

**SECTION 1: Identification of the substance/mixture and of the company/undertaking****1.1. Product identifier**

|                                 |                                          |
|---------------------------------|------------------------------------------|
| Product Name                    | Fluxclene                                |
| Product Code(s)                 | FLU-a, EFLU200D, EFLU400D, EFLU400DB, ZE |
| Safety data sheet number        | 00804                                    |
| Unique Formula Identifier (UFI) | X072-80MP-300S-W25T                      |
| Pure substance/mixture          | Mixture                                  |

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

|                      |                                                 |
|----------------------|-------------------------------------------------|
| Recommended use      | Cleaning agent                                  |
| Uses advised against | No specific uses advised against are identified |

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

| <b><u>Manufacturer</u></b>                                                                                                                            | <b><u>Supplier</u></b>                                                   |
|-------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------|
| ELECTROLUBE<br>MacDermid Alpha Electronics Solutions<br>ASHBY PARK, COALFIELD WAY,<br>ASHBY DE LA ZOUCH,<br>LEICESTERSHIRE LE65 1JR<br>UNITED KINGDOM | HK WENTWORTH LIMITED<br>32 RUE DE TOURNENFILS<br>91540 MENNECY<br>FRANCE |
| +44 (0)1530 419600<br>+44 (0)1530 416640<br>info@electrolube.com                                                                                      | +33 (0) 1 82 88 47 94<br>info@electrolube.com                            |

For further information, please contact

|                |                      |
|----------------|----------------------|
| E-mail address | info@electrolube.com |
|----------------|----------------------|

**1.4. Emergency telephone number**

|                     |                                                                                                            |
|---------------------|------------------------------------------------------------------------------------------------------------|
| Emergency Telephone | POISON INFORMATION CENTRE (Beaumont Hospital, Republic of Ireland only) +353 (0)1 809 2166 (08:00 - 22:00) |
|---------------------|------------------------------------------------------------------------------------------------------------|

**Emergency Telephone - IN CASE OF EMERGENCY CALL: +44 1865 407333 (24hr, Provided by Carechem 24)**

**SECTION 2: Hazards identification****2.1. Classification of the substance or mixture**

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

|                                                         |                           |
|---------------------------------------------------------|---------------------------|
| <b>Aerosols</b>                                         | Category 1 - (H222, H229) |
| <b>Skin corrosion/irritation</b>                        | Category 2 - (H315)       |
| <b>Serious eye damage/eye irritation</b>                | Category 2 - (H319)       |
| <b>Skin sensitisation</b>                               | Category 1 - (H317)       |
| <b>Specific target organ toxicity (single exposure)</b> | Category 3 - (H336)       |
| Category 3 Narcotic effects                             |                           |
| <b>Aspiration hazard</b>                                | Category 1 - (H304)       |
| <b>Acute aquatic toxicity</b>                           | Category 1 - (H400)       |
| <b>Chronic aquatic toxicity</b>                         | Category 1 - (H410)       |

## 2.2. Label elements

Contains Cyclohexane, Propan-2-ol, 1-Methoxy-2-propanol, Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics, Orange Terpenes



### Signal word

Danger

### Hazard statements

H222 - Extremely flammable aerosol  
H229 - Pressurised container: May burst if heated  
H315 - Causes skin irritation  
H317 - May cause an allergic skin reaction  
H319 - Causes serious eye irritation  
H336 - May cause drowsiness or dizziness  
H410 - Very toxic to aquatic life with long lasting effects

### Precautionary Statements - EU (§28, 1272/2008)

P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.  
P211 - Do not spray on an open flame or other ignition source.  
P251 - Do not pierce or burn, even after use.  
P261 - Avoid breathing spray.  
P273 - Avoid release to the environment.  
P280 - Wear protective gloves and eye/face protection.  
P301 + P310 - IF SWALLOWED: Immediately call a POISON CENTER or doctor.  
P331 - Do NOT induce vomiting.  
P410 + P412 - Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.

### Unknown aquatic toxicity

Contains 0 % of components with unknown hazards to the aquatic environment.

### Additional information

This product is exempt from the requirement for a child resistant fastening and tactile warning of danger, as it is an aspiration hazard, placed on the market in the form of an aerosol or in a container with a sealed spray attachment.

## 2.3. Other hazards

This mixture contains no substance considered to be persistent, bioaccumulating or toxic (PBT). This mixture contains no substance considered to be very persistent nor very bioaccumulating (vPvB).

### Endocrine Disruptor Information

This product does not contain any known or suspected endocrine disruptors.

**SECTION 3: Composition/information on ingredients****3.1 Substances**

Not applicable

**3.2 Mixtures**

| Chemical name                                                        | Weight-% | REACH registration number | EC No (EU Index No) | Classification according to Regulation (EC) No. 1272/2008 [CLP]                                                                             | Specific concentration limit (SCL) | M-Factor | M-Factor (long-term) |
|----------------------------------------------------------------------|----------|---------------------------|---------------------|---------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------|----------|----------------------|
| Cyclohexane<br>110-82-7                                              | 30-60    | 01-2119463273-41-00<br>00 | 203-806-2           | Asp. Tox. 1 (H304)<br>Aquatic Chronic 1 (H410)<br>Aquatic Acute 1 (H400)<br>Skin Irrit. 2 (H315)<br>STOT SE 3 (H336)<br>Flam. Liq. 2 (H225) | -                                  | -        | -                    |
| Propan-2-ol<br>67-63-0                                               | 10-30    | 01-2119457558-25-00<br>00 | 200-661-7           | Eye Irrit. 2 (H319)<br>STOT SE 3 (H336)<br>Flam. Liq. 2 (H225)                                                                              | -                                  | -        | -                    |
| 1-Methoxy-2-propanol<br>107-98-2                                     | 10-30    | 01-2119457435-35-00<br>00 | 203-539-1           | Flam. Liq. 3 (H226)<br>STOT SE 3 (H336)                                                                                                     | -                                  | -        | -                    |
| Hydrocarbons, C7,<br>n-alkanes,<br>isoalkanes, cyclics<br>64742-49-0 | 5-10     | 01-2119475515-33-00<br>00 | 927-510-4           | Aquatic Chronic 2 (H411)<br>Asp. Tox. 1 (H304)<br>Skin Irrit. 2 (H315)<br>STOT SE 3 (H336)<br>Flam. Liq. 2 (H225)                           | -                                  | -        | -                    |
| Orange Terpenes<br>8028-48-6                                         | 1-5      | 01-2119493353-35-00<br>00 | 232-433-8           | Aquatic Chronic 2 (H411)<br>Asp. Tox. 1 (H304)<br>Flam. Liq. 3 (H226)<br>Skin Sens. 1 (H317)<br>Skin Irrit. 2 (H315)                        | -                                  | -        | -                    |
| Carbon Dioxide<br>124-38-9                                           | 1-5      | No data available         | 204-696-9           | Press. Gas (Comp.) (H280)                                                                                                                   | -                                  | -        | -                    |
| 2-Methoxypropanol<br>1589-47-5                                       | <0.1     | No data available         | 216-455-5           | Flam. Liq. 3 (H226)<br>Repr. 1B (H360D)<br>Skin Irrit. 2 (H315)<br>STOT SE 3 (H335)<br>Eye Dam. 1 (H318)                                    | -                                  | -        | -                    |

