATE CLP (vapours) 11 mg/l/4h
ATE CLP (dust,mist) 1,5 mg/l/4h

Di-tert-butyl peroxide (110-05-4)
LD50 oral rat > 2000 mg/kg bodyweight Wistar
LD50 dermal rat > 2000 mg/kg bodyweight Wistar
LC50 inhalation rat (mg/l) > 22 mg/l/4h Wistar

hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)
LD50 oral rat > 15000 mg/kg
LD50 dermal rabbit > 3400 mg/kg
LC50 inhalation rat (mg/l) > 13,1 mg/l/4h

Skin corrosion/irritation: Causes skin irritation.
Serious eye damage/irritation: Causes serious eye irritation.
Respiratory or skin sensitisation: Not classified
Germ cell mutagenicity: Suspected of causing genetic defects.
Carcinogenicity: Not classified
Reproductive toxicity: Not classified
STOT-single exposure: May cause respiratory irritation.
STOT-repeated exposure: May cause damage to organs through prolonged or repeated exposure.
Aspiration hazard: May be fatal if swallowed and enters airways.

SECTION 12: Ecological information

12.1. Toxicity

distillates (Fischer-Tropsch), C8-26, branched and linear (848301-67-7)
LC50 fish 1 > 1000 mg/l @96h Pimephales promelas
EC50 Daphnia 1 > 1000 mg/l @48h Daphnia magna
EC50 other aquatic organisms 1 > 1000 mg/l @72h Pseudokirchneriella subcapitata
NOEC (acute) > 1000 mg/l @48h Daphnia magna
2-butoxyethanol (111-76-2)
LC50 fish 1 96h 1464 mg/l Oncorhynchus mykiss
EC50 Daphnia 1 48h 1800 mg/l Daphnia magna
EC50 other aquatic organisms 1 72h 911 mg/l Pseudokirchneriella subcapitata
NOEC (acute) 72h 88 mg/l Pseudokirchneriella subcapitata

2-ethylhexan-1-ol (104-76-7)
LC50 fish 1 96h 28,2 mg/l pimephales promelas
EC50 Daphnia 1 48h 39 mg/l daphnia magna
EC50 other aquatic organisms 1 72h 11,5 mg/l algae (desmodesmus subspicatus)

reaction mass of ethylbenzene and xylene
LC50 fish 1 > 2,6 mg/l @96h
EC50 other aquatic organisms 1 72h 2,2 mg/l

Di-tert-butyl peroxide (110-05-4)
LC50 fish 1 96h 805,089 mg/l Pimephales promelas
EC50 Daphnia 1 > 73,1 mg/l @48h Daphnia magna
EC50 other aquatic organisms 1 ≈ 15 mg/l @72h Pseudokirchneriella subcapitata

12.2. Persistence and degradability

distillates (Fischer-Tropsch), C8-26, branched and linear (848301-67-7)
Persistence and degradability Readily biodegradable.

2-butoxyethanol (111-76-2)
Persistence and degradability Readily biodegradable.

2-ethylhexan-1-ol (104-76-7)
Persistence and degradability Readily biodegradable.

12.3. Bioaccumulative potential

distillates (Fischer-Tropsch), C8-26, branched and linear (848301-67-7)
Log Pow > 6,5 @40°C

2-butoxyethanol (111-76-2)
Bioaccumulative potential Slightly bioaccumulative.

2-ethylhexan-1-ol (104-76-7)
Bioaccumulative potential No bioaccumulation.

Di-tert-butyl peroxide (110-05-4)
Log Pow 3,2 @22°C

12.4. Mobility in soil

2-butoxyethanol (111-76-2)
Ecology - soil Small adsorption.

12.5. Results of PBT and vPvB assessment

2-ethylhexan-1-ol (104-76-7)
This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII
This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)
This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII
This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

12.6. Other adverse effects
No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods
Product/Packaging disposal recommendations
Dispose in a safe manner in accordance with local/national regulations. Remove to an authorized waste treatment plant. Avoid release to the environment.

European List of Waste (LoW) code
18 01 06* - chemicals consisting of or containing dangerous substances
15 01 10* - packaging containing residues of or contaminated by dangerous substances
SECTION 14: Transport information

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

14.1. UN number
UN-No. (ADR) : 1993

14.2. UN proper shipping name
Proper Shipping Name (ADR) : FLAMMABLE LIQUID, N.O.S.
Transport document description (ADR) : UN 1993 FLAMMABLE LIQUID, N.O.S. (xylenes, di-tert-butylperoxide), 3, III, (D/E)

14.3. Transport hazard class(es)
Class (ADR) : 3
Danger labels (ADR) : 3

14.4. Packing group
Packing group (ADR) : III

14.5. Environmental hazards
Other information : No supplementary information available.

14.6. Special precautions for user

14.6.1. Overland transport
Hazard identification number (Kemler No.) : 30
Classification code (ADR) : F1
Orange plates : 30

Special provisions (ADR) : 274, 601, 640E
Transport category (ADR) : 3
Tunnel restriction code (ADR) : D/E
Limited quantities (ADR) : 5l
Excepted quantities (ADR) : E1
EAC code : •3YE

14.6.2. Transport by sea
EmS-No. (1) : F-E, S-E

14.6.3. Air transport
Instruction "cargo" (ICAO) : 366
Instruction "passenger" (ICAO) : 355
Instruction "passenger" - Limited quantities (ICAO) : Y344

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
VOC content : 85,96 %
15.1.2. National regulations

Water hazard class (WGK) : 2 - significant hazard to water

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

Full text of H- and EUH-statements:

- 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 3 Hazardous to the aquatic environment — Chronic Hazard, Category 3
- Asp. Tox. 1 Aspiration hazard, 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
- Muta. 2 Germ cell mutagenicity, Category 2
- Org. Perox. E Organic Peroxides, Type E
- 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 3 Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation
- H225 Highly flammable liquid and vapour.
- H226 Flammable liquid and vapour.
- H242 Heating may cause a fire.
- H302 Harmful if swallowed.
- H304 May be fatal if swallowed and enters airways.
- H312 Harmful in contact with skin.
- H315 Causes skin irritation.
- H319 Causes serious eye irritation.
- H332 Harmful if inhaled.
- H335 May cause respiratory irritation.
- H341 Suspected of causing genetic defects.
- H372 Causes damage to organs through prolonged or repeated exposure.
- H373 May cause damage to organs through prolonged or repeated exposure.
- H412 Harmful to aquatic life with long lasting effects.

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.