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| | | Revision No : S10024-EU01EN |
| | L267-50% | Issue date : 26/10/2023 |

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

1.1. Product identifier

Product form : Mixture
Trade name : L267-50%
UFI : 9MRV-P0KS-5009-KNU2

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

1.2.1. Relevant identified uses

Main use category : Industrial use, Professional use
Use of the substance/mixture : Coolant
Antifreeze

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

CCI Manufacturing Germany GmbH
Borsigstraße 12
41541 Dormagen - Germany
T +49-2133-27940 - F +49-2133-279432
cmg.info@cci-corporation.com

1.4. Emergency telephone number

| Country | Official advisory body | Address | Emergency number |
|---------|--|--|--|
| 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]

Acute Tox. 4 (Oral) H302
STOT RE 2 H373

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

2.2. Label elements

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


Hazard pictograms (CLP) :



GHS07

GHS08

Signal word : Warning
Contains : ethanediol; ethylene glycol

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Hazard statements (CLP) : H302 - Harmful if swallowed.
H373 - May cause damage to organs (kidneys) through prolonged or repeated exposure (oral).

Precautionary statements (CLP) : P260 - Do not breathe vapours.
P264 - Wash hands, forearms and face thoroughly after handling.
P270 - Do not eat, drink or smoke when using this product.
P314 - Get medical advice/attention if you feel unwell.
P501 - Dispose of contents and container to an approved waste disposal plant.

2.3. Other hazards

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

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

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Comments : ethanediol; ethylene glycol
Inhibitor

| Substance name | Product identifier | % | Classification according to Regulation (EC) No. 1272/2008 [CLP] |
|--|---|---------|---|
| ethanediol; ethylene glycol substance with a Community workplace exposure limit | (CAS-No.) 107-21-1 (EC-No.) 203-473-3 (EC Index) 603-027-00-1 (REACH-no) 01-2119456816-28-XXXX | 45 – 50 | Acute Tox. 4 (Oral), H302 STOT RE 2, H373 |

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

SECTION 4: First aid measures

4.1. Description of first aid measures


Additional advice : First aider: Pay attention to self-protection!. Concerning personal protective equipment to use, see section 8. Never give anything by mouth to an unconscious person. In case of doubt or persistent symptoms, consult always a physician. Show this safety data sheet to the doctor in attendance. Treat symptomatically. Symptoms may develop several hours following exposure; medical observation therefore necessary for at least 48 hours.

Inhalation : Remove casualty to fresh air and keep warm and at rest. In case of doubt or persistent symptoms, consult always a physician.

Skin contact : Remove contaminated clothing and shoes. Gently wash with plenty of soap and water. In case of doubt or persistent symptoms, consult always a physician.

Eyes contact : Rinse immediately carefully and thoroughly with eye-bath or water. In case of doubt or persistent symptoms, consult always a physician.

Ingestion : Rinse mouth thoroughly with water. Get immediate medical advice/attention.

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

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| Inhalation | : The following symptoms may occur: Cough. Dizziness. Headache. |
| Skin contact | : The following symptoms may occur: Dry skin. |
| Eyes contact | : The following symptoms may occur: Redness, pain. |
| Ingestion | : Harmful if swallowed. The following symptoms may occur: Vomiting. Nausea. Unconsciousness. Abdominal pain. |
| Chronic symptoms | : May cause damage to organs (kidneys) through prolonged or repeated exposure (oral). |

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 | : Water spray. Alcohol resistant foam. dry extinguishing powder. Carbon dioxide. |
| Unsuitable extinguishing media | : Strong water jet. |

5.2. Special hazards arising from the substance or mixture

| | |
|--|---|
| Specific hazards | : Non flammable. Heating will cause a rise in pressure with a risk of bursting. |
| Hazardous decomposition products in case of fire | : Carbon oxides (CO, CO ₂). |

5.3. Advice for firefighters

| | |
|--------------------------------|--|
| Firefighting instructions | : Special protective equipment for firefighters. In case of fire: Wear self-contained breathing apparatus. Use water spray or fog for cooling exposed containers. Do not allow run-off from fire-fighting to enter drains or water courses. Evacuate personnel to a safe area. |
| Protection during firefighting | : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. |
| Other information | : Do not allow run-off from fire-fighting to enter drains or water courses. Dispose of waste in accordance with environmental legislation. |

