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

1.1. Product identifier

Product name : Engine Flush
Product code  : W51265

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 : Treatment for the cleaning of oil circuits.

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.be

1.4. Emergency telephone number

Emergency number : BIG: +32(0)14/58.45.45

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

Eye Irrit. 2 : H319
STOT RE 1 : H372
Asp. Tox. 1 : H304
Aquatic Chronic 3 : H412

Full text of H-statements: see section 16

Classification according to Directive 67/548/EEC [DSD] or 1999/45/EC [DPD]

Xn; R65
Xn; R48/20
R66
R52/53

Full text of R-phrases: 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) :

Signal word (CLP) : Danger
Hazardous ingredients : Hydrocarbons, C10, aromatics, <1% naphthalene, hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)
Hazard statements (CLP) :

EUH-statements : EUH066 - Repeated exposure may cause skin dryness or cracking
Precautionary statements (CLP) :
P102 - Keep out of reach of children
P405 - Store locked up
P260 - Do not breathe vapours
P301+P310 - IF SWALLOWED: Immediately call a POISON CENTER, a doctor
P331 - Do NOT induce vomiting
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
P337+P313 - If eye irritation persists: Get medical advice/attention
P273 - Avoid release to the environment


<table>
<thead>
<tr>
<th>Component</th>
<th>% w</th>
</tr>
</thead>
<tbody>
<tr>
<td>aromatic hydrocarbons</td>
<td>5-15%</td>
</tr>
<tr>
<td>non-ionic surfactants</td>
<td>&lt;5%</td>
</tr>
</tbody>
</table>

2.3. Other hazards
No additional information available

SECTION 3: Composition/information on ingredients

3.1. Substance
Not applicable

3.2. Mixture

<table>
<thead>
<tr>
<th>Name</th>
<th>Product identifier</th>
<th>% w</th>
<th>Classification according to Directive 67/548/EEC</th>
</tr>
</thead>
<tbody>
<tr>
<td>hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)</td>
<td>(EC no) 919-164-8 (REACH-no) 01-2119473977-17</td>
<td>50 - 75</td>
<td>Xn; R48/20 Xn; R65 R66</td>
</tr>
<tr>
<td>hydrocarbons, C10, aromatics, &lt;1% naphthalene</td>
<td>(EC no) 918-811-1 (REACH-no) 01-2119463583-34</td>
<td>10 - 25</td>
<td>N; R51/53 Xn; R65 R66 R67</td>
</tr>
<tr>
<td>Amides, C16-18 and C18-unsatd., N,N-bis(hydroxyethyl)</td>
<td>(CAS No) 68603-38-3 (EC no) 271-653-9</td>
<td>2,5 - 5</td>
<td>Xi; R41 Xi; R38</td>
</tr>
<tr>
<td>Naphthalene</td>
<td>(CAS No) 91-20-3 (EC no) 202-049-5 (EC index no) 601-052-00-2 (REACH-no) 01-2119561346-37</td>
<td>0,1 - 1</td>
<td>Carc.Cat.3; R40 Xn; R22 N; R50/53</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Name</th>
<th>Product identifier</th>
<th>% w</th>
<th>Classification according to Regulation (EC) No. 1272/2008 [CLP]</th>
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<td>STOT RE 1, H372 Asp. Tox. 1, H304 Aquatic Chronic 3, H412</td>
</tr>
<tr>
<td>Hydrocarbons, C10, aromatics, &lt;1% naphthalene</td>
<td>(EC no) 918-811-1 (REACH-no) 01-2119463583-34</td>
<td>10 - 25</td>
<td>STOT SE 3, H336 Asp. Tox. 1, H304 Aquatic Chronic 2, H411</td>
</tr>
<tr>
<td>Amides, C16-18 and C18-unsatd., N,N-bis(hydroxyethyl)</td>
<td>(CAS No) 68603-38-3 (EC no) 271-653-9</td>
<td>2,5 - 5</td>
<td>Skin Irrit. 2, H315 Eye Dam. 1, H318</td>
</tr>
<tr>
<td>Naphthalene</td>
<td>(CAS No) 91-20-3 (EC no) 202-049-5 (EC index no) 601-052-00-2 (REACH-no) 01-2119561346-37</td>
<td>0,1 - 1</td>
<td>Carc. 2, H351 Acute Tox. 4 (Oral), H302 Aquatic Acute 1, H400 Aquatic Chronic 1, H410</td>
</tr>
</tbody>
</table>

Full text of R- and 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 or doctor/physician if you feel unwell.