**Full text of H- and EUH-phrases: see section 16*****Acute Toxicity Estimate***

If LD50/LC50 data is not available or does not correspond to the classification category, then the appropriate conversion value from CLP Annex I, Table 3.1.2, is used to calculate the acute toxicity estimate (ATEmix) for classifying a mixture based on its components

| Chemical name           | Oral LD50 mg/kg | Dermal LD50 mg/kg | Inhalation LC50 - 4 hour - dust/mist - mg/L | Inhalation LC50 - 4 hour - vapour - mg/L | Inhalation LC50 - 4 hour - gas - ppm |
|-------------------------|-----------------|-------------------|---------------------------------------------|------------------------------------------|--------------------------------------|
| Cyclohexane<br>110-82-7 | 12705           | 2000              | No data available                           | No data available                        | No data available                    |
| Propan-2-ol             | 1870            | 4059              | No data available                           | 30.1002                                  | No data available                    |

| Chemical name                                                        | Oral LD50 mg/kg   | Dermal LD50 mg/kg | Inhalation LC50 - 4 hour - dust/mist - mg/L | Inhalation LC50 - 4 hour - vapour - mg/L | Inhalation LC50 - 4 hour - gas - ppm |
|----------------------------------------------------------------------|-------------------|-------------------|---------------------------------------------|------------------------------------------|--------------------------------------|
| 67-63-0                                                              |                   |                   |                                             |                                          |                                      |
| 1-Methoxy-2-propanol<br>107-98-2                                     | 5000              | 13000             | No data available                           | 34.1234                                  | No data available                    |
| Hydrocarbons, C7,<br>n-alkanes, isoalkanes,<br>cyclics<br>64742-49-0 | 5000              | 3160              | No data available                           | No data available                        | No data available                    |
| Orange Terpenes<br>8028-48-6                                         | No data available | 5000              | No data available                           | No data available                        | No data available                    |
| 2-Methoxypropanol<br>1589-47-5                                       | 5710              | 5660              | No data available                           | No data available                        | No data available                    |

This product does not contain candidate substances of very high concern at a concentration  $\geq 0.1\%$  (Regulation (EC) No. 1907/2006 (REACH), Article 59)

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

|                                           |                                                                                                                                                                                                                                                                                                                                                                                               |
|-------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>General advice</b>                     | Show this safety data sheet to the doctor in attendance. Immediate medical attention is required.                                                                                                                                                                                                                                                                                             |
| <b>Inhalation</b>                         | Remove to fresh air. Aspiration into lungs can produce severe lung damage. If breathing has stopped, give artificial respiration. Get medical attention immediately. Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation. If breathing is difficult, (trained personnel should) give oxygen. Get immediate medical attention. Delayed pulmonary edema may occur. |
| <b>Eye contact</b>                        | 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. Keep eye wide open while rinsing. Do not rub affected area. Get medical attention if irritation develops and persists.                                                                                                           |
| <b>Skin contact</b>                       | May cause an allergic skin reaction. In the case of skin irritation or allergic reactions see a doctor. Wash off immediately with soap and plenty of water for at least 15 minutes.                                                                                                                                                                                                           |
| <b>Ingestion</b>                          | Do NOT induce vomiting. Rinse mouth. Never give anything by mouth to an unconscious person. ASPIRATION HAZARD IF SWALLOWED - CAN ENTER LUNGS AND CAUSE DAMAGE. If vomiting occurs spontaneously, keep head below hips to prevent aspiration. Get immediate medical attention.                                                                                                                 |
| <b>Self-protection of the first aider</b> | Remove all sources of ignition. Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination. Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation. Use personal protective equipment as required. Avoid contact with skin, eyes or clothing.                                  |

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

|                            |                                                                                                                                                                                                                                                                            |
|----------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Symptoms</b>            | Itching. Rashes. Hives. Difficulty in breathing. Coughing and/ or wheezing. Dizziness. May cause redness and tearing of the eyes. Burning sensation. Inhalation of high vapour concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting. |
| <b>Effects of Exposure</b> | None.                                                                                                                                                                                                                                                                      |

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

|                        |                                                                                                                                                                                                                                      |
|------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Note to doctors</b> | May cause sensitisation in susceptible persons. Treat symptomatically. Because of the danger of aspiration, emesis or gastric lavage should not be used unless the risk is justified by the presence of additional toxic substances. |
|------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

### **SECTION 5: Firefighting measures**

#### 5.1. Extinguishing media

|                                       |                                                                    |
|---------------------------------------|--------------------------------------------------------------------|
| <b>Suitable Extinguishing Media</b>   | Dry chemical. Carbon dioxide (CO2). Water spray.                   |
| <b>Large Fire</b>                     | CAUTION: Use of water spray when fighting fire may be inefficient. |
| <b>Unsuitable extinguishing media</b> | DO NOT EXTINGUISH A LEAKING GAS FIRE UNLESS LEAK CAN BE STOPPED.   |

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

|                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|---------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Specific hazards arising from the chemical</b> | Risk of ignition. Keep product and empty container away from heat and sources of ignition. In the event of fire, cool tanks with water spray. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations. Cylinders may rupture under extreme heat. Damaged cylinders should be handled only by specialists. Containers may explode when heated. Product is or contains a sensitiser. May cause sensitisation by skin contact. |
|---------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

#### 5.3. Advice for firefighters

|                                                                       |                                                                                                                                    |
|-----------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------|
| <b>Special protective equipment and precautions for fire-fighters</b> | Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment. |
|-----------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------|