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel


| | |
|-----------------------------|---|
| For non-emergency personnel | : Evacuate personnel to a safe area. Stay upwind/keep distance from source. Provide adequate ventilation. Use personal protective equipment as required. Concerning personal protective equipment to use, see section 8. Do not breathe vapour/aerosol. Avoid contact with skin, eyes and clothing. |
|-----------------------------|---|

6.1.2. For emergency responders

| | |
|--------------------------|---|
| For emergency responders | : Ensure procedures and training for emergency decontamination and disposal are in place. Concerning personal protective equipment to use, see section 8. |
|--------------------------|---|

6.2. Environmental precautions

Do not allow to enter into surface water or drains. Notify authorities if product enters sewers or public waters.

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6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Stop leak if safe to do so. Dam up. Use water spray jet to minimise or disperse vapours. Clean-up methods - small spillage: Take up liquid spill into absorbent material, e.g.: sand, earth, vermiculite or powdered limestone, Collect in closed and suitable containers for disposal. Clean-up methods - large spillage: Recover large spills by pumping (use an explosion proof or hand pump), Keep in suitable, closed containers for disposal. Dispose of waste product or used containers according to local regulations.

6.4. Reference to other sections

Concerning personal protective equipment to use, see section 8. Concerning disposal elimination after cleaning, see section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Provide adequate ventilation. Use personal protective equipment as required. Concerning personal protective equipment to use, see section 8. Do not breathe vapour/aerosol. Avoid contact with skin, eyes and clothing. Take any precaution to avoid mixing with combustibles... See also section 10. Ensure proper process control to avoid excess waste discharge (temperature, concentration, pH, time). Do not allow to enter into surface water or drains.

Hygiene measures : Keep good industrial hygiene. Wash hands immediately after handling the product. When using do not eat, drink or smoke. Keep away from food, drink and animal feedingstuffs. Separate working clothes from town clothes. Remove contaminated clothing and shoes. Wash contaminated clothing before reuse.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store in a dry, cool and well-ventilated place. Do not store near or with any of the incompatible materials listed in section 10. Bund storage facilities to prevent soil and water pollution in the event of spillage.

Packaging materials : Keep only in the original container.

7.3. Specific end use(s)

Coolant. For further information see section 1.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

| ethanediol; ethylene glycol (107-21-1) | | |
|--|----------------------|--|
| EU | IOEL TWA | 52 mg/m ³ |
| EU | IOEL TWA [ppm] | 20 ppm |
| EU | IOEL STEL | 104 mg/m ³ |
| EU | IOEL STEL [ppm] | 40 ppm |
| EU | Remark | Possibility of significant uptake through the skin |
| Austria | MAK (OEL TWA) | 26 mg/m ³ |
| Austria | MAK (OEL TWA) [ppm] | 10 ppm |
| Austria | MAK (OEL STEL) | 52 mg/m ³ |
| Austria | MAK (OEL STEL) [ppm] | 20 ppm |
| Bulgaria | OEL TWA | 52 mg/m ³ |
| Bulgaria | OEL TWA [ppm] | 20 ppm |
| Bulgaria | OEL STEL | 104 mg/m ³ |
| Bulgaria | OEL STEL [ppm] | 40 ppm |

