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

### 1.1. Product identifier

| | | |
|---|---|---|
| Product form | : | Mixture |
| Trade name | : | PETRYGO HEAVY |
| UFI | : | MM90-N024-X009-W46F |
| Product group | : | Trade product |

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

#### 1.2.1. Relevant identified uses

Intended for general public

| | | |
|---|---|---|
| Main use category | : | Professional use,Consumer use |
| Use of the substance/mixture | : | Radiator cooling fluid |

#### 1.2.2. Uses advised against

No additional information available

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

ORLEN OIL Sp. z o.o.
ul. Elbląska 135
80-718 Gdańsk
T +48 12 66 555 00 / +48 12 66 555 01
centrala@orlenoil.pl
E-mail address of competent person responsible for the SDS : msds@orlenoil.pl

### 1.4. Emergency telephone number

| | | |
|---|---|---|
| Emergency number | : | Emergency contact + 48 242010367, +48 242869509, +48242869556 (7:00-15:00)<br>Emergency number 112 |

## SECTION 2: Hazards identification

### 2.1. Classification of the substance or mixture

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

| | |
|---|---|
| Acute toxicity (oral), Category 4 | H302 |
| Specific target organ toxicity – Repeated exposure, Category 2 | H373 |

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

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

May cause damage to organs through prolonged or repeated exposure. Harmful if swallowed.

### 2.2. Label elements

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

Hazard pictograms (CLP) :

GHS07 GHS08

| | | |
|---|---|---|
| Signal word (CLP) | : | Warning |
| Contains | : | ethylene glycol |
| Hazard statements (CLP) | : | H302 - Harmful if swallowed.<br>H373 - May cause damage to organs (kidneys) through prolonged or repeated exposure (if swallowed). |
| Precautionary statements (CLP) | : | P102 - Keep out of reach of children.<br>P260 - Do not breathe vapours, spray.<br>P264 - Wash hands thoroughly after handling. |

P270 - Do not eat, drink or smoke when using this product.
P301+P312 - IF SWALLOWED: Call a POISON CENTRE or doctor if you feel unwell.
P501 - Dispose of contents/container to properly labelled waste containers according to the national law.

### 2.3. Other hazards

Contains no PBT/vPvB substances ≥ 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 is 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

### 3.1. Substances

Not applicable

### 3.2. Mixtures

| Name | Product identifier | % | Classification according to Regulation (EC) No. 1272/2008 [CLP] |
|---|---|---|---|
| ethylene glycol<br>substance with national workplace exposure limit(s) (GB); substance with a Community workplace exposure limit | CAS-No.: 107-21-1<br>EC-No.: 203-473-3<br>EC Index-No.: 603-027-00-1<br>REACH-no: 01-2119456816-28 | 39.75 – 53 | Acute Tox. 4 (Oral), H302 (ATE=500 mg/kg bodyweight)<br>STOT RE 2, H373 |
| disodium sebacate | CAS-No.: 17265-14-4<br>EC-No.: 241-300-3<br>REACH-no: 01-2120762063-61 | 1.59 – 2.65 | Eye Irrit. 2, H319 |
| Sodium 4(or 5)-methyl-1H-benzotriazolide | CAS-No.: 64665-57-2<br>EC-No.: 265-004-9<br>REACH-no: 01-2119980062-42 | 0.053 – 0.106 | Acute Tox. 4 (Oral), H302 (ATE=500 mg/kg bodyweight)<br>Skin Corr. 1B, H314<br>Repr. 2, H361d<br>Aquatic Chronic 2, H411 |

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

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

First-aid measures general : Call a poison center or a doctor if you feel unwell.
First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing.
First-aid measures after skin contact : Wash skin with plenty of water.
First-aid measures after eye contact : Rinse eyes with water as a precaution.
First-aid measures after ingestion : Rinse mouth. Call a poison center or a doctor if you feel unwell.

### 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

Treat symptomatically.

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

Suitable extinguishing media : Dry chemical, CO2, or water spray or regular foam.

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

Hazardous decomposition products in case of fire : Toxic fumes may be released.

### 5.3. Advice for firefighters

Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

## SECTION 6: Accidental release measures

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

#### 6.1.1. For non-emergency personnel

Emergency procedures : Ventilate spillage area. Do not breathe dust/fume/gas/mist/vapours/spray.

#### 6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

### 6.2. Environmental precautions

Avoid release to the environment.

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

Methods for cleaning up : Take up liquid spill into absorbent material.

Other information : Dispose of materials or solid residues at an authorized site.

### 6.4. Reference to other sections

For further information refer to section 13.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

Precautions for safe handling : Ensure good ventilation of the work station. Wear personal protective equipment. Do not breathe dust/fume/gas/mist/vapours/spray.

Hygiene measures : Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

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

Storage conditions : Store in a well-ventilated place. Keep cool.