### **SECTION 6: Accidental release measures**

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

|                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|---------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Personal precautions</b>     | Evacuate personnel to safe areas. Use personal protective equipment as required. See section 8 for more information. Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. Keep people away from and upwind of spill/leak. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Take precautionary measures against static discharges. Avoid breathing dust/fume/gas/mist/vapours/spray. |
| <b>Other information</b>        | Ventilate the area. Refer to protective measures listed in Sections 7 and 8.                                                                                                                                                                                                                                                                                                                                                                   |
| <b>For emergency responders</b> | Use personal protection recommended in Section 8.                                                                                                                                                                                                                                                                                                                                                                                              |

#### 6.2. Environmental precautions

|                                  |                                                                                                                                                      |
|----------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Environmental precautions</b> | Refer to protective measures listed in Sections 7 and 8. Prevent further leakage or spillage if safe to do so. Prevent product from entering drains. |
|----------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------|

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

|                                |                                                                                                                                                                                                                                                                          |
|--------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Methods for containment</b> | Keep out of drains, sewers, ditches and waterways. Stop leak if you can do it without risk. A vapour suppressing foam may be used to reduce vapours. Dyke far ahead of spill to collect run-off water. Flood with water to complete polymerization and scrape off floor. |
| <b>Methods for cleaning up</b> | Take precautionary measures against static discharges. Dam up. Soak up with inert                                                                                                                                                                                        |

absorbent material. Pick up and transfer to properly labelled containers.

**Prevention of secondary hazards** Clean contaminated objects and areas thoroughly observing environmental regulations.

#### 6.4. Reference to other sections

**Reference to other sections** See section 8 for more information. See section 13 for more information.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

**Advice on safe handling** Use personal protection equipment. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Do not spray on an open flame or other ignition source. Take necessary action to avoid static electricity discharge (which might cause ignition of organic vapours). Use spark-proof tools and explosion-proof equipment. Handle product only in closed system or provide appropriate exhaust ventilation. Keep in an area equipped with sprinklers. Do not puncture or incinerate cans. Contents under pressure. In case of rupture. Avoid breathing vapours or mists. Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. In case of insufficient ventilation, wear suitable respiratory equipment. Do not eat, drink or smoke when using this product. Take off contaminated clothing and wash it before reuse.

**General hygiene considerations** Do not eat, drink or smoke when using this product. Contaminated work clothing should not be allowed out of the workplace. Regular cleaning of equipment, work area and clothing is recommended. Wash hands before breaks and immediately after handling the product. Wear suitable gloves and eye/face protection. Avoid contact with skin, eyes or clothing.

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

**Storage Conditions** Protect from sunlight. Keep away from heat, sparks, flame and other sources of ignition (i.e., pilot lights, electric motors and static electricity). Keep in properly labelled containers. Do not store near combustible materials. Keep in an area equipped with sprinklers. Store in accordance with the particular national regulations. Store in accordance with local regulations. Store in a cool, dry area away from potential sources of heat, open flames, sunlight or other chemicals. Store locked up. Keep out of the reach of children. Store away from other materials.

**Storage class (TRGS 510)** LGK 2B.

### 7.3. Specific end use(s)

**Risk Management Methods (RMM)** The information required is contained in this Safety Data Sheet.

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

#### Exposure Limits

| Chemical name           | European Union                             | Austria                                                    | Belgium                                    | Bulgaria                                     | Croatia                                         |
|-------------------------|--------------------------------------------|------------------------------------------------------------|--------------------------------------------|----------------------------------------------|-------------------------------------------------|
| Cyclohexane<br>110-82-7 | TWA: 200 ppm<br>TWA: 700 mg/m <sup>3</sup> | TWA: 200 ppm<br>TWA: 700 mg/m <sup>3</sup><br>STEL 800 ppm | TWA: 100 ppm<br>TWA: 350 mg/m <sup>3</sup> | TWA: 200 ppm<br>TWA: 700.0 mg/m <sup>3</sup> | TWA: 200 ppm<br>TWA: 700 mg/m <sup>3</sup><br>* |