First-aid measures after skin contact: After contact with skin, take off immediately all contaminated clothing, and wash immediately with plenty of water and soap. If skin irritation 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: Rinse mouth. Do NOT induce vomiting. Call a POISON CENTER or doctor/physician if you feel unwell. Ingestion of large quantities: immediately to hospital.

4.2. Most important symptoms and effects, both acute and delayed
No additional information available

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.

5.2. Special hazards arising from the substance or mixture
Fire hazard: Combustible liquid. This material can accumulate static charge by flow or agitation and can be ignited by static discharge.

Explosion hazard: No direct explosion hazard.

5.3. Advice for firefighters
Firefighting instructions: Prevent fire-fighting water from entering 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: Use special care to avoid static electric charges. No open flames. No smoking.

6.1.1. For non-emergency personnel
Emergency procedures: Mark the danger area. Seal off low-lying areas. Large spills/in enclosed spaces: compressed air apparatus. Wash contaminated clothes.

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 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. Small quantities of liquid spill: take up in non-combustible absorbent material and shovel into container for disposal. Clean with detergents. Avoid solvent cleaners.

6.4. Reference to other sections
No additional information available

SECTION 7: Handling and storage

7.1. Precautions for safe handling
Precautions for safe handling: Meets the legal requirements. Repeated or prolonged contact with the product may lead to removal of natural fats from the skin. Presents no particular risk when handled in accordance with good occupational hygiene practice.

Hygiene measures: Use good personal hygiene practices. Wash contaminated clothing before reuse.

7.2. Conditions for safe storage, including any incompatibilities
Storage conditions: Meets the legal requirements. Keep container tightly closed.
Engine Flush
Safety Data Sheet
according to Regulation (EC) No. 453/2010

Storage area: Meets the legal requirements. Store in a well-ventilated place.
Special rules on packaging: Keep only in original container. correctly labelled.

7.3. Specific end use(s)
No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

**hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)**
Italy - Portugal - USA
ACGIH TWA (ppm) 100 ppm

**Naphthalene (91-20-3)**
EU
IOELV TWA (mg/m³) 50 mg/m³
EU
IOELV TWA (ppm) 10 ppm
Belgium
Limit value (mg/m³) 53 mg/m³
Belgium
Limit value (ppm) 10 ppm
Belgium
Short time value (mg/m³) 80 mg/m³
Belgium
Short time value (ppm) 15 ppm
Belgium
Remark (BE) D

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. Does not require any specific or particular technical measures.
Personal protective equipment: Gloves. Safety glasses.
Hand protection: Neoprene. nitrile. 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: Yellow.
Odour: characteristic.
Odour threshold: No data available
pH: No data available
Relative evaporation rate (butylacetate=1): No data available
refraction index: 1,467
Melting point: No data available
Freezing point: No data available
Boiling point: No data available
Flash point: 65 °C
Auto-ignition temperature: No data available
Decomposition temperature: No data available
Flammability (solid, gas): No data available
Vapour pressure: No data available
Relative vapour density at 20 °C: No data available
Relative density: No data available
Density @20°C: 840 kg/m³
Solubility: No data available
Log Pow: No data available

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Log Kow : No data available
Viscosity, kinematic @40°C : 2,07 mm²/s
Viscosity, dynamic @40°C : No data available
Viscosity : 
Viscosity Index : 
Explosive properties : No data available
Oxidising properties : No data available
Explosive limits : No data available

9.2. Other information
VOC content : 72 %
Other properties : Dimethylsulfoxide (DMSO) <3%.
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 sources of heat (e.g. hot surfaces), sparks and open flames. Keep away from strong acids and strong oxidizers.

