

according to Regulation (EG) No. 1907/2006

## 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

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

#### VAICO Engine Flush

VAICO No:  
V60-1011

### 1.2. Details of the supplier of the safety data sheet

- 1.2.1. Manufacturer/Supplier:  
VIEROL AG | Karlstraße 19 | 26123 Oldenburg | Germany  
Telefon +49 441 - 210 20-0 | Telefax +49 441 - 210 20-111
- 1.2.2. Responsible Department:  
VIEROL AG | Karlstraße 19 | 26123 Oldenburg | Germany  
Telefon +49 441 - 210 20-0 | Telefax +49 441 - 210 20-111

### 1.3. Emergency telephone number: Gift-Informationszentrum Nord (Göttingen) Telefon +49 (0)551/ 19240

## 2. HAZARD'S IDENTIFICATION

### 2.1. Classification of the substance or mixture Regulation (EC) No. 1272/2008

GHS08 health hazard



Asp. Tox. 1 H304 May be fatal if swallowed and enters airways.

GHS07



### 2.2. Label elements Labelling according to Regulation (EC) No 1272/2008 The product is classified and labelled according to the CLP regulation.

#### Hazard pictograms



GHS08



GHS07

**Signal Word**  
Warning

according to Regulation (EG) No. 1907/2006

#### Hazard-determining components of labelling

Distillates (petroleum), hydrotreated light ethyl acetate

#### Hazard statements

H336 May cause drowsiness or dizziness.  
H304 May be fatal if swallowed and enters airways.

#### Precautionary statements

P101 If medical advice is needed, have product container or label at hand.  
P102 Keep out of reach of children.  
P103 Read label before use.  
P271 Use only outdoors or in a well-ventilated area.  
P261 Avoid breathing vapours.  
P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/ doctor.  
P312 Call a POISON CENTER/doctor if you feel unwell.  
P331 Do NOT induce vomiting.  
P405 Store locked up  
P403+P233 Store in a well-ventilated place. Keep container tightly closed.  
P501 Dispose of contents/container to hazardous or special waste collection point.

#### 2.3. Other hazards

Results of PBT and vPvB assessment  
PBT: Not applicable.  
vPvB: Not applicable.

## 3. COMPOSITION / INFORMATION ON INGREDIENTS

#### 3.1. Mixtures

Description  
Mixture of substances listed below with nonhazardous additions.

#### 3.2. Dangerous components

|   |   |         |
|---|---|---------|
| CAS: 64742-47-8   | Distillates (petroleum), hydrotreated light                 |         |
| EINECS: 265-149-8   | ⚠ Asp. Tox. 1, H304; ⚠ STOT SE 3, H336                      | 50-100% |
| CAS: 141-78-6   | ethyl acetate   |         |
| EINECS: 205-500-4   | ⚠ Flam. Liq. 2, H225; ⚠ Eye Irrit. 2, H319; STOT SE 3, H336 | 2.5-10% |
| <i>Regulation (EC) No 648/2004 on detergents / Labelling for contents</i> |   |         |
| aliphatic hydrocarbons  |   | >30%    |

#### Additional information

For the wording of the listed risk phrases refer to section 16.

## 4. FIRST AID MEASURES

#### 4.1. Description of first aid measures

##### After inhalation

Supply fresh air; consult doctor in case of complaints.  
Take affected persons into fresh air and keep quiet.

##### After skin contact

Immediately wash with water and soap and rinse thoroughly.  
Immediately remove any clothing soiled by the product.

according to Regulation (EG) No. 1907/2006

**After eye contact**

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

**After swallowing**

Do not induce vomiting; call for medical help immediately

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

Unconsciousness

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

No further relevant information available.

## 5. FIREFIGHTING MEASURES

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**5.1. Extinguishing media**

Suitable extinguishing agents

CO<sub>2</sub>, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

**For safety reasons unsuitable extinguishing agents**

Water with full jet

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

In case of fire, the following can be released:

Carbon monoxide (CO)

**5.3. Advice for firefighters**

Protective equipment:

Wear self-contained respiratory protective device.

Wear fully protective suit.

**Additional information**

Cool endangered receptacles with water spray.

Collect contaminated fire fighting water separately. It must not enter the sewage system.

Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.