|                                                                      |                                                                                                 |                                                                                                                                                   |                                                                                                  |                                                                                                        |                                                                                                    |
|----------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------|
|                                                                      |                                                                                                 | STEL 2800 mg/m <sup>3</sup>                                                                                                                       |                                                                                                  |                                                                                                        |                                                                                                    |
| Propan-2-ol<br>67-63-0                                               | -                                                                                               | TWA: 200 ppm<br>TWA: 500 mg/m <sup>3</sup><br>STEL 800 ppm<br>STEL 2000 mg/m <sup>3</sup>                                                         | TWA: 200 ppm<br>TWA: 500 mg/m <sup>3</sup><br>STEL: 400 ppm<br>STEL: 1000 mg/m <sup>3</sup>      | STEL: 1225.0 mg/m <sup>3</sup><br>TWA: 980.0 mg/m <sup>3</sup>                                         | TWA: 400 ppm<br>TWA: 999 mg/m <sup>3</sup><br>STEL: 500 ppm<br>STEL: 1250 mg/m <sup>3</sup>        |
| 1-Methoxy-2-propanol<br>107-98-2                                     | TWA: 100 ppm<br>TWA: 375 mg/m <sup>3</sup><br>STEL: 150 ppm<br>STEL: 568 mg/m <sup>3</sup><br>* | TWA: 50 ppm<br>TWA: 187 mg/m <sup>3</sup><br>STEL 50 ppm<br>STEL 187 mg/m <sup>3</sup><br>Ceiling: 50 ppm<br>Ceiling: 187 mg/m <sup>3</sup><br>H* | TWA: 50 ppm<br>TWA: 184 mg/m <sup>3</sup><br>STEL: 100 ppm<br>STEL: 369 mg/m <sup>3</sup><br>D*  | STEL: 150 ppm<br>STEL: 568.0 mg/m <sup>3</sup><br>TWA: 100 ppm<br>TWA: 375.0 mg/m <sup>3</sup><br>K*   | TWA: 100 ppm<br>TWA: 375 mg/m <sup>3</sup><br>STEL: 150 ppm<br>STEL: 568 mg/m <sup>3</sup>         |
| Hydrocarbons, C7,<br>n-alkanes, isoalkanes,<br>cyclics<br>64742-49-0 | -                                                                                               | -                                                                                                                                                 | -                                                                                                | TWA: 1600 mg/m <sup>3</sup>                                                                            | -                                                                                                  |
| Carbon Dioxide<br>124-38-9                                           | TWA: 5000 ppm<br>TWA: 9000 mg/m <sup>3</sup>                                                    | TWA: 5000 ppm<br>TWA: 9000 mg/m <sup>3</sup><br>STEL 10000 ppm<br>STEL 18000 mg/m <sup>3</sup>                                                    | TWA: 5000 ppm<br>TWA: 9131 mg/m <sup>3</sup><br>STEL: 30000 ppm<br>STEL: 54784 mg/m <sup>3</sup> | TWA: 5000 ppm<br>TWA: 9000 mg/m <sup>3</sup>                                                           | TWA: 5000 ppm<br>TWA: 9000 mg/m <sup>3</sup>                                                       |
| 2-Methoxypropanol<br>1589-47-5                                       | -                                                                                               | TWA: 20 ppm<br>TWA: 75 mg/m <sup>3</sup><br>STEL 80 ppm<br>STEL 300 mg/m <sup>3</sup><br>H*                                                       | -                                                                                                | -                                                                                                      | -                                                                                                  |
| Chemical name                                                        | Cyprus                                                                                          | Czech Republic                                                                                                                                    | Denmark                                                                                          | Estonia                                                                                                | Finland                                                                                            |
| Cyclohexane<br>110-82-7                                              | TWA: 200 ppm<br>TWA: 700 mg/m <sup>3</sup>                                                      | TWA: 700 mg/m <sup>3</sup><br>Ceiling: 2000 mg/m <sup>3</sup>                                                                                     | TWA: 50 ppm<br>TWA: 172 mg/m <sup>3</sup><br>STEL: 100 ppm<br>STEL: 344 mg/m <sup>3</sup>        | TWA: 200 ppm<br>TWA: 700 mg/m <sup>3</sup>                                                             | TWA: 100 ppm<br>TWA: 350 mg/m <sup>3</sup><br>STEL: 250 ppm<br>STEL: 875 mg/m <sup>3</sup>         |
| Propan-2-ol<br>67-63-0                                               | -                                                                                               | TWA: 500 mg/m <sup>3</sup><br>Ceiling: 1000 mg/m <sup>3</sup><br>D*                                                                               | TWA: 200 ppm<br>TWA: 490 mg/m <sup>3</sup><br>STEL: 400 ppm<br>STEL: 980 mg/m <sup>3</sup>       | TWA: 150 ppm<br>TWA: 350 mg/m <sup>3</sup><br>STEL: 250 ppm<br>STEL: 600 mg/m <sup>3</sup>             | TWA: 200 ppm<br>TWA: 500 mg/m <sup>3</sup><br>STEL: 250 ppm<br>STEL: 620 mg/m <sup>3</sup>         |
| 1-Methoxy-2-propanol<br>107-98-2                                     | *<br>STEL: 150 ppm<br>STEL: 568 mg/m <sup>3</sup><br>TWA: 100 ppm<br>TWA: 375 mg/m <sup>3</sup> | TWA: 270 mg/m <sup>3</sup><br>Ceiling: 550 mg/m <sup>3</sup><br>D*                                                                                | TWA: 50 ppm<br>TWA: 185 mg/m <sup>3</sup><br>H*<br>STEL: 568 mg/m <sup>3</sup><br>STEL: 150 ppm  | S+<br>TWA: 100 ppm<br>TWA: 375 mg/m <sup>3</sup><br>STEL: 150 ppm<br>STEL: 568 mg/m <sup>3</sup><br>A* | TWA: 100 ppm<br>TWA: 370 mg/m <sup>3</sup><br>STEL: 150 ppm<br>STEL: 560 mg/m <sup>3</sup><br>iho* |
| Hydrocarbons, C7,<br>n-alkanes, isoalkanes,<br>cyclics<br>64742-49-0 | -                                                                                               | -                                                                                                                                                 | -                                                                                                | TWA: 5 mg/kg<br>STEL: 500 mg/m <sup>3</sup>                                                            | -                                                                                                  |
| Carbon Dioxide<br>124-38-9                                           | TWA: 5000 ppm<br>TWA: 9000 mg/m <sup>3</sup>                                                    | TWA: 9000 mg/m <sup>3</sup><br>Ceiling: 45000<br>mg/m <sup>3</sup>                                                                                | TWA: 5000 ppm<br>TWA: 9000 mg/m <sup>3</sup><br>STEL: 10000 ppm<br>STEL: 18000 mg/m <sup>3</sup> | TWA: 5000 ppm<br>TWA: 9000 mg/m <sup>3</sup>                                                           | TWA: 5000 ppm<br>TWA: 9100 mg/m <sup>3</sup>                                                       |
| 2-Methoxypropanol<br>1589-47-5                                       | -                                                                                               | -                                                                                                                                                 | TWA: 20 ppm<br>TWA: 75 mg/m <sup>3</sup><br>STEL: 40 ppm<br>STEL: 150 mg/m <sup>3</sup>          | -                                                                                                      | -                                                                                                  |
| Chemical name                                                        | France                                                                                          | Germany TRGS                                                                                                                                      | Germany DFG                                                                                      | Greece                                                                                                 | Hungary                                                                                            |
| Cyclohexane<br>110-82-7                                              | TWA: 200 ppm<br>TWA: 700 mg/m <sup>3</sup><br>STEL: 375 ppm<br>STEL: 1300 mg/m <sup>3</sup>     | TWA: 200 ppm<br>TWA: 700 mg/m <sup>3</sup>                                                                                                        | TWA: 200 ppm<br>TWA: 700 mg/m <sup>3</sup><br>Peak: 800 ppm<br>Peak: 2800 mg/m <sup>3</sup>      | TWA: 200 ppm<br>TWA: 700 mg/m <sup>3</sup>                                                             | TWA: 200 ppm<br>TWA: 700 mg/m <sup>3</sup>                                                         |
| Propan-2-ol                                                          | STEL: 400 ppm                                                                                   | TWA: 200 ppm                                                                                                                                      | TWA: 200 ppm                                                                                     | TWA: 400 ppm                                                                                           | TWA: 500 mg/m <sup>3</sup>                                                                         |