Storage temperature : ≤ 30 °C

### 7.3. Specific end use(s)

No additional information available

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

#### 8.1.1 National occupational exposure and biological limit values

| ethylene glycol (107-21-1) | |
|---|---|
| **EU - Indicative Occupational Exposure Limit (IOEL)** | |
| Local name | Ethylene glycol |
| IOEL TWA | 52 mg/m³ |
| IOEL TWA [ppm] | 20 ppm |
| IOEL STEL | 104 mg/m³ |
| IOEL STEL [ppm] | 40 ppm |
| Remark | Skin |
| Regulatory reference | COMMISSION DIRECTIVE 2000/39/EC |
| **United Kingdom - Occupational Exposure Limits** | |
| Local name | Ethane-1,2-diol |
| WEL TWA (OEL TWA) [1] | 10 mg/m³ particulate<br>52 mg/m³ vapour |
| WEL TWA (OEL TWA) [2] | 20 ppm vapour |
| WEL STEL (OEL STEL) | 104 mg/m³ vapour |
| WEL STEL (OEL STEL) [ppm] | 40 ppm vapour |
| Remark | Sk (Can be absorbed through the skin. The assigned substances are those for which there are concerns that dermal absorption will lead to systemic toxicity) |
| Regulatory reference | EH40/2005 (Fourth edition, 2020). HSE |

#### 8.1.2. Recommended monitoring procedures

No additional information available

#### 8.1.3. Air contaminants formed

No additional information available

#### 8.1.4. DNEL and PNEC

| ethylene glycol (107-21-1) | |
|---|---|
| **DNEL/DMEL (Workers)** | |
| Long-term - systemic effects, dermal | 106 mg/kg bodyweight/day |
| Long-term - local effects, inhalation | 35 mg/m³ |
| **DNEL/DMEL (General population)** | |
| Long-term - systemic effects, dermal | 53 mg/kg bodyweight/day |
| Long-term - local effects, inhalation | 7 mg/m³ |
| **PNEC (Water)** | |
| PNEC aqua (freshwater) | 10 mg/l |
| PNEC aqua (marine water) | 1 mg/l |
| PNEC aqua (intermittent, freshwater) | 10 mg/l |
| PNEC aqua (intermittent, marine water) | 10 mg/l |
| **PNEC (Sediment)** | |
| PNEC sediment (freshwater) | 37 mg/kg dwt |
| PNEC sediment (marine water) | 3.7 mg/kg dwt |
| **PNEC (Soil)** | |
| PNEC soil | 1.53 mg/kg dwt |

| ethylene glycol (107-21-1) | |
|---|---|
| **PNEC (STP)** | |
| PNEC sewage treatment plant | 199.5 mg/l |

#### 8.1.5. Control banding

No additional information available

### 8.2. Exposure controls

#### 8.2.1. Appropriate engineering controls

**Appropriate engineering controls:**
Ensure good ventilation of the work station.

#### 8.2.2. Personal protection equipment

**Personal protective equipment symbol(s):**

#### 8.2.2.1. Eye and face protection

**Eye protection:**
Safety glasses

#### 8.2.2.2. Skin protection

**Skin and body protection:**
Wear suitable protective clothing

**Hand protection:**
Protective gloves

#### 8.2.2.3. Respiratory protection

**Respiratory protection:**
In case of insufficient ventilation, wear suitable respiratory equipment

#### 8.2.2.4. Thermal hazards

No additional information available

#### 8.2.3. Environmental exposure controls

**Environmental exposure controls:**
Avoid release to the environment.

## SECTION 9: Physical and chemical properties

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

| | | |
|---|---|---|
| Physical state | : | Liquid |
| Colour | : | pink. |
| Odour | : | characteristic. |
| Odour threshold | : | Not available |
| Melting point | : | Not applicable |
| Freezing point | : | < -35 °C crystallization point |
| Boiling point | : | > 107.5 °C |
| Flammability | : | Non flammable. |
| Lower explosion limit | : | Not available |
| Upper explosion limit | : | Not available |
| Flash point | : | Not available |
| Auto-ignition temperature | : | Not available |
| Decomposition temperature | : | Not available |
| pH | : | 8 |

| | | |
|---|---|---|
| Viscosity, kinematic | : | 20°C |
| Solubility | : | Soluble in water. |
| Partition coefficient n-octanol/water (Log Kow) | : | Not available |
| Vapour pressure | : | Not available |
| Vapour pressure at 50°C | : | Not available |
| Density | : | 1.07 g/cm³ 15°C |
| Relative density | : | Not available |
| Relative vapour density at 20°C | : | Not available |
| Particle characteristics | : | Not applicable |

### 9.2. Other information

#### 9.2.1. Information with regard to physical hazard classes

No additional information available

#### 9.2.2. Other safety characteristics

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.