## 6. ACCIDENTAL RELEASE MEASURES

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

Wear protective equipment. Keep unprotected persons away.

Ensure adequate ventilation

Keep away from ignition sources.

**6.2. Environmental precautions**

Inform respective authorities in case of seepage into water course or sewage system.

Do not allow to enter sewers/ surface or ground water.

**6.3. Methods and material for containment and cleaning up**

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Ensure adequate ventilation.

**6.4. Reference to other sections**

See Section 13 for disposal information.

according to Regulation (EG) No. 1907/2006

## 7. HANDLING AND STORAGE

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### 7.1. Precautions for safe handling

Ensure good ventilation/exhaustion at the workplace.  
Keep receptacles tightly sealed.  
Keep away from sources of ignition - No smoking.  
Prevent formation of aerosols.  
Avoid contact with skin and eyes.

### Information about fire - and explosion protection

Protect against electrostatic charges.

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

Requirements to be met by storerooms and receptacles: Store in a cool location.  
Information about storage in one common storage facility: Not required.  
Further information about storage conditions: Protect from heat and direct sunlight.

### 7.3. Specific end use(s)

No further relevant information available.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

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### Additional information about design of technical facilities

No further data; see item 7.

### 8.1. Control parameters

Inform respective authorities in case of seepage into water course or sewage system.  
Do not allow to enter sewers/ surface or ground water.

### Ingredients with limit values that require monitoring at the workplace

141-78-6 ethyl acetate

WEL

Short-term value: 400 ppm

Long-term value: 200 ppm

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### Additional information

The lists valid during the making were used as basis

### 8.2. Exposure controls

#### Personal protective equipment

#### General protective and hygienic measures

Keep away from foodstuffs, beverages and feed.  
Immediately remove all soiled and contaminated clothing  
Wash hands before breaks and at the end of work.  
Do not inhale gases / fumes / aerosols.  
Avoid contact with the eyes and skin.

#### Respiratory protection

Not necessary if room is well-ventilated.

#### Protection of hands

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

according to Regulation (EG) No. 1907/2006

### Material of gloves

Nitrile rubber, NBR

Recommended thickness of the material: <sup>3</sup> 0.7 mm

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

### 8.3. Specific end use(s)

No further relevant information available.

## 9. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Additional information about design of technical facilities

No further data; see item 7.

### 9.1. Control parameters

Inform respective authorities in case of seepage into water course or sewage system.

Do not allow to enter sewers/ surface or ground water.

*141-78-6 ethyl acetate*

*WEL*

*Short-term value: 400 ppm*

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#### Personal protective equipment

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Wash hands before breaks and at the end of work.

Do not inhale gases / fumes / aerosols.

Avoid contact with the eyes and skin.

#### Respiratory protection

Not necessary if room is well-ventilated.

#### Protection of hands

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

#### Material of gloves

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Recommended thickness of the material: <sup>3</sup> 0.7 mm

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

#### Penetration time of glove material

>240 min

The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.

#### Eye protection

Tightly sealed goggles



according to Regulation (EG) No. 1907/2006

## Body protection

Protective work clothing

## 10. PHYSICAL AND CHEMICAL PROPERTIES

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

#### General Information

Appearance:

|         |              |
|---------|--------------|
| Form:   | Fluid        |
| Colour: | Colourless   |
| Odour:  | Solvent-like |

#### Change in condition

|                              |               |
|------------------------------|---------------|
| Melting point/Melting range: | Undetermined. |
| Boiling point/Boiling range: | Undetermined. |

#### Flash point

Undetermined

#### Danger of explosion

Product does not present an explosion hazard.

#### Density at 20 °C

0.8 g/cm<sup>3</sup>

#### Solubility in / Miscibility with

water: Not miscible or difficult to mix.

#### Viscosity

|                   |                   |
|-------------------|-------------------|
| Dynamic:          | Not determined.   |
| Kinematic:        | Not determined.   |
| Organic solvents: | 85.0 %            |
| VOC (EC)          | 85 %<br>680.0 g/l |

### 10.2. Other information

No further relevant information available.

## 11. STABILITY AND REACTIVITY

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### 11.1. Reactivity

### 11.2. Chemical stability

Thermal decomposition / conditions to be avoided  
No decomposition if used according to specifications

### 11.3. Possibility of hazardous reactions

No dangerous reactions known.