|                                                                      |                                                                                                     |                                                                                                     |                                                                                                                       |                                                                                                    |                                                                                                  |
|----------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|
| 67-63-0                                                              | STEL: 980 mg/m <sup>3</sup>                                                                         | TWA: 500 mg/m <sup>3</sup>                                                                          | TWA: 500 mg/m <sup>3</sup><br>Peak: 400 ppm<br>Peak: 1000 mg/m <sup>3</sup>                                           | TWA: 980 mg/m <sup>3</sup><br>STEL: 500 ppm<br>STEL: 1225 mg/m <sup>3</sup>                        | TWA: 200 ppm<br>STEL: 1000 mg/m <sup>3</sup><br>STEL: 400 ppm<br>b*                              |
| 1-Methoxy-2-propanol<br>107-98-2                                     | TWA: 50 ppm<br>TWA: 188 mg/m <sup>3</sup><br>STEL: 100 ppm<br>STEL: 375 mg/m <sup>3</sup><br>*      | TWA: 100 ppm<br>TWA: 370 mg/m <sup>3</sup>                                                          | TWA: 100 ppm<br>TWA: 370 mg/m <sup>3</sup><br>Peak: 200 ppm<br>Peak: 740 mg/m <sup>3</sup>                            | TWA: 100 ppm<br>TWA: 360 mg/m <sup>3</sup><br>STEL: 300 ppm<br>STEL: 1080 mg/m <sup>3</sup><br>*   | TWA: 375 mg/m <sup>3</sup><br>TWA: 100 ppm<br>STEL: 568 mg/m <sup>3</sup><br>STEL: 150 ppm<br>b* |
| Carbon Dioxide<br>124-38-9                                           | TWA: 5000 ppm<br>TWA: 9000 mg/m <sup>3</sup>                                                        | TWA: 5000 ppm<br>TWA: 9100 mg/m <sup>3</sup>                                                        | TWA: 5000 ppm<br>TWA: 9100 mg/m <sup>3</sup><br>Peak: 10000 ppm<br>Peak: 18200 mg/m <sup>3</sup>                      | TWA: 5000 ppm<br>TWA: 9000 mg/m <sup>3</sup><br>STEL: 5000 ppm<br>STEL: 54000 mg/m <sup>3</sup>    | TWA: 9000 mg/m <sup>3</sup><br>TWA: 5000 ppm                                                     |
| 2-Methoxypropanol<br>1589-47-5                                       | -                                                                                                   | TWA: 5 ppm<br>TWA: 19 mg/m <sup>3</sup><br>H*                                                       | TWA: 5 ppm<br>TWA: 19 mg/m <sup>3</sup><br>Peak: 10 ppm<br>Peak: 38 mg/m <sup>3</sup><br>*                            | -                                                                                                  | -                                                                                                |
| Chemical name                                                        | Ireland                                                                                             | Italy MDLPS                                                                                         | Italy AIDII                                                                                                           | Latvia                                                                                             | Lithuania                                                                                        |
| Cyclohexane<br>110-82-7                                              | TWA: 200 ppm<br>TWA: 700 mg/m <sup>3</sup><br>STEL: 600 ppm<br>STEL: 2100 mg/m <sup>3</sup>         | TWA: 100 ppm<br>TWA: 350 mg/m <sup>3</sup>                                                          | TWA: 100 ppm<br>TWA: 344 mg/m <sup>3</sup>                                                                            | TWA: 23 ppm<br>TWA: 80 mg/m <sup>3</sup>                                                           | TWA: 200 ppm<br>TWA: 700 mg/m <sup>3</sup>                                                       |
| Propan-2-ol<br>67-63-0                                               | TWA: 200 ppm<br>STEL: 400 ppm<br>Sk*                                                                | -                                                                                                   | TWA: 200 ppm<br>TWA: 492 mg/m <sup>3</sup><br>STEL: 400 ppm<br>STEL: 983 mg/m <sup>3</sup>                            | TWA: 350 mg/m <sup>3</sup><br>STEL: 600 mg/m <sup>3</sup>                                          | STEL: 250 ppm<br>STEL: 600 mg/m <sup>3</sup><br>TWA: 150 ppm<br>TWA: 350 mg/m <sup>3</sup>       |
| 1-Methoxy-2-propanol<br>107-98-2                                     | TWA: 100 ppm<br>TWA: 375 mg/m <sup>3</sup><br>STEL: 150 ppm<br>STEL: 568 mg/m <sup>3</sup>          | TWA: 100 ppm<br>TWA: 375 mg/m <sup>3</sup><br>STEL: 150 ppm<br>STEL: 568 mg/m <sup>3</sup><br>cute* | TWA: 50 ppm<br>TWA: 184 mg/m <sup>3</sup><br>STEL: 100 ppm<br>STEL: 368 mg/m <sup>3</sup>                             | TWA: 100 ppm<br>TWA: 375 mg/m <sup>3</sup><br>STEL: 150 ppm<br>STEL: 568 mg/m <sup>3</sup><br>Ada* | STEL: 300 mg/m <sup>3</sup><br>STEL: 75 ppm<br>TWA: 190 mg/m <sup>3</sup><br>TWA: 50 ppm<br>O*   |
| Carbon Dioxide<br>124-38-9                                           | TWA: 5000 ppm<br>TWA: 9000 mg/m <sup>3</sup><br>STEL: 15000 ppm<br>STEL: 27000 mg/m <sup>3</sup>    | TWA: 5000 ppm<br>TWA: 9000 mg/m <sup>3</sup>                                                        | TWA: 5000 ppm<br>TWA: 9000 mg/m <sup>3</sup><br>STEL: 30000 ppm<br>STEL: 54000 mg/m <sup>3</sup><br>Simple asphyxiant | TWA: 5000 ppm<br>TWA: 9000 mg/m <sup>3</sup>                                                       | TWA: 5000 ppm<br>TWA: 9000 mg/m <sup>3</sup>                                                     |
| Chemical name                                                        | Luxembourg                                                                                          | Malta                                                                                               | Netherlands                                                                                                           | Norway                                                                                             | Poland                                                                                           |
| Cyclohexane<br>110-82-7                                              | TWA: 200 ppm<br>TWA: 700 mg/m <sup>3</sup>                                                          | TWA: 200 ppm<br>TWA: 700 mg/m <sup>3</sup>                                                          | TWA: 200 ppm<br>TWA: 700 mg/m <sup>3</sup><br>STEL: 400 ppm<br>STEL: 1400 mg/m <sup>3</sup>                           | TWA: 150 ppm<br>TWA: 525 mg/m <sup>3</sup><br>STEL: 187.5 ppm<br>STEL: 656.25 mg/m <sup>3</sup>    | STEL: 1000 mg/m <sup>3</sup><br>TWA: 300 mg/m <sup>3</sup><br>skóra*                             |
| Propan-2-ol<br>67-63-0                                               | -                                                                                                   | -                                                                                                   | -                                                                                                                     | TWA: 100 ppm<br>TWA: 245 mg/m <sup>3</sup><br>STEL: 150 ppm<br>STEL: 306.25 mg/m <sup>3</sup>      | STEL: 1200 mg/m <sup>3</sup><br>TWA: 900 mg/m <sup>3</sup><br>skóra*                             |
| 1-Methoxy-2-propanol<br>107-98-2                                     | STEL: 150 ppm<br>STEL: 568 mg/m <sup>3</sup><br>TWA: 100 ppm<br>TWA: 375 mg/m <sup>3</sup><br>Peau* | STEL: 150 ppm<br>STEL: 568 mg/m <sup>3</sup><br>skin*<br>TWA: 100 ppm<br>TWA: 375 mg/m <sup>3</sup> | TWA: 100 ppm<br>TWA: 375 mg/m <sup>3</sup><br>STEL: 150 ppm<br>STEL: 563 mg/m <sup>3</sup><br>H*                      | TWA: 50 ppm<br>TWA: 180 mg/m <sup>3</sup><br>STEL: 75 ppm<br>STEL: 225 mg/m <sup>3</sup><br>H*     | STEL: 360 mg/m <sup>3</sup><br>TWA: 180 mg/m <sup>3</sup><br>skóra*                              |
| Hydrocarbons, C7,<br>n-alkanes, isoalkanes,<br>cyclics<br>64742-49-0 | -                                                                                                   | -                                                                                                   | -                                                                                                                     | -                                                                                                  | STEL: 1500 mg/m <sup>3</sup><br>TWA: 500 mg/m <sup>3</sup>                                       |
| Carbon Dioxide<br>124-38-9                                           | TWA: 5000 ppm<br>TWA: 9000 mg/m <sup>3</sup>                                                        | TWA: 5000 ppm<br>TWA: 9000 mg/m <sup>3</sup>                                                        | TWA: 5000 ppm<br>TWA: 9000 mg/m <sup>3</sup>                                                                          | TWA: 5000 ppm<br>TWA: 9000 mg/m <sup>3</sup><br>STEL: 6250 ppm                                     | STEL: 27000 mg/m <sup>3</sup><br>TWA: 9000 mg/m <sup>3</sup>                                     |



