

ES COMPLEAT OAT Concentrate (EG - Ethylene Glycol) Page : 1 / 17 Revision nr : 5.0 Issue date : 21/11/2023

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| <u>1.1.</u> | | bstance/mixture and of the company/undertaking |
|---|--|--|
| | Product identifier | |
| Produ | ct form | : Mixture |
| Trade | name | : ES COMPLEAT OAT Concentrate |
| | | (EG - Ethylene Glycol) |
| Produ | ct code | : CC36070EDJ (5L jar); CC36070EDP (20L pail); CC36070EDD (208L drum); CC36070EDT (1000L tote); CC36070ED (bulk) |
| Produ | ct group | : Trade product |
| Docun | nent no. | : LT36359EU |
| 1.2. | Relevant identified uses of | the substance or mixture and uses advised against |
| 1.2.1. | Relevant identified uses | |
| Main ι | ise category | : Professional use,Industrial use |
| Use of | the substance/mixture | : Coolant Antifreeze |
| | | / WWW 0020 |
| 1.2.2. | Uses advised against | |
| No ad | ditional information available | |
| | | |
| 1.3. | Details of the supplier of th | <u>e safety data sheet</u> |
| | ins Filtration | |
| | tle Road | |
| Daven North: | ants, NN11 8NG - The United | Kingdom |
| | (0)1788 853600 | ing dom |
| Fleetg | uard | |
| | | |
| • | ndustrielle du Grand Guelen | |
| Zone I 29556 | Quimper Cedex 9 - France | |
| Zone I 29556 T +33 | Quimper Cedex 9 - France (0) 2 98 76 49 49 | |
| Zone I 29556 T +33 fleetgu | Quimper Cedex 9 - France (0) 2 98 76 49 49 lard.support.emea@cummins | s.com |
| Zone I 29556 T +33 <u>fleetgu</u> Fleetg | Quimper Cedex 9 - France (0) 2 98 76 49 49 lard.support.emea@cummins uard | <u>s.com</u> |
| Zone I 29556 T +33 <u>fleetgi</u> Fleetg Catenl | Quimper Cedex 9 - France (0) 2 98 76 49 49 lard.support.emea@cummins uard pergstraat 1 | s.com |
| Zone I 29556 T +33 fleetg Fleetg CatenI 2840 F | Quimper Cedex 9 - France (0) 2 98 76 49 49 lard.support.emea@cummins uard bergstraat 1 lumst - Belgium | s.com |
| Zone I 29556 T +33 fleetgu Fleetg Catenl 2840 F T +32 | Quimper Cedex 9 - France (0) 2 98 76 49 49 lard.support.emea@cummins uard bergstraat 1 lumst - Belgium 3 456 3000 | |
| Zone I 29556 T +33 fleetgu Fleetg Catenl 2840 F T +32 fleetgu | Quimper Cedex 9 - France (0) 2 98 76 49 49 lard.support.emea@cummins uard bergstraat 1 cumst - Belgium 3 456 3000 lard.support.emea@cummins | |
| Zone I 29556 T +33 fleetgu Fleetg Catenl 2840 F T +32 fleetgu Fleetgu | Quimper Cedex 9 - France (0) 2 98 76 49 49 lard.support.emea@cummins uard bergstraat 1 cumst - Belgium 3 456 3000 lard.support.emea@cummins | |
| Zone I 29556 T +33 fleetgi Fleetgi Cateni 2840 F T +32 : fleetgi Fleetgi Water Pretor | Quimper Cedex 9 - France (0) 2 98 76 49 49 aard.support.emea@cummins uard bergstraat 1 tumst - Belgium 3 456 3000 aard.support.emea@cummins uard fall Commercial Park, ia Main Road and Beatty Stree | s.com et, |
| Zone I 29556 T +33 fleetgi Fleetgi Cateni 2840 F T +32 3 fleetgi Water Pretor Wood | Quimper Cedex 9 - France (0) 2 98 76 49 49 aard.support.emea@cummins uard bergstraat 1 tumst - Belgium 3 456 3000 aard.support.emea@cummins uard fall Commercial Park, a Main Road and Beatty Stree mead, Johannesburg - South | s.com et, |
| Zone I 29556 T +33 fleetgi Fleetgi Catenl 2840 F T +32 3 fleetgi Water Pretor Wood T +27 | Quimper Cedex 9 - France (0) 2 98 76 49 49 aard.support.emea@cummins uard bergstraat 1 tumst - Belgium 3 456 3000 aard.support.emea@cummins uard fall Commercial Park, a Main Road and Beatty Stree mead, Johannesburg - South 10 285 0200 | <mark>s.com</mark> et, Africa |
| Zone I 29556 T +33 fleetgi Fleetg Catenl 2840 F T +32 3 fleetgi Water Pretor Wood T +27 | Quimper Cedex 9 - France (0) 2 98 76 49 49 aard.support.emea@cummins uard bergstraat 1 tumst - Belgium 3 456 3000 aard.support.emea@cummins uard fall Commercial Park, a Main Road and Beatty Stree mead, Johannesburg - South | <mark>s.com</mark> et, Africa |
| Zone I 29556 T +33 fleetgi Fleetgi Catenl 2840 F T +32 3 fleetgi Water Pretor Wood T +27 | Quimper Cedex 9 - France (0) 2 98 76 49 49 aard.support.emea@cummins uard bergstraat 1 tumst - Belgium 3 456 3000 aard.support.emea@cummins uard fall Commercial Park, a Main Road and Beatty Stree mead, Johannesburg - South 10 285 0200 | s.com et, Africa s.com |
| Zone I 29556 T +33 fleetgu Fleetg Cateni 2840 F T +32 S fleetgu Fleetgu Wateri Pretor Woodu T +27 fleetgu 1.4. | Quimper Cedex 9 - France (0) 2 98 76 49 49 aard.support.emea@cummins uard bergstraat 1 tumst - Belgium 3 456 3000 aard.support.emea@cummins uard fall Commercial Park, ta Main Road and Beatty Stree mead, Johannesburg - South 10 285 0200 aard.support.emea@cummins | s.com et, Africa s.com |