### 11.4. Conditions to avoid

No further relevant information available

### 11.5. Incompatible materials

No further relevant information available

according to Regulation (EG) No. 1907/2006

- 11.6. Hazardous decomposition products**  
No dangerous decomposition products known.

## 12. TOXICOLOGICAL INFORM

- 12.1. Information on toxicological effects**  
Acute toxicity

### LD/LC50 values relevant for classification

*ATE (Acute Toxicity Estimates)*

|  |         |                      |
|--|---------|----------------------|
| <i>Inhalative</i>  | LC50/4h | 6.25mg/l (rat)       |
| <b>6 4742-47-8 Distillates (petroleum), hydrotreated light</b> |         |                      |
| <i>Oral</i>  | LD50    | >2000 mg/kg (rat)    |
| <i>Dermal</i>  | LD50    | >2000 mg/kg (rabbit) |
| <i>Inhalative</i>  | LC50/4h | >5 mg/l (rat)        |
| <b>141-78-6 ethyl acetate</b>                                  |         |                      |
| <i>Oral</i>  | LD50    | 5620mg/kg (rabbit)   |
| <i>Inhalative</i>  | LC50/4h | 1600mg/l (rat)       |

**Primary irritant effect**  
**Skin corrosion/irritation**  
No irritant effect

**Respiratory or skin sensitisation**  
No sensitising effects known.

### Additional toxicological information

The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:  
Harmful

## 13. ECOLOGICAL INFORMATION

- 13.1. Toxicity**  
Aquatic toxicity  
No further relevant information available

- 13.2. Persistence and degradability**  
No further relevant information available  
Other information  
The product is biodegradable

- 13.3. Bioaccumulative potential**  
No further relevant information available

- 13.4. Mobility in soil**  
No further relevant information available.

### Additional ecological information

#### General notes

Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water  
Do not allow product to reach ground water, water course or sewage system.

according to Regulation (EG) No. 1907/2006

## 13.5. Results of PBT and vPvB assessment

### PBT

Not applicable.

### vPvB

Not applicable.

## 14. DISPOSAL CONSIDERATIONS

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### 14.1. Waste treatment methods

Recommendation

Must not be disposed together with household garbage. Do not allow product to reach sewage system.

### European waste catalogue

07 06 04 other organic solvents, washing liquids and mother liquors

15 01 10 packaging containing residues of or contaminated by dangerous substances

### Uncleaned packaging

#### Recommendation

Disposal must be made according to official regulations

## 15. TRANSPORT INFORMATION

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### 15.1. UN-Number

ADR,RID,ADN, ADN, IMDG, IATA

Void

### 15.2. UN proper shipping name

ADR,RID,ADN, ADN, IMDG, IATA

Void

### 15.3. Transport hazard class(es)

ADR,RID,ADN, ADN, IMDG, IATA

Class

Void

### 15.4. Packing group

ADR,RID,ADN, IMDG, IATA

Void

### 15.5. Environmental hazards:

Marine pollutant:

No

### 15.6. Special precautions for user

Not applicable.

### 15.7. Transport in bulk according to Annex II of

MARPOL73/78 and the IBC Code

Not applicable.

UN "Model Regulation"

according to Regulation (EG) No. 1907/2006

## 16. REGULATORY INFORMATION

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

No further relevant information available

### 16.2. Chemical safety assessment

A Chemical Safety Assessment has not been carried out.

## 17. OTHER INFORMATION

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This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

### Relevant phrases

H225 Highly flammable liquid and vapour.

H304 May be fatal if swallowed and enters airways.

H319 Causes serious eye irritation.

H336 May cause drowsiness or dizziness.

### Abbreviations and acronyms

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the

International Transport of Dangerous Goods by Rail)

ICAO: International Civil Aviation Organisation

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International

Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

VOC: Volatile Organic Compounds (USA, EU)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

Flam. Liq. 2: Flammable liquids, Hazard Category 2

Eye Irrit. 2: Serious eye damage/eye irritation, Hazard Category 2

STOT SE 3: Specific target organ toxicity - Single exposure, Hazard Category 3

Asp. Tox. 1: Aspiration hazard, Hazard Category 1

\* Data compared to the previous version altered.