10.5. Incompatible materials
No additional information available

10.6. Hazardous decomposition products
No additional information available

SECTION 11: Toxicological information

11.1. Information on toxicological effects
Acute toxicity : Harmful: may cause lung damage if swallowed

Naphthalene (91-20-3)
ATE CLP (oral) : 500,000 mg/kg bodyweight
Skin corrosion/irritation : Not classified
Serious eye damage/irritation : Causes serious eye irritation.
Respiratory or skin sensitisation : Not classified
Germ cell mutagenicity : Not classified
Carcinogenicity : Not classified
Reproductive toxicity : Not classified
Specific target organ toxicity (single exposure) : Not classified
Specific target organ toxicity (repeated exposure) : Causes damage to organs (central nervous system) through prolonged or repeated exposure.
Aspiration hazard : May be fatal if swallowed and enters airways.

SECTION 12: Ecological information

12.1. Toxicity
Ecology - general : May cause long lasting harmful effects to aquatic life.
Ecology - water : Harmful to aquatic life with long lasting effects.

Naphthalene (91-20-3)
LC50 fish 1 : 6,08 mg/l 96h
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
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
Waste disposal recommendations : Remove to an authorized waste treatment plant.

SECTION 14: Transport information

14.1. UN number
Not regulated for transport

14.2. UN proper shipping name
Not applicable

14.3. Transport hazard class(es)
Not applicable

14.4. Packing group
Not applicable

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

14.6. Special precautions for user

14.6.1. Overland transport
No additional information available

14.6.2. Transport by sea
No additional information available

14.6.3. Air transport
No additional information available

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
Engine Flush is not on the REACH Candidate List
Contains no substance on the REACH candidate list
Contains no REACH Annex XIV substances
VOC content : 72 %
15.1.2. National regulations

Water hazard class (WGK) : 2 - hazard to waters

15.2. Chemical safety assessment

No additional information available

**SECTION 16: Other information**

Full text of R-, H- and EUH-statements:

- **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

- **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. 2**
  - Carcinogenicity, Category 2

- **Eye Dam. 1**
  - Serious eye damage/eye irritation, Category 1

- **Eye Irrit. 2**
  - Serious eye damage/eye irritation, Category 2

- **Skin Irrit. 2**
  - Skin corrosion/irritation, Category 2

- **STOT RE 1**
  - Specific target organ toxicity — Repeated exposure, Category 1

- **STOT SE 3**
  - Specific target organ toxicity — Single exposure, Category 3, Narcosis

- **H302**
  - Harmful if swallowed

- **H304**
  - May be fatal if swallowed and enters airways

- **H315**
  - Causes skin irritation

- **H318**
  - Causes serious eye damage

- **H319**
  - Causes serious eye irritation

- **H336**
  - May cause drowsiness or dizziness

- **H351**
  - Suspected of causing cancer

- **H372**
  - Causes damage to organs through prolonged or repeated exposure

- **H400**
  - Very toxic to aquatic life

- **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

- **R22**
  - Harmful if swallowed

- **R38**
  - Irritating to skin

- **R40**
  - Limited evidence of a carcinogenic effect

- **R41**
  - Risk of serious damage to eyes

- **R48/20**
  - Harmful: danger of serious damage to health by prolonged exposure through inhalation

- **R50/53**
  - Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment

- **R51/53**
  - Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment

- **R52/53**
  - Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment

- **R65**
  - Harmful: may cause lung damage if swallowed

- **R66**
  - Repeated exposure may cause skin dryness or cracking

- **R67**
  - Vapours may cause drowsiness and dizziness

- **N**
  - Dangerous for the environment

- **Xi**
  - Irritant

- **Xn**
  - Harmful

*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.*