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| 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 |
|---------------------|------|
| Eye Irrit. 2 | H319 |
| 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)

| Hazard pictograms (CLP) | GHS07 GHS08 |
|--------------------------------|--|
| Signal word | : Warning |
| Contains | : ethanediol; ethylene glycol |
| Hazard statements (CLP) | : H302 - Harmful if swallowed. |
| | H319 - Causes serious eye irritation. |
| | H373 - May cause damage to organs (kidneys) through prolonged or repeated exposure (oral). |
| Precautionary statements (CLP) | : P260 - Do not breathe fume, mist, spray, vapours. |
| | P264 - Wash hands, forearms and face thoroughly after handling. |
| | P270 - Do not eat, drink or smoke when using this product. |
| | P280 - Wear protective clothing/eye protection/face protection. |
| | 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 | |

2.3. Other hazards

Other hazards

: Results of PBT and vPvB assessment. Contains no PBT and/or 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 %



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SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

| 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 | 89,91 – 92,65 | Acute Tox. 4 (Oral), H302 STOT RE 2, H373 |
| disodium sebacate | (CAS-No.) 17265-14-4 (EC-No.) 241-300-3 | 2,69 - 3,28 | Eye Irrit. 2, H319 |
| sodium benzoate | (CAS-No.) 532-32-1 (EC-No.) 208-534-8 | 2,12 – 2,6 | Eye Irrit. 2, H319 |