| ethanediol; ethylene glycol (107-21-1) | | |
|--|--|---|
| Croatia | GVI (OEL TWA) [1] | 52 mg/m ³ |
| Croatia | GVI (OEL TWA) [2] | 20 ppm |
| Croatia | KGVI (OEL STEL) | 104 mg/m ³ |
| Croatia | KGVI (OEL STEL) [ppm] | 40 ppm |
| Cyprus | OEL TWA | 52 mg/m ³ |
| Cyprus | OEL TWA [ppm] | 20 ppm |
| Cyprus | OEL STEL | 104 mg/m ³ |
| Cyprus | OEL STEL [ppm] | 40 ppm |
| Czech Republic | PEL (OEL TWA) | 50 mg/m ³ |
| Denmark | OEL TWA [1] | 26 mg/m ³ 10 mg/m ³ (atomized) |
| Denmark | OEL TWA [2] | 10 ppm |
| Estonia | OEL TWA | 52 mg/m ³ (total concentration of aerosol and vapor) |
| Estonia | OEL TWA [ppm] | 20 ppm (total concentration of aerosol and vapor) |
| Estonia | OEL STEL | 104 mg/m ³ (total concentration of aerosol and vapor) |
| Estonia | OEL STEL [ppm] | 40 ppm (total concentration of aerosol and vapor) |
| Finland | HTP (OEL TWA) [1] | 50 mg/m ³ |
| Finland | HTP (OEL TWA) [2] | 20 ppm |
| Finland | HTP (OEL STEL) | 100 mg/m ³ |
| Finland | HTP (OEL STEL) [ppm] | 40 ppm |
| France | VME (OEL TWA) | 52 mg/m ³ (indicative limit-vapor) |
| France | VME (OEL TWA) [ppm] | 20 ppm (indicative limit-vapor) |
| France | VLE (OEL C/STEL) | 104 mg/m ³ (indicative limit-vapor) |
| France | VLE (OEL C/STEL) [ppm] | 40 ppm (indicative limit-vapor) |
| Germany | Occupational exposure limit value (mg/m ³) (TRGS900) | 26 mg/m ³ (the risk of damage to the embryo or fetus can be excluded when AGW and BGW values are observed) |
| Germany | Occupational exposure limit value (ppm) (TRGS900) | 10 ppm (the risk of damage to the embryo or fetus can be excluded when AGW and BGW values are observed) |
| Gibraltar | OEL TWA | 52 mg/m ³ |
| Gibraltar | OEL TWA [ppm] | 20 ppm |
| Gibraltar | OEL STEL | 104 mg/m ³ |
| Gibraltar | OEL STEL [ppm] | 40 ppm |
| Greece | OEL TWA | 125 mg/m ³ (vapor) |
| Greece | OEL TWA [ppm] | 50 ppm (vapor) |
| Greece | OEL STEL | 125 mg/m ³ (vapor) |
| Greece | OEL STEL [ppm] | 50 ppm (vapor) |
| Hungary | AK (OEL TWA) | 52 mg/m ³ |
| Hungary | CK (OEL STEL) | 104 mg/m ³ |
| Ireland | OEL TWA [1] | 52 mg/m ³ |

| ethanediol; ethylene glycol (107-21-1) | | |
|--|-----------------------|--|
| Ireland | OEL TWA [2] | 20 ppm |
| Ireland | OEL STEL | 104 mg/m ³ |
| Ireland | OEL STEL [ppm] | 40 ppm |
| Italy | OEL TWA | 52 mg/m ³ |
| Italy | OEL TWA [ppm] | 20 ppm |
| Italy | OEL STEL | 104 mg/m ³ |
| Italy | OEL STEL [ppm] | 40 ppm |
| Latvia | OEL TWA | 52 mg/m ³ |
| Latvia | OEL TWA [ppm] | 20 ppm |
| Lithuania | IPRV (OEL TWA) | 25 mg/m ³ (aerosol and vapor) |
| Lithuania | IPRV (OEL TWA) [ppm] | 10 ppm (aerosol and vapor) |
| Lithuania | TPRV (OEL STEL) | 50 mg/m ³ (aerosol and vapor) |
| Lithuania | TPRV (OEL STEL) [ppm] | 20 ppm (aerosol and vapor) |
| Luxembourg | OEL TWA | 52 mg/m ³ |
| Luxembourg | OEL TWA [ppm] | 20 ppm |
| Luxembourg | OEL STEL | 104 mg/m ³ |
| Luxembourg | OEL STEL [ppm] | 40 ppm |
| Malta | OEL TWA | 52 mg/m ³ |
| Malta | OEL TWA [ppm] | 20 ppm |
| Malta | OEL STEL | 104 mg/m ³ |
| Malta | OEL STEL [ppm] | 40 ppm |
| Netherlands | TGG-8u (OEL TWA) | 52 mg/m ³ (fume) 10 mg/m ³ (droplets) |
| Netherlands | TGG-15min (OEL STEL) | 104 mg/m ³ |
| Poland | NDS (OEL TWA) | 15 mg/m ³ |
| Poland | NDSch (OEL STEL) | 50 mg/m ³ |
| Portugal | OEL TWA | 52 mg/m ³ (indicative limit value) |
| Portugal | OEL TWA [ppm] | 20 ppm (indicative limit value) |
| Portugal | OEL STEL | 104 mg/m ³ (indicative limit value) |
| Portugal | OEL STEL [ppm] | 40 ppm (indicative limit value) |
| Portugal | OEL C | 100 mg/m ³ (aerosol only) |
| Romania | OEL TWA | 52 mg/m ³ |
| Romania | OEL TWA [ppm] | 20 ppm |
| Romania | OEL STEL | 104 mg/m ³ |
| Romania | OEL STEL [ppm] | 40 ppm |
| Slovakia | NPHV (OEL TWA) [1] | 52 mg/m ³ |
| Slovakia | NPHV (OEL TWA) [2] | 20 ppm |
| Slovakia | NPHV (OEL C) | 104 mg/m ³ |
| Slovenia | OEL TWA | 52 mg/m ³ |
| Slovenia | OEL TWA [ppm] | 20 ppm |
| Slovenia | OEL STEL | 104 mg/m ³ |

| ethanediol; ethylene glycol (107-21-1) | | |
|--|--------------------------------|--|
| Slovenia | OEL STEL [ppm] | 40 ppm |
| Spain | VLA-ED (OEL TWA) [1] | 52 mg/m ³ (indicative limit value) |
| Spain | VLA-ED (OEL TWA) [2] | 20 ppm (indicative limit value) |
| Spain | VLA-EC (OEL STEL) | 104 mg/m ³ |
| Spain | VLA-EC (OEL STEL) [ppm] | 40 ppm |
| Sweden | NGV (OEL TWA) | 25 mg/m ³ (limit value applies to the combined concentration of vapor and aerosol-aerosol and vapor) |
| Sweden | NGV (OEL TWA) [ppm] | 10 ppm (limit value applies to the combined concentration of vapor and aerosol-aerosol and vapor) |
| Sweden | KTV (OEL STEL) | 104 mg/m ³ (limit value applies to the combined concentration of vapor and aerosol-aerosol and vapor) |
| Sweden | KTV (OEL STEL) [ppm] | 40 ppm (limit value applies to the combined concentration of vapor and aerosol-aerosol and vapor) |
| United Kingdom | WEL TWA (OEL TWA) [1] | 10 mg/m ³ (particulates) 52 mg/m ³ (vapour) |
| United Kingdom | WEL TWA (OEL TWA) [2] | 20 ppm (vapour) |
| United Kingdom | WEL STEL (OEL STEL) | 104 mg/m ³ (vapour) 30 mg/m ³ (calculated-particulate) |
| United Kingdom | WEL STEL (OEL STEL) [ppm] | 40 ppm (vapour) |
| Norway | Grenseverdi (OEL TWA) [1] | 52 mg/m ³ (total sum of gas and particulate matter (aerosol) of the substance-aerosol) |
| Norway | Grenseverdi (OEL TWA) [2] | 20 ppm (total sum of gas and particulate matter (aerosol) of the substance-aerosol) |
| Norway | Korttidsverdi (OEL STEL) | 104 mg/m ³ (total sum of gas and particulate matter (aerosol) of the substance-aerosol) |
| Norway | Korttidsverdi (OEL STEL) [ppm] | 40 ppm (total sum of gas and particulate matter (aerosol) of the substance-aerosol) |
| Switzerland | MAK (OEL TWA) [1] | 26 mg/m ³ (aerosol, vapour) |
| Switzerland | MAK (OEL TWA) [2] | 10 ppm (aerosol, vapour) |
| Switzerland | KZGW (OEL STEL) | 52 mg/m ³ (aerosol, vapour) |
| Switzerland | KZGW (OEL STEL) [ppm] | 20 ppm (aerosol, vapour) |
| Australia | OES TWA [1] | 10 mg/m ³ (particulate) 52 mg/m ³ (vapour) |
| Australia | OES TWA [2] | 20 ppm (vapour) |
| Australia | OES STEL | 104 mg/m ³ (vapour) |
| Australia | OES STEL [ppm] | 40 ppm (vapour) |
| Canada (Quebec) | Plafond (OEL C) | 127 mg/m ³ (mist and vapour) |
| Canada (Quebec) | Plafond (OEL C) [ppm] | 50 ppm (mist and vapour) |
| USA - ACGIH | ACGIH OEL TWA [ppm] | 25 ppm (vapor fraction) |
| USA - ACGIH | ACGIH OEL STEL | 10 mg/m ³ (inhalable particulate matter, aerosol only) |
| USA - ACGIH | ACGIH OEL STEL [ppm] | 50 ppm (vapor fraction) |

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Additional information : Personal air monitoring :. Room air monitoring. Recommended monitoring procedures