### 10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

### 10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

### 10.5. Incompatible materials

No additional information available

### 10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## SECTION 11: Toxicological information

### 11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

| | | |
|---|---|---|
| Acute toxicity (oral) | : | Harmful if swallowed. |
| Acute toxicity (dermal) | : | Not classified |
| Acute toxicity (inhalation) | : | Not classified |

| **PETRYGO HEAVY** | |
|---|---|
| ATE CLP (oral) | 943.396 mg/kg bodyweight |

| **ethylene glycol (107-21-1)** | |
|---|---|
| LD50 oral rat | 7712 mg/kg bodyweight Animal: rat |

| **disodium sebacate (17265-14-4)** | |
|---|---|
| LD50 oral rat | > 5000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 401 (Acute Oral Toxicity) |
| LD50 dermal rat | > 2000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal Toxicity) |

| Sodium 4(or 5)-methyl-1H-benzotriazolide (64665-57-2) | |
|---|---|
| LD50 dermal rabbit | > 2000 mg/kg bodyweight Animal: rabbit, Guideline: OECD Guideline 402 (Acute Dermal Toxicity) |

Skin corrosion/irritation : Not classified
pH: 8

Serious eye damage/irritation : Not classified
pH: 8

Respiratory or skin sensitisation : Not classified

Germ cell mutagenicity : Not classified

Carcinogenicity : Not classified

Reproductive toxicity : Not classified

STOT-single exposure : Not classified

STOT-repeated exposure : May cause damage to organs (kidneys) through prolonged or repeated exposure (if swallowed).

| ethylene glycol (107-21-1) | |
|---|---|
| STOT-repeated exposure | May cause damage to organs (kidneys) through prolonged or repeated exposure. |

| Sodium 4(or 5)-methyl-1H-benzotriazolide (64665-57-2) | |
|---|---|
| NOAEL (oral, rat, 90 days) | ≈ 150 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 407 (Repeated Dose 28-Day Oral Toxicity Study in Rodents) |

Aspiration hazard : Not classified

| PETRYGO HEAVY | |
|---|---|
| Viscosity, kinematic | 20°C |

### 11.2. Information on other hazards

No additional information available

## SECTION 12: Ecological information

### 12.1. Toxicity

Ecology - general : The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment.

Hazardous to the aquatic environment, short–term (acute) : Not classified

Hazardous to the aquatic environment, long–term (chronic) : Not classified

Not rapidly degradable

| ethylene glycol (107-21-1) | |
|---|---|
| LC50 - Fish [1] | > 72860 mg/l Test organisms (species): Pimephales promelas |
| EC50 - Crustacea [1] | > 100 mg/l Test organisms (species): Daphnia magna |
| EC50 96h - Algae [1] | 13000 mg/l Pseudokirchnerella subcapitata |
| NOEC (chronic) | ≥ 1000 mg/l Test organisms (species): Americamysis bahia (previous name: Mysidopsis bahia) Duration: '23 d' |
| NOEC chronic fish | 15380 mg/l Pimephales promelas |
| NOEC chronic crustacea | 8590 mg/l |

| disodium sebacate (17265-14-4) | |
|---|---|
| LC50 - Fish [1] | > 100 mg/l Test organisms (species): Danio rerio (previous name: Brachydanio rerio) |
| LC50 - Fish [2] | > 18 mg/l Test organisms (species): other: |

| disodium sebacate (17265-14-4) | |
|---|---|
| EC50 - Crustacea [1] | > 100 mg/l Test organisms (species): Daphnia magna |

| Sodium 4(or 5)-methyl-1H-benzotriazolide (64665-57-2) | |
|---|---|
| LC50 - Fish [1] | 180 mg/l Test organisms (species): Danio rerio (previous name: Brachydanio rerio) |
| LC50 - Fish [2] | 55 mg/l Test organisms (species): Cyprinodon variegatus |
| EC50 - Other aquatic organisms [1] | 15.8 mg/l Test organisms (species): other aquatic crustacea: |
| EC50 - Other aquatic organisms [2] | 8.58 mg/l Test organisms (species): other aquatic crustacea: |
| LOEC (chronic) | 37.6 mg/l Test organisms (species): Daphnia magna Duration: '21 d' |
| NOEC (chronic) | 18.4 mg/l Test organisms (species): Daphnia magna Duration: '21 d' |

### 12.2. Persistence and degradability

No additional information available

### 12.3. Bioaccumulative potential

No additional information available

### 12.4. Mobility in soil

No additional information available

### 12.5. Results of PBT and vPvB assessment

No additional information available

### 12.6. Endocrine disrupting properties

No additional information available

### 12.7. 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.

HP Code : HP5 - "Specific Target Organ Toxicity (STOT)/Aspiration Toxicity:" waste which can cause specific target organ toxicity either from a single or repeated exposure, or which cause acute toxic effects following aspiration.
HP6 - "Acute Toxicity:" waste which can cause acute toxic effects following oral or dermal administration, or inhalation exposure.