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

SECTION 4: First aid measures

4.1. Description of first aid measures

| 4.1. Description of first aid measur | res | | |
|--------------------------------------|------|---|--|
| 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. Get immediate medical advice/attention. Show this safe data sheet to the doctor in attendance. Inhalation of high vapour concentrations can cause CNS-depression and narcosis. | |
| Inhalation | : | Remove casualty to fresh air and keep warm and at rest. Give oxygen or artificial respiration if necessary. Call a physician if irritation develops or persists. | |
| Skin contact | : | Remove contaminated clothing and shoes. Gently wash with plenty of soap and water. Wash contaminated clothing before reuse. In case of doubt or persistent symptoms, consult always a physician. | |
| Eyes contact | : | Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. In case of doubt or persistent symptoms, consult always a physician. | |
| Ingestion | : | : If swallowed, DO NOT induce vomiting unless directed to do so by medical personnel. Rinse mouth out with water. Drink 1 or 2 glasses of water. Never give anything by mouth to an unconscious person. Get immediate medical advice/attention. | |
| 4.2. Most important symptoms an | d ef | fects, both acute and delayed | |
| Inhalation | : | Inhalation of aerosol may cause irritation to the upper respiratory tract. Exposure may result in reddening, tears and itching of the eyes and soreness in the nose and throat, together with coughing. Causes damage to organs. Liver and kidney injuries may occur. Pulmonary irritation. Headache. Nausea. Vomiting. | |
| Skin contact | : | : May cause slight irritation to the skin. May be harmful if absorbed through skin. Repeated exposure may cause skin dryness or cracking. Symptoms similar to those listed under ingestion. | |
| Eyes contact | : | Causes serious eye irritation. The following symptoms may occur: erythema (redness). Lachrymation. Pain. | |
| | | | |

| Filtration | SAFETY DATA SHEET | Page : 4 / 17 | | |
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| | (EG - Ethylene Glycol) | LT36359EU | | |
| Ingestion | : Harmful if swallowed. Drowsiness. Weakness. In cause defects to the central nervous system (e.g. absorption of this product into the body may lead methaemoglobine that, in sufficient concentratio exposure : Bladder /. Kidney injury may occur. Th occur: Vomiting. Unconsciousness. Nausea . Abc | dizziness, headache). The d to the formation of n, causes cyanosis. prolonged he following symptoms may | | |
| Chronic symptoms | : May cause damage to organs (kidneys) through p exposure (oral). | prolonged or repeated | | |
| 4.3. Indication of any immedia | ate medical attention and special treatment needed | | | |
| Treat symptomatically. Prompt ac | tion is critical. CNS depression !. | | | |
| SECTION 5: Firefighting measure | S | | | |
| 5.1. Extinguishing media | | | | |
| uitable extinguishing media : Water spray, Alcohol resistant foam, Carbon dioxide, Dry extinguishing powder. | | | | |
| Unsuitable extinguishing media | : Strong water jet . | | | |
| 5.2. Special hazards arising from | om the substance or mixture | | | |
| Specific hazards | : Combustible liquid. Vapours are heavier than air | and may spread along floors. | | |
| Explosion hazard : Heat may build pressure, rupturing closed containers, spreading fire and increasing risk of burns and injuries. | | | | |
| Hazardous decomposition products in case of fire : Carbon oxides (CO, CO2). Toxic and corrosive fumes are released. Formaldehyde. | | | | |
| 5.3. Advice for firefighters | | | | |
| Precautionary measures fire | : Use water spray or fog for cooling exposed conta | ainers. | | |
| Firefighting instructions | : Evacuate area. Use extinguishing media appropr | iate for surrounding fire. | | |
| Protection during firefighting | : Use self-contained breathing apparatus and chen | : Use self-contained breathing apparatus and chemically protective clothing. | | |
| Other information | : Prevent fire fighting water from entering the envi | ronment. | | |
| SECTION 6: Accidental release n | neasures | | | |
| 6.1. Personal precautions, pro | tective equipment and emergency procedures | | | |
| 6.1.1. For non-emergency perso | nnel | | | |
| For non-emergency personnel | : Stay upwind/keep distance from source. Provide breathe vapour/aerosol. Avoid contact with skin, personal protective equipment as required. Conc equipment to use, see section 8. Keep away from open flames and other ignition sources. No smok | eyes and clothing. Use erning personal protective heat, hot surfaces, sparks, | | |
| 6.1.2. For emergency responder | rs | | | |
| For emergency responders | : Ensure procedures and training for emergency de are in place. Concerning personal protective equi | | | |
| 6.2. Environmental precaution Do not allow to enter into surface | <u>1s</u> water or drains. Notify authorities if liquid enters sewers o | r public waters. | | |

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Provide adequate ventilation. Stop leak if safe to do so. Contain spillage, soak up with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and transfer to a container for disposal according to local / national regulations (see section 13). Site should have a spill plan to ensure that adequate safeguards are in place to minimize the impact of episodic releases.