8.2. Exposure controls

- Engineering measure(s) : Provide adequate ventilation. Organisational measures to prevent /limit releases, dispersion and exposure. See Section 7 for information on safe handling .
- Personal protective equipment : The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.
- Hand protection : Wear chemically resistant gloves (tested to EN374) . Suitable material: NR (natural rubber, natural latex) (BTT >8h, >0,3mm). Neoprene (BTT >8h, >0,3mm). Nitrile rubber (BTT >8h, >0,3mm). PVC (Polyvinyl chloride) (BTT >8h, >0,3mm). The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances.
- Eye protection : Use suitable eye protection (EN166): Safety goggles recommended during refilling. Safety glasses with side-shields
- Body protection : Wear suitable protective clothing. Overalls, apron and boots recommended.
- Respiratory protection : In case of insufficient ventilation, wear suitable respiratory equipment. Half-face mask (DIN EN 140). full face mask (DIN EN 136). Filter type: A/P (EN141). The filter class must be suitable for the maximum contaminant concentration (gas/vapour/aerosol/particulates) that may arise when handling the product. If the concentration is exceeded, self-contained breathing apparatus must be used. (EN 137)
- Thermal hazard protection : Not required for normal conditions of use. Use dedicated equipment.
- Environmental exposure controls : Avoid release to the environment. Comply with applicable Community environmental protection legislation.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

- Physical state : Liquid
- Appearance : Liquid.
- Colour : Green
- Odour : mild.
- Odour threshold : No data available
- pH : 7,8 (ASTM D1287)
- Relative evaporation rate (butylacetate=1) : No data available
- Melting / freezing point : No data available
- Freezing point : < -37 °C
- Initial boiling point and boiling range : No data available
- Flash point : No data available
- Auto-ignition temperature : not auto-flammable
- Decomposition temperature : No data available
- Flammability (solid, gas) : Not applicable,liquid
- Vapour pressure : No data available
- Vapour density : No data available
- Relative density : 1,09 g/cm³ (ASTM D1122)

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| Solubility | : No additional information available. Water: completely miscible |
| Partition coefficient n-octanol/water | : -1,36 (ethanediol; ethylene glycol) |
| Kinematic viscosity | : No data available |
| Dynamic viscosity | : No data available |
| Explosive properties | : Not applicable. The study does not need to be conducted because there are no chemical groups associated with explosive properties present in the molecule. |
| Oxidising properties | : Not applicable. The classification procedure needs not to be applied because there are no chemical groups present in the molecule which are associated with oxidising properties. |
| Explosive limits | : No data available |
| Particle size | : Not applicable |
| Particle size distribution | : Not applicable |
| Particle shape | : Not applicable |
| Particle aspect ratio | : Not applicable |
| Particle aggregation state | : Not applicable |
| Particle agglomeration state | : Not applicable |
| Particle specific surface area | : Not applicable |
| Particle dustiness | : 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

Stable at ambient temperature and under normal conditions of use. Reference to other sections 10.4 & 10.5.

10.2. Chemical stability

Stable at ambient temperature and under normal conditions of use.

10.3. Possibility of hazardous reactions

None under normal processing.

10.4. Conditions to avoid


Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Direct sunlight. See Section 7 for information on safe handling.

10.5. Incompatible materials

Strong oxidizing agents. Strong bases. See Section 7 for information on safe handling.

10.6. Hazardous decomposition products

Does not decompose when used for intended uses. Reference to other sections 5.2.

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SECTION 11: Toxicological information

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

Acute toxicity : Harmful if swallowed.

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| ATE CLP (oral) | 555,556 mg/kg bodyweight |
| ethanediol; ethylene glycol (107-21-1) | |
| LD50/oral/rat | < 2000 mg/kg (LDLo: > 786 mg/kg, human) |
| LD50/dermal/rat | 10600 mg/kg |
| LD50/dermal/rabbit | 9530 mg/kg |
| LC50/inhalation/4h/rat | > 2,5 mg/l/6h |
| LDLo, human | 398 mg/kg (Sudebno-Meditsinskaya Ekspertiza. Forensic Medical Examination. Vol. 26(2), Pg. 48, 1983.) |

Skin corrosion/irritation : Not classified (Based on available data, the classification criteria are not met)
pH: 7,8 (ASTM D1287)

Serious eye damage/irritation : Not classified (Based on available data, the classification criteria are not met)
pH: 7,8 (ASTM D1287)