|                                  |                                                                                                                      |                                                                                                  |                                                                                              |                                                                                                  |                                                                                                            |
|----------------------------------|----------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------|
|                                  |                                                                                                                      |                                                                                                  |                                                                                              | STEL: 11250 mg/m <sup>3</sup>                                                                    |                                                                                                            |
| 2-Methoxypropanol<br>1589-47-5   | -                                                                                                                    | -                                                                                                | -                                                                                            | TWA: 20 ppm<br>TWA: 75 mg/m <sup>3</sup><br>STEL: 30 ppm<br>STEL: 112.5 mg/m <sup>3</sup><br>H*  | -                                                                                                          |
| Chemical name                    | Portugal                                                                                                             | Romania                                                                                          | Slovakia                                                                                     | Slovenia                                                                                         | Spain                                                                                                      |
| Cyclohexane<br>110-82-7          | TWA: 200 ppm<br>TWA: 700 mg/m <sup>3</sup>                                                                           | TWA: 200 ppm<br>TWA: 700 mg/m <sup>3</sup>                                                       | TWA: 200 ppm<br>TWA: 700 mg/m <sup>3</sup>                                                   | TWA: 200 ppm<br>TWA: 700 mg/m <sup>3</sup><br>STEL: 2800 mg/m <sup>3</sup><br>STEL: 800 ppm      | TWA: 200 ppm<br>TWA: 700 mg/m <sup>3</sup>                                                                 |
| Propan-2-ol<br>67-63-0           | TWA: 200 ppm<br>STEL: 400 ppm                                                                                        | TWA: 81 ppm<br>TWA: 200 mg/m <sup>3</sup><br>STEL: 203 ppm<br>STEL: 500 mg/m <sup>3</sup>        | TWA: 200 ppm<br>TWA: 500 mg/m <sup>3</sup><br>Ceiling: 1000 mg/m <sup>3</sup>                | TWA: 200 ppm<br>TWA: 500 mg/m <sup>3</sup><br>STEL: 400 ppm<br>STEL: 1000 mg/m <sup>3</sup>      | TWA: 200 ppm<br>TWA: 500 mg/m <sup>3</sup><br>STEL: 400 ppm<br>STEL: 1000 mg/m <sup>3</sup>                |
| 1-Methoxy-2-propanol<br>107-98-2 | TWA: 100 ppm<br>TWA: 375 mg/m <sup>3</sup><br>STEL: 150 ppm<br>STEL: 568 mg/m <sup>3</sup>                           | TWA: 100 ppm<br>TWA: 375 mg/m <sup>3</sup><br>STEL: 150 ppm<br>STEL: 568 mg/m <sup>3</sup><br>P* | TWA: 100 ppm<br>TWA: 375 mg/m <sup>3</sup><br>K*<br>Ceiling: 568 mg/m <sup>3</sup>           | TWA: 100 ppm<br>TWA: 375 mg/m <sup>3</sup><br>STEL: 150 ppm<br>STEL: 568 mg/m <sup>3</sup><br>K* | TWA: 100 ppm<br>TWA: 375 mg/m <sup>3</sup><br>STEL: 150 ppm<br>STEL: 568 mg/m <sup>3</sup><br>vía dérmica* |
| Carbon Dioxide<br>124-38-9       | TWA: 5000 ppm<br>TWA: 9000 mg/m <sup>3</sup><br>STEL: 30000 ppm                                                      | TWA: 5000 ppm<br>TWA: 9000 mg/m <sup>3</sup>                                                     | TWA: 5000 ppm<br>TWA: 9000 mg/m <sup>3</sup>                                                 | TWA: 5000 ppm<br>TWA: 9000 mg/m <sup>3</sup><br>STEL: 10000 ppm<br>STEL: 18000 mg/m <sup>3</sup> | TWA: 5000 ppm<br>TWA: 9150 mg/m <sup>3</sup>                                                               |
| 2-Methoxypropanol<br>1589-47-5   | -                                                                                                                    | -                                                                                                | TWA: 5 ppm<br>TWA: 19 mg/m <sup>3</sup><br>K*                                                | TWA: 19 mg/m <sup>3</sup><br>TWA: 5 ppm<br>STEL: 40 ppm<br>STEL: 152 mg/m <sup>3</sup><br>K*     | TWA: 5 ppm<br>TWA: 19 mg/m <sup>3</sup>                                                                    |
| Chemical name                    | Sweden                                                                                                               |                                                                                                  | Switzerland                                                                                  |                                                                                                  | United Kingdom                                                                                             |
| Cyclohexane<br>110-82-7          | NGV: 200 ppm<br>NGV: 700 mg/m <sup>3</sup>                                                                           |                                                                                                  | TWA: 200 ppm<br>TWA: 700 mg/m <sup>3</sup><br>STEL: 800 ppm<br>STEL: 2800 mg/m <sup>3</sup>  |                                                                                                  | TWA: 100 ppm<br>TWA: 350 mg/m <sup>3</sup><br>STEL: 300 ppm<br>STEL: 1050 mg/m <sup>3</sup>                |
| Propan-2-ol<br>67-63-0           | Vägledande KGV: 250 ppm<br>Vägledande KGV: 600 mg/m <sup>3</sup><br>NGV: 150 ppm<br>NGV: 350 mg/m <sup>3</sup>       |                                                                                                  | TWA: 200 ppm<br>TWA: 500 mg/m <sup>3</sup><br>STEL: 400 ppm<br>STEL: 1000 mg/m <sup>3</sup>  |                                                                                                  | TWA: 400 ppm<br>TWA: 999 mg/m <sup>3</sup><br>STEL: 500 ppm<br>STEL: 1250 mg/m <sup>3</sup>                |
| 1-Methoxy-2-propanol<br>107-98-2 | Bindande KGV: 150 ppm<br>Bindande KGV: 568 mg/m <sup>3</sup><br>NGV: 50 ppm<br>NGV: 190 mg/m <sup>3</sup><br>H*      |                                                                                                  | TWA: 100 ppm<br>TWA: 360 mg/m <sup>3</sup><br>STEL: 200 ppm<br>STEL: 720 mg/m <sup>3</sup>   |                                                                                                  | TWA: 100 ppm<br>TWA: 375 mg/m <sup>3</sup><br>STEL: 150 ppm<br>STEL: 560 mg/m <sup>3</sup><br>Sk*          |
| Carbon Dioxide<br>124-38-9       | Vägledande KGV: 10000 ppm<br>Vägledande KGV: 18000 mg/m <sup>3</sup><br>NGV: 5000 ppm<br>NGV: 9000 mg/m <sup>3</sup> |                                                                                                  | TWA: 5000 ppm<br>TWA: 9000 mg/m <sup>3</sup>                                                 |                                                                                                  | TWA: 5000 ppm<br>TWA: 9150 mg/m <sup>3</sup><br>STEL: 15000 ppm<br>STEL: 27400 mg/m <sup>3</sup>           |
| 2-Methoxypropanol<br>1589-47-5   | -                                                                                                                    |                                                                                                  | TWA: 5 ppm<br>TWA: 19 mg/m <sup>3</sup><br>STEL: 40 ppm<br>STEL: 152 mg/m <sup>3</sup><br>H* |                                                                                                  | -                                                                                                          |