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Reference to other sections <u>6.4</u>.

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 | : Use only in well ventilated areas. Do not ingest. Do not breathe vapour/aerosol. Avoid contact with skin, eyes and clothing. Use personal protective equipment as required. Concerning personal protective equipment to use, see section 8. After use replace the closing cap immediately. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Take any precaution to avoid mixing with Incompatible materials, Refer to Section 10 on Incompatible Materials. | | |
| Hygiene measures | : Keep good industrial hygiene. Wash hands and face before breaks and immediately after handling of the product. Keep away from food, drink and animal feedingstuffs. When using do not eat, drink or smoke. Separate working clothes from town clothes. Remove contaminated clothing and shoes. | | |
| 7.2. Conditions for safe storage, inc | luding 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. Keep locked up. Good housekeeping - e.g. inspection procedures will ensure that there are no leaks to soil. | | |
| Incompatible substances or mixtures | : Strong oxidizing agents. Strong acids. Strong bases. alkali metals. Reducing agent. | | |
| Heat and ignition sources | : Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. | | |
| Special rules on packaging | : Keep in properly labelled containers. Containers which are opened should be properly resealed and kept upright to prevent leakage. After use replace the closing cap immediately. | | |
| Packaging materials | : Keep only in the original container. | | |
| 7.3. Specific end use(s) | | | |
| Coolant. Antifreeze. | | | |

Coolant. Antifreeze.

SECTION 8: Exposure controls/personal protection

<u>8.1.</u> **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 | | |
| Belgium | OEL TWA | 52 mg/m³ (aerosol) | | |
| Belgium | OEL TWA | 20 ppm (aerosol) | | |

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| ethanediol; ethylene glycol (107-21-1) | | | | |
|--|---|---|--|--|
| Belgium | OEL STEL | 104 mg/m ³ (aerosol) | | |
| Belgium | OEL STEL | 40 ppm (aerosol) | | |
| Bulgaria | OEL TWA | 52 mg/m ³ | | |
| Bulgaria | OEL TWA | 20 ppm | | |
| Bulgaria | OEL STEL | 104 mg/m ³ | | |
| Bulgaria | OEL STEL | 40 ppm | | |
| 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 | 20 ppm | | |
| Cyprus | OEL STEL | 104 mg/m ³ | | |
| Cyprus | OEL STEL | 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 | | |
| Denmark | OEL STEL | 104 mg/m ³ 20 mg/m ³ (atomized) | | |
| Denmark | OEL STEL | 40 ppm | | |
| Estonia | OEL TWA | 52 mg/m ³ (total concentration of aerosol and vapor) | | |
| Estonia | OEL TWA | 20 ppm (total concentration of aerosol and vapor) | | |
| Estonia | OEL STEL | 104 mg/m ³ (total concentration of aerosol and vapor) | | |
| Estonia | OEL STEL | 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 | 20 ppm | | |

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| ethanediol; ethylene glycol (107-21-1) | | | | |
|--|----------------------------|--|--|--|
| Gibraltar | OEL STEL | 104 mg/m ³ | | |
| Gibraltar | OEL STEL | 40 ppm | | |
| Greece | OEL TWA | 125 mg/m³ (vapor) | | |
| Greece | OEL TWA | 50 ppm (vapor) | | |
| Greece | OEL STEL | 125 mg/m³ (vapor) | | |
| Greece | OEL STEL | 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 | | |
| Ireland | OEL TWA [2] | 20 ppm | | |
| Ireland | OEL STEL | 104 mg/m ³ | | |
| Ireland | OEL STEL | 40 ppm | | |
| Italy | OEL TWA | 52 mg/m ³ | | |
| Italy | OEL TWA | 20 ppm | | |
| Italy | OEL STEL | 104 mg/m ³ | | |
| Italy | OEL STEL | 40 ppm | | |
| Latvia | OEL TWA | 52 mg/m ³ | | |
| Latvia | OEL TWA | 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 | 20 ppm | | |
| Luxembourg | OEL STEL | 104 mg/m ³ | | |
| Luxembourg | OEL STEL | 40 ppm | | |
| Malta | OEL TWA | 52 mg/m ³ | | |
| Malta | OEL TWA | 20 ppm | | |
| Malta | OEL STEL | 104 mg/m ³ | | |
| Malta | OEL STEL | 40 ppm | | |
| Netherlands | TGG-8u (OEL TWA) | 52 mg/m³ (fume) 10 mg/m³ (droplets) | | |
| Netherlands | TGG-15min (OEL STEL) | 104 mg/m ³ (fume) | | |
| Netherlands | TGG-15min (OEL STEL) [ppm] | 40 ppm (fume) | | |
| 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 | 20 ppm (indicative limit value) | | |
| Portugal | OEL STEL | 104 mg/m ³ (indicative limit value) | | |
| Portugal | OEL STEL | 40 ppm (indicative limit value) | | |
| Portugal | OEL C | 100 mg/m³ (aerosol only) | | |

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| ethanediol; ethylene g | lycol (107-21-1) | |
|------------------------|--------------------------------|--|
| Romania | OEL TWA | 52 mg/m ³ |
| Romania | OEL TWA | 20 ppm |
| Romania | OEL STEL | 104 mg/m ³ |
| Romania | OEL STEL | 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 | 20 ppm |
| Slovenia | OEL STEL | 104 mg/m ³ |
| Slovenia | OEL STEL | 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) |
| Norway | Grenseverdi (OEL TWA) [2] | 20 ppm (total sum of gas and particulate matter (aerosol) of the substance) |
| Norway | Korttidsverdi (OEL STEL) | 104 mg/m ³ (total sum of gas and particulate matter (aerosol) of the substance) |
| Norway | Korttidsverdi (OEL STEL) [ppm] | 40 ppm (total sum of gas and particulate matter (aerosol) of the substance) |
| Switzerland | MAK (OEL TWA) [1] | 26 mg/m³ (aerosol, vapour) |
| Switzerland | MAK (OEL TWA) [2] | 10 ppm (aerosol, vapour) |
| Switzerland | KZGW (OEL STEL) | 52 mg/m³ (aerosol, vapour) |
| Switzerland | KZGW (OEL STEL) [ppm] | 20 ppm (aerosol, vapour) |

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Filtration
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| ethanediol; ethylene glycol (107-21-1) | | |
|--|--|--|
| Australia | OES TWA [1] | 10 mg/m³ (particulate) 52 mg/m³ (vapour) |
| Australia | OES TWA [2] | 20 ppm (vapour) |
| Australia | OES STEL | 104 mg/m³ (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) | 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) |
| sodium benzoate (532-32 | 2-1) | |
| Germany | Occupational exposure limit value (mg/m³) (TRGS900) | 10 mg/m ³ (the risk of damage to the embryo or fetus can be excluded when AGW and BGW values are observed-inhalable fraction) |
| Slovenia | OEL TWA | 10 mg/m ³ (inhalable fraction) |
| Slovenia | OEL STEL | 20 mg/m ³ (inhalable fraction) |
| USA - ACGIH | ACGIH OEL TWA | 2,5 mg/m ³ (inhalable particulate matter) |