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)

| | |
|---|-----------------------|
| ethanediol; ethylene glycol (107-21-1) | |
| NOAEL (chronic, oral, animal/male, 2 years) | 1000 mg/kg bodyweight |
| NOAEL (chronic, oral, animal/female, 2 years) | 1500 mg/kg bodyweight |

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)

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

| | |
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| ethanediol; ethylene glycol (107-21-1) | |
| NOAEL (oral, rat, 90 days) | 200 mg/kg bodyweight/day OECD Guideline 407 |

Aspiration hazard : Not classified (Based on available data, the classification criteria are not met)

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| Kinematic viscosity | No data available |


Other adverse effects : May cause damage to organs through prolonged or repeated exposure.
Damage to kidneys.

Other information : Symptoms related to the physical, chemical and toxicological characteristics.
For further information see section 4.

11.2. Information on other hazards

11.2.1. 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 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

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11.2.2 Other information

Other adverse effects : May cause damage to organs through prolonged or repeated exposure, Damage to kidneys

Other information : Symptoms related to the physical, chemical and toxicological characteristics, For further information see section 4

SECTION 12: Ecological information

12.1. Toxicity

Environmental properties : Not classified.

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

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


| ethanediol; ethylene glycol (107-21-1) | |
|---|---|
| LC50 - Fish [1] | 41000 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss) |
| LC50 - Fish [2] | 54700 (14 – 18) ml/l (Exposure time: 96 h - Fathead minnow) |
| EC50 - Crustacea [1] | 46300 mg/l (Exposure time: 48 h - Species: Daphnia magna) |
| EC50 - Crustacea [2] | 41000 mg/l (Exposure time: 48 h - Species: Daphnia magna) |
| EC50 96h - Algae [1] | 6500 – 13000 mg/l (Species: Pseudokirchneriella subcapitata) |
| EC50 96h - Algae [2] | 6500 – 13000 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum) |
| NOEC (chronic) | 15380 mg/l @ 7d Pimephales promelas |

12.2. Persistence and degradability

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|---|------------------------|
| Persistence and degradability | DOC reduction. |
| ethanediol; ethylene glycol (107-21-1) | |
| Persistence and degradability | Readily biodegradable. |

12.3. Bioaccumulative potential

| L267-50% | |
|---|-------------------------------------|
| Partition coefficient n-octanol/water | -1,36 (ethanediol; ethylene glycol) |
| Bioaccumulative potential | Bioaccumulation unlikely. |
| ethanediol; ethylene glycol (107-21-1) | |
| Partition coefficient n-octanol/water | -1,36 |
| Bioaccumulative potential | Does not bioaccumulate. |

| | | |
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12.4. Mobility in soil

| | |
|------------------|---------------------------------|
| L267-50% | |
| Mobility in soil | Not expected to adsorb on soil. |
| Ecology - soil | Not expected to adsorb on soil. |

12.5. Results of PBT and vPvB assessment

| | |
|---------------------------|-------------------|
| L267-50% | |
| Results of PBT assessment | No data available |

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 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

12.7. Other adverse effects

Other adverse effects : No data available
 Additional information : No data available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Product/Packaging disposal recommendations : Do not allow to enter into surface water or drains. Dispose of empty containers and wastes safely. See Section 7 for information on safe handling. Refer to manufacturer/supplier for information on recovery/recycling. Recycling is preferred to disposal or incineration. If recycling is not possible, eliminate in accordance with local valid waste disposal regulations.


Additional information : Handle contaminated packages in the same way as the substance itself. Dispose of contaminated materials in accordance with current regulations.

European waste catalogue (2001/573/EC, 75/442/EEC, 91/689/EEC) : This material and its container must be disposed of as hazardous waste. Waste codes should be assigned by the user based on the application for which the product was used.

SECTION 14: Transport information

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

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

| | | |
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| ADR | IMDG | IATA | ADN | RID |
|------------------------------------|---|------------------------------------|------------------------------------|------------------------------------|
| Not applicable | Not applicable | Not applicable | Not applicable | Not applicable |
| 14.4. Packing group | | | | |
| Not applicable | Not applicable | Not applicable | Not applicable | Not applicable |
| 14.5. Environmental hazards | | | | |
| Dangerous for the environment : No | Dangerous for the environment : No Marine pollutant : No | Dangerous for the environment : No | Dangerous for the environment : No | Dangerous for the environment : No |
| Not applicable | | | | |

14.6. Special precautions for user

Special precautions for user : Not applicable

- Overland transport

No data available

- Transport by sea

No data available

- Air transport

No data available

- Inland waterway transport

No data available

- Rail transport

No data available

14.7. Maritime transport in bulk according to IMO instruments

Code: IBC : 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

The following restrictions are applicable according to Annex XVII of the REACH Regulation (EC) No 1907/2006:

| | |
|--|--|
| 3(b) Substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: Hazard classes 3.1 to 3.6, 3.7 adverse effects on sexual function and fertility or on development, 3.8 effects other than narcotic effects, 3.9 and 3.10 | L267-50% ; ethanediol; ethylene glycol |
|--|--|

Contains no substance on the REACH candidate list

Contains no REACH Annex XIV substances

| | | |
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15.1.2. National regulations

France

| No ICPE | Installations classées Désignation de la rubrique | Code Régime | Rayon |
|---------|--|-------------|-------|
| na | Not Applicable | na | na |

Germany

Regulatory reference : WGK 1, Slightly hazardous to water (Classification according to AwSV, Annex 1)

Hazardous Incident Ordinance (12. BImSchV) : Is not subject of the 12. BImSchV (Hazardous Incident Ordinance)

Netherlands

Waterbezwaarlijkheid : B (5) - Weinig schadelijk voor in het water levende organismen

SZW-lijst van kankerverwekkende stoffen : None of the components are listed

SZW-lijst van mutagene stoffen : None of the components are listed

SZW-lijst van reprotoxische stoffen – Borstvoeding : None of the components are listed

SZW-lijst van reprotoxische stoffen – Vruchtbaarheid : None of the components are listed

SZW-lijst van reprotoxische stoffen – Ontwikkeling : None of the components are listed

15.2. Chemical safety assessment

No chemical safety assessment has been carried out


For the following substances of this mixture a chemical safety assessment has been carried out

ethanediol; ethylene glycol

SECTION 16: Other information

Abbreviations and acronyms:

| |
|--|
| ADN = Accord Européen relatif au Transport International des Marchandises Dangereuses par voie de Navigation du Rhin |
| ADR = Accord européen relatif au transport international des marchandises Dangereuses par Route |
| CLP = Classification, Labelling and Packaging Regulation according to 1272/2008/EC |
| IATA = International Air Transport Association |
| IMDG = International Maritime Dangerous Goods Code |
| LEL = Lower Explosive Limit/Lower Explosion Limit |
| UEL = Upper Explosion Limit/Upper Explosive Limit |
| REACH = Registration, Evaluation, Authorisation and Restriction of Chemicals |
| BTT = Breakthrough time (maximum wearing time) |
| EC50 = Median Effective Concentration |
| EL50 = Median effective level |
| ErC50 = EC50 in terms of reduction of growth rate |
| ErL50 = EL50 in terms of reduction of growth rate |
| EWC = European waste catalogue |
| LC50 = Median lethal concentration |
| LD50 = Median lethal dose |
| LL50 = Median lethal level |
| NA = Not applicable |

| | | |
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| | |
|--|--|
| | NOEC = No observed effect concentration |
| | NOEL: no-observed-effect level |
| | NOELR = No observed effect loading rate |
| | NOAEC = No observed adverse effect concentration |
| | NOAEL = No observed adverse effect level |
| | N.O.S. = Not Otherwise Specified |
| | OEL = Occupational Exposure Limits - Short Term Exposure Limits (STELs) |
| | Quantitative structure-activity relationship (QSAR) |
| | STOT = Specific Target Organ Toxicity |
| | TWA = time weighted average |
| | VOC = Volatile organic compounds |
| | WGK = Wassergefährdungsklasse (Water Hazard Class under German Federal Water Management Act) |

Sources of key data used to compile the : ECHA (European Chemicals Agency), Supplier SDS, INCHEM2, LOLI. datasheet

Training advice : Training staff on good practice.

Other information : Assessment/classification CLP. Article 9. Calculation method.

Full text of H- and EUH-statements:

| | |
|---------------------|--|
| Acute Tox. 4 (Oral) | Acute toxicity (oral), Category 4 |
| H302 | Harmful if swallowed. |
| H373 | May cause damage to organs through prolonged or repeated exposure. |
| STOT RE 2 | Specific target organ toxicity – Repeated exposure, Category 2 |

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878

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

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

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