**Biological occupational exposure limits**

|               |                |         |          |                     |                |
|---------------|----------------|---------|----------|---------------------|----------------|
| Chemical name | European Union | Austria | Bulgaria | Croatia             | Czech Republic |
| Cyclohexane   | -              | -       | -        | 150 mg/g Creatinine | -              |

|                                  |         |                          |             |                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                   |
|----------------------------------|---------|--------------------------|-------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 110-82-7                         |         |                          |             | - urine<br>(1,2-Cyclohexanediol) - at the end of the work shift; at chronic exposure after several successive shifts<br>450 µg/L - blood (Cyclohexanol) - during exposure<br>3.20 mg/g Creatinine - urine (Cyclohexanol) - during the second half of the work shift                                                                                          |                                                                                                                                                                                                                                                   |
| Propan-2-ol<br>67-63-0           | -       | -                        | -           | 50 mg/L - blood (Acetone) - at the end of the work shift<br>50 mg/L - urine (Acetone) - at the end of the work shift                                                                                                                                                                                                                                         | -                                                                                                                                                                                                                                                 |
| Chemical name                    | Denmark | Finland                  | France      | Germany DFG                                                                                                                                                                                                                                                                                                                                                  | Germany TRGS                                                                                                                                                                                                                                      |
| Cyclohexane<br>110-82-7          | -       | -                        | -           | 150 mg/g Creatinine (urine - total<br>1,2-Cyclohexanediol (after hydrolysis) end of shift)<br>150 mg/g Creatinine (urine - total<br>1,2-Cyclohexanediol (after hydrolysis) for long-term exposures: at the end of the shift after several shifts)<br>150 mg/g Creatinine - BAT (for long-term exposures: at the end of the shift after several shifts) urine | 150 mg/g Creatinine (urine - total<br>1,2-Cyclohexanediol (after hydrolysis) end of shift)<br>150 mg/g Creatinine (urine - total<br>1,2-Cyclohexanediol (after hydrolysis) for long-term exposures: at the end of the shift after several shifts) |
| Propan-2-ol<br>67-63-0           | -       | -                        | -           | 25 mg/L (whole blood - Acetone end of shift)<br>25 mg/L (urine - Acetone end of shift)<br>25 mg/L - BAT (end of exposure or end of shift) urine<br>25 mg/L - BAT (end of exposure or end of shift) blood                                                                                                                                                     | 25 mg/L (whole blood - Acetone end of shift)<br>25 mg/L (urine - Acetone end of shift)                                                                                                                                                            |
| 1-Methoxy-2-propanol<br>107-98-2 | -       | -                        | -           | 15 mg/L (urine - 1-Methoxypropan-2-ol end of shift)<br>15 mg/L - BAT (end of exposure or end of shift) urine                                                                                                                                                                                                                                                 | 15 mg/L (urine - 1-Methoxypropan-2-ol end of shift)                                                                                                                                                                                               |
| Chemical name                    | Hungary | Ireland                  | Italy MDLPS | Italy AIDII                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                   |
| Propan-2-ol                      | -       | 40 mg/L (urine - Acetone | -           | 40 mg/L - urine (Acetone                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                   |