| 8.2. Exposure controls | |
|---------------------------------|--|
| Engineering measure(s) | : Provide adequate ventilation. Use only in area provided with appropriate exhaust ventilation. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Organisational measures to prevent/limit releases, dispersion and exposure : See also section 7. |
| 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 | : Protective gloves complying with EN 374. Impervious gloves : Butyl caoutchouc (butyl rubber). NBR (Nitrile rubber) . Neoprene . Breakthrough time : >8h. Thickness of the glove material: >0,3mm. The selection of specific gloves for a specific application and time of use in a working area, should also take into account other factors on the working space, such as (but not limited to): other chemicals that are possibly used, physical requirements (protection against cutting/drilling, skill, thermal protection), and the instructions/specification of the supplier of gloves. |
| Eye protection | : tightly fitting safety goggles. Safety glasses. (EN 166) |
| Body protection | : Wear chemical resistant apron. Wear work clothes with long sleeves. |
| Respiratory protection | : Not required for normal conditions of use. In case of insufficient ventilation, wear suitable respiratory equipment. full face mask (DIN EN 136) (EN 136). Half-face mask (DIN EN 140) (EN 140). Filter type: A/P (EN 141). Self-contained breathing apparatus (EN 133). |
| 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. |



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| SECTION 9: Physical and chemical properties | | |
|--|--|--|
| 9.1. Information on basic physical and chemical properties | | |
| Physical state | : Liquid | |
| Appearance | : Liquid. | |
| Colour | : Red. | |
| Odour | : Not available | |
| Odour threshold | : No data available | |
| pH | : 8,9 – 9 | |
| Relative evaporation rate (butylacetate=1) | : No data available | |
| Melting / freezing point | : No data available | |
| Freezing point | : -38,44 °C | |
| Initial boiling point and boiling range | : 179 °C | |
| Flash point | : No data available | |
| Auto-ignition temperature | : No data available | |
| Decomposition temperature | : No data available | |
| Flammability | : Not applicable | |
| Vapour pressure | : No data available | |
| Vapour density | : No data available | |
| Relative density | : 1,118 – 1,148 (H ₂ O=1) | |
| Solubility | : Miscible with : Water. | |
| Partition coefficient n-octanol/water | : No data available | |
| 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



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9.2.2. Other safety characteristics

VOC content

: No data available

SECTION 10: Stability and reactivity

10.1. Reactivity

Combustible. Reference to other sections: 10.4 & 10.5.

10.2. Chemical stability

The product is stable under storage at normal ambient temperatures.

10.3. Possibility of hazardous reactions

Hazardous polymerisation does not occur.

10.4. Conditions to avoid

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

10.5. Incompatible materials

Strong oxidizing agents . Strong acids . Strong bases . alkali metals . Reducing agent . See Section 7 for information on safe handling.

10.6. Hazardous decomposition products

Burning produces noxious and toxic fumes. Carbon oxides. Formaldehyde . Reference to other sections 5.2.

SECTION 11: Toxicological information

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

| Acute toxicity | : Harmful if swallowed. |
|--|---|
| ATE CLP (oral) | 539,665 mg/kg bodyweight |
| ethanediol; ethylene glycol (107-21-1) | |
| LD50/oral/rat | 4700 mg/kg (Source: NLM_CIP) |
| LD50/dermal/rat | 10600 mg/kg (Source: JAPAN_GHS) |
| LC50/inhalation/4h/rat | > 2,5 mg/l (Exposure time: 6 h Source: ECHA_API) |
| sodium benzoate (532-32-1) | |
| LD50/oral/rat | > 2000 mg/kg |
| LD50/dermal/rabbit | > 2000 mg/kg |
| Skin corrosion/irritation | : Not classified (Based on available data, the classification criteria are not met) |
| | pH: 8,9 – 9 |
| Serious eye damage/irritation | : Causes serious eye irritation. (Based on available data, the classification criteria are not met) |
| | рН: 8,9 – 9 |
| 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) |
| 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). |
| Aspiration hazard | : Not classified (Based on available data, the classification criteria are not met) |



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| No data available |
|--|
| : Symptoms related to the physical, chemical and toxicological characteristics. Reference to other sections 4.2. |
| |
| |
| : The mixture does not contain substance(s) included in the list established 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 % |
| |
| : Symptoms related to the physical, chemical and toxicological characteristics, Reference to other sections 4.2 |
| |
| : Not classified (CLP). |
| : Not classified |
| : Not classified |
| |
| 41000 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss Source: IUCLID) |
| 14 – 18 ml/l (Exposure time: 96 h - Species: Oncorhynchus mykiss [static] Source: EPA) |
| 46300 mg/l (Exposure time: 48 h - Species: Daphnia magna) |
| |
| 6500 – 13000 mg/l (Species: Pseudokirchneriella subcapitata) |
| 6500 – 13000 mg/l (Species: Pseudokirchneriella subcapitata) |
| 6500 – 13000 mg/l (Species: Pseudokirchneriella subcapitata) > 1000 (420 – 558) mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through]) |
| |

12.2. Persistence and degradability

EC50 - Crustacea [1]

| ES COMPLEAT OAT Concentrate (EG - Ethylene Glycol) | |
|---|--------------------|
| Persistence and degradability | No data available. |

< 650 mg/l (Exposure time: 48 h - Species: Daphnia magna)



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12.3. Bioaccumulative potential

| ES COMPLEAT OAT Concentrate (EG - Ethylene Glycol) | |
|---|--------------------------------------|
| Partition coefficient n-octanol/water | No data available |
| Bioaccumulative potential | No additional information available. |

| ethanediol; ethylene glycol (107-21-1) | |
|--|-------|
| Partition coefficient n-octanol/water | -1,36 |

| disodium sebacate (17265-14-4) | |
|--|-------------------|
| Partition coefficient n-octanol/water -4,9 (at 2 | 20 °C (at pH 7.8) |

| sodium benzoate (532-32-1) | |
|---------------------------------------|----------------------|
| BCF - Fish [1] | (no bioaccumulation) |
| Partition coefficient n-octanol/water | -2,13 |

12.4. Mobility in soil

| ES COMPLEAT OAT Concentrate (EG - Ethylene Glycol) | |
|---|------------------------------------|
| Ecology - soil | This information is not available. |

12.5. Results of PBT and vPvB assessment

| ES COMPLEAT OAT Concentrate (EG - Ethylene Glycol) | | |
|--|--|--|
| Results of PBT assessment Contains no PBT and/or vPvB substances ≥ 0.1% assessed in accordance with REACH Annex XIII | | |
| 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 ir accordance with Article 59(1) of REACH for having endocrine disrupting | |

| caused by endocrine disrupting properties | 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 % |
|---|--|
| | |

12.7. Other adverse effects

Additional information : No information available

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| SECTION 13: Disposal considerations | | | |
|---|---|--|--|
| 13.1. Waste treatment methods | | | |
| Product/Packaging disposal recommendations | : Avoid release to the environment. 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. Handle contaminated packages in the same way as the substance itself. Dispose of contaminated materials in accordance with current regulations. | | |
| Additional information | : Delivery to an approved waste disposal company. In accordance with local and national 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, preferably in discussion with the waste disposal authorities The following Waste Codes are only suggestions: 07 02 04* - other organic solvents, washing liquids and mother liquors / 150110 - packaging containing residues of or contaminated by dangerous substances . | | |

SECTION 14: Transport information

| ADR | IMDG | ΙΑΤΑ | ADN | RID |
|-------------------|-----------------|----------------|----------------|----------------|
| 14.1. UN number | r 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 |
| Not applicable | Not applicable | Not applicable | Not applicable | Not applicable |
| 14.3. Transport h | azard class(es) | | | |
| Not applicable | Not applicable | Not applicable | Not applicable | Not applicable |
| Not applicable | Not applicable | Not applicable | Not applicable | Not applicable |
| 14.4. Packing gro | oup | | | · |
| Not applicable | Not applicable | Not applicable | Not applicable | Not applicable |
| 14.5. Environme | ntal hazards | | | • |
| Not applicable | Not applicable | Not applicable | Not applicable | Not applicable |
| | • | Not applicable | • | • |

14.6. Special precautions for user

Special precautions for user

: Not applicable

- Overland transport

Not applicable

- Transport by sea

Not applicable

- Air transport

Not applicable

- Inland waterway transport

Not applicable



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- Rail transport

Not applicable

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

Listed on REACH Annex XVII (Restriction Conditions). The following restrictions are applicable:

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

Contains no substance(s) listed on the REACH Candidate List

Contains no substance(s) listed on REACH Annex XIV (Authorisation List)

VOC content

: No data available

15.1.2. National regulations

France

| Installations classées Code Régime No ICPE Désignation de la rubrique Code Régime | | | Rayon | | |
|---|--------------------------------|--|------------------|---------|--|
| na | Not Applicable | | na | na | |
| Germany | | | | | |
| Regulatory refe | erence | : WGK 2, Significantly hazardous to water (Classifica Annex 1) | tion according t | o AwSV, | |
| German storage class (LGK) | | : LGK 10 - Combustible liquids | | | |
| Hazardous Incident Ordinance (12. BImSchV) | | : Is not subject of the 12. BImSchV (Hazardous Incident Ordinance) | | | |
| TA Luft (Techn Quality Contro | ical Instructions on Air I) | : 5.2.5 Organic Substances | | | |
| Netherlands | | | | | |
| Waterbezwaarlijkheid | | : B (4) - Weinig schadelijk voor in het water levende organismen | | | |
| SZW-lijst van k stoffen | kankerverwekkende | : 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 | | | |



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| SZW-lijst van reprotoxische stoffen – Ontwikkeling | : None of the components are listed |
|---|--|
| Denmark Recommendations Danish Regulation | : Young people below the age of 18 years are not allowed to use the product Pregnant/breastfeeding women working with the product must not be in direct |
| | contact with the product |

15.2. Chemical safety assessment

Not applicable

SECTION 16: Other information

Indication of changes:

| 1.3 | Company | Modified |
|-----|---|----------|
| 2.1 | Classification according to Regulation (EC) No. 1272/2008 [CLP] | |
| 2.2 | Hazard statements (CLP) | |
| 2.2 | Precautionary statements (CLP) | |
| 4.1 | Eyes contact | Modified |
| 4.2 | Skin contact | |
| 4.3 | Indication of any immediate medical attention and special treatment needed | Modified |
| 5.2 | Specific hazards | Modified |
| 5.3 | Protection during firefighting | Modified |
| 6.1 | For emergency responders | Modified |
| 6.2 | Environmental precautions | Modified |
| 7.2 | Heat and ignition sources | Added |
| 7.2 | Special rules on packaging | Added |
| 7.3 | Specific end use(s) | Added |
| 7.3 | Specific end use(s) | Added |
| 8.2 | Thermal hazard protection | Added |
| 8.2 | Environmental exposure controls | Added |

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 |



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| CSR = CSR = Chemical Safety Report |
|--|
| EC50 = Median Effective Concentration |
| LD50 = Median lethal dose |
| LC50 = Median lethal concentration |
| NA = Not applicable |
| N.O.S. = Not Otherwise Specified |
| DNEL = DNEL = Derived No Effect Level |
| PNEC = Predicted No Effect Concentration |
| TLV = Threshold limits |
| TWA = time weighted average |
| STEL = Short term exposure limit |
| persistent, bioaccumulating and toxic (PBT). |
| vPvB = very persistent and very bioaccumulating |
| WGK = Wassergefährdungsklasse (Water Hazard Class under German Federal Water Management Act) |

Sources of key data used to compile the : ECHA (European Chemicals Agency). Manufacturer/Supplier. LOLI. datasheet

Training advice

: Manipulations are to be done only by qualified and authorised persons. Training staff on good practice.

Other information

: Classification - Assessment method: CLP Calculation method (Article 9).

Full text of H- and EUH-statements:

| Acute Tox. 4 (Oral) | Acute toxicity (oral), Category 4 |
|--|--|
| Eye Irrit. 2 Serious eye damage/eye irritation, Category 2 | |
| H302 | Harmful if swallowed. |
| H319 | Causes serious eye irritation. |
| 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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