## SECTION 14: Transport information

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

| ADR | IMDG | IATA | ADN | RID |
|---|---|---|---|---|
| **14.1. UN number or ID number** | | | | |
| Not applicable | Not applicable | Not applicable | Not applicable | Not applicable |
| **14.2. UN proper shipping name** | | | | |
| Not applicable | Not applicable | Not applicable | Not applicable | Not applicable |
| **14.3. Transport hazard class(es)** | | | | |
| Not applicable | Not applicable | Not applicable | Not applicable | Not applicable |

| ADR | IMDG | IATA | ADN | RID |
|---|---|---|---|---|
| **14.4. Packing group** | | | | |
| Not applicable | Not applicable | Not applicable | Not applicable | Not applicable |
| **14.5. Environmental hazards** | | | | |
| Not applicable | Not applicable | Not applicable | Not applicable | Not applicable |
| No supplementary information available | | | | |

### 14.6. Special precautions for user

**Overland transport**
Not applicable

**Transport by sea**
Not applicable

**Air transport**
Not applicable

**Inland waterway transport**
Not applicable

**Rail transport**
Not applicable

### 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

**15.1.1. 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 no substance(s) listed on the PIC list (Regulation EU 649/2012 concerning the export and import of hazardous chemicals)

**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)

**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 no 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)

**15.1.2. National regulations**

No additional information available

### 15.2. Chemical safety assessment

No chemical safety assessment has been carried out

## SECTION 16: Other information

**Indication of changes**

| Section | Changed item | Change | Comments |
|---|---|---|---|
| | Revision date | Modified | |
| | Supersedes version of | Modified | |
| 1.1 | Product group | Added | |

**Abbreviations and acronyms:**

| | |
|---|---|
| ADN | European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways |
| ADR | European Agreement concerning the International Carriage of Dangerous Goods by Road |
| ATE | Acute Toxicity Estimate |
| BCF | Bioconcentration factor |
| BLV | Biological limit value |
| BOD | Biochemical oxygen demand (BOD) |
| COD | Chemical oxygen demand (COD) |
| DMEL | Derived Minimal Effect level |
| DNEL | Derived-No Effect Level |
| EC-No. | European Community number |
| EC50 | Median effective concentration |
| EN | European Standard |
| IARC | International Agency for Research on Cancer |
| IATA | International Air Transport Association |
| IMDG | International Maritime Dangerous Goods |
| LC50 | Median lethal concentration |
| LD50 | Median lethal dose |
| LOAEL | Lowest Observed Adverse Effect Level |
| NOAEC | No-Observed Adverse Effect Concentration |
| NOAEL | No-Observed Adverse Effect Level |
| NOEC | No-Observed Effect Concentration |
| OECD | Organisation for Economic Co-operation and Development |
| OEL | Occupational Exposure Limit |
| PBT | Persistent Bioaccumulative Toxic |
| PNEC | Predicted No-Effect Concentration |
| RID | Regulations concerning the International Carriage of Dangerous Goods by Rail |
| SDS | Safety Data Sheet |
| STP | Sewage treatment plant |
| ThOD | Theoretical oxygen demand (ThOD) |

| Abbreviations and acronyms: | |
|---|---|
| TLM | Median Tolerance Limit |
| VOC | Volatile Organic Compounds |
| CAS-No. | Chemical Abstract Service number |
| N.O.S. | Not Otherwise Specified |
| vPvB | Very Persistent and Very Bioaccumulative |
| ED | Endocrine disrupting properties |

| Full text of H- and EUH-statements: | |
|---|---|
| Acute Tox. 4 (Oral) | Acute toxicity (oral), Category 4 |
| Aquatic Chronic 2 | Hazardous to the aquatic environment – Chronic Hazard, Category 2 |
| Eye Irrit. 2 | Serious eye damage/eye irritation, Category 2 |
| H302 | Harmful if swallowed. |
| H314 | Causes severe skin burns and eye damage. |
| H319 | Causes serious eye irritation. |
| H361d | Suspected of damaging the unborn child. |
| H373 | May cause damage to organs through prolonged or repeated exposure. |
| H411 | Toxic to aquatic life with long lasting effects. |
| Repr. 2 | Reproductive toxicity, Category 2 |
| Skin Corr. 1B | Skin corrosion/irritation, Category 1, Sub-Category 1B |
| STOT RE 2 | Specific target organ toxicity – Repeated exposure, Category 2 |

| Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]: | | |
|---|---|---|
| Acute Tox. 4 (Oral) | H302 | Calculation method |
| STOT RE 2 | H373 | Calculation method |

The classification complies with : ATP 12

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.