|                                  |                                                                                                                                                                                                                      |                                              |                                                                                                                                                                                                                                                                                         |                                      |
|----------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------|
| 67-63-0                          |                                                                                                                                                                                                                      | end of shift at end of<br>workweek)          |                                                                                                                                                                                                                                                                                         | - end of shift at end of<br>workweek |
| Chemical name                    | Latvia                                                                                                                                                                                                               | Luxembourg                                   | Romania                                                                                                                                                                                                                                                                                 | Slovakia                             |
| Propan-2-ol<br>67-63-0           | -                                                                                                                                                                                                                    | -                                            | 50 mg/L - urine (Acetone)<br>- end of shift                                                                                                                                                                                                                                             | -                                    |
| Chemical name                    | Slovenia                                                                                                                                                                                                             | Spain                                        | Switzerland                                                                                                                                                                                                                                                                             | United Kingdom                       |
| Cyclohexane<br>110-82-7          | 150 mg/g Creatinine -<br>urine<br>(1,2-Cyclohexanediol<br>(after hydrolysis)) - at the<br>end of the work shift; for<br>long-term exposure: at the<br>end of the work shift after<br>several consecutive<br>workdays | -                                            | 150 mg/g creatinine (urine<br>- total<br>1,2-Cyclohexanediol end<br>of shift, and after several<br>shifts (for long-term<br>exposures))<br>146 µmol/mmol creatinine<br>(urine - total<br>1,2-Cyclohexanediol end<br>of shift, and after several<br>shifts (for long-term<br>exposures)) | -                                    |
| Propan-2-ol<br>67-63-0           | 25 mg/L - blood (Acetone)<br>- at the end of the work<br>shift<br>25 mg/L - urine (Acetone)<br>- at the end of the work<br>shift                                                                                     | 40 mg/L (urine - Acetone<br>end of workweek) | 25 mg/L (urine - Acetone<br>end of shift)<br>0.4 mmol/L (urine -<br>Acetone end of shift)<br>25 mg/L (whole blood -<br>Acetone end of shift)<br>0.4 mmol/L (whole blood -<br>Acetone end of shift)                                                                                      | -                                    |
| 1-Methoxy-2-propanol<br>107-98-2 | 15 mg/L - urine<br>(1-Methoxypropan-2-ol) -<br>at the end of the work<br>shift                                                                                                                                       | -                                            | 20 mg/L (urine -<br>1-Methoxypropanol-2 end<br>of shift)<br>221.9 µmol/L (urine -<br>1-Methoxypropanol-2 end<br>of shift)                                                                                                                                                               | -                                    |

#### Derived No Effect Level (DNEL) - Workers

| Chemical name                                                     | Oral | Dermal                    | Inhalation                                                                                                                         |
|-------------------------------------------------------------------|------|---------------------------|------------------------------------------------------------------------------------------------------------------------------------|
| Cyclohexane<br>110-82-7                                           | -    | 2016 mg/kg bw/day [4] [6] | 700 mg/m <sup>3</sup> [4] [6]<br>1400 mg/m <sup>3</sup> [4] [7]<br>700 mg/m <sup>3</sup> [5] [6]<br>1400 mg/m <sup>3</sup> [5] [7] |
| Propan-2-ol<br>67-63-0                                            | -    | 888 mg/kg bw/day [4] [6]  | 500 mg/m <sup>3</sup> [4] [6]                                                                                                      |
| 1-Methoxy-2-propanol<br>107-98-2                                  | -    | 183 mg/kg bw/day [4] [6]  | 369 mg/m <sup>3</sup> [4] [6]<br>553.5 mg/m <sup>3</sup> [4] [7]<br>553.5 mg/m <sup>3</sup> [5] [7]                                |
| Hydrocarbons, C7, n-alkanes,<br>isoalkanes, cyclics<br>64742-49-0 | -    | -                         | 1286.4 mg/m <sup>3</sup> [4] [7]<br>837.5 mg/m <sup>3</sup> [5] [6]<br>1066.67 mg/m <sup>3</sup> [5] [7]                           |

#### Notes

- [4] Systemic health effects.  
[5] Local health effects.  
[6] Long term.  
[7] Short term.

#### Derived No Effect Level (DNEL) - General Public

| Chemical name                                                     | Oral                      | Dermal | Inhalation                                                                                                                       |
|-------------------------------------------------------------------|---------------------------|--------|----------------------------------------------------------------------------------------------------------------------------------|
| Cyclohexane<br>110-82-7                                           | 59.4 mg/kg bw/day [4] [6] | -      | 206 mg/m <sup>3</sup> [4] [6]<br>412 mg/m <sup>3</sup> [4] [7]<br>206 mg/m <sup>3</sup> [5] [6]<br>412 mg/m <sup>3</sup> [5] [7] |
| Propan-2-ol<br>67-63-0                                            | 26 mg/kg bw/day [4] [6]   | -      | 89 mg/m <sup>3</sup> [4] [6]                                                                                                     |
| 1-Methoxy-2-propanol<br>107-98-2                                  | 33 mg/kg bw/day [4] [6]   | -      | 43.9 mg/m <sup>3</sup> [4] [6]                                                                                                   |
| Hydrocarbons, C7, n-alkanes,<br>isoalkanes, cyclics<br>64742-49-0 | -                         | -      | 1152 mg/m <sup>3</sup> [4] [7]<br>178.57 mg/m <sup>3</sup> [5] [6]<br>640 mg/m <sup>3</sup> [5] [7]                              |

#### Notes

|     |                          |
|-----|--------------------------|
| [4] | Systemic health effects. |
| [5] | Local health effects.    |
| [6] | Long term.               |
| [7] | Short term.              |

#### Predicted No Effect Concentration (PNEC)

| Chemical name                    | Freshwater | Freshwater<br>(intermittent release) | Marine water | Marine water<br>(intermittent release) | Air |
|----------------------------------|------------|--------------------------------------|--------------|----------------------------------------|-----|
| Cyclohexane<br>110-82-7          | 0.207 mg/L | 0.207 mg/L                           | 0.207 mg/L   | -                                      | -   |
| Propan-2-ol<br>67-63-0           | 140.9 mg/L | 140.9 mg/L                           | 140.9 mg/L   | -                                      | -   |
| 1-Methoxy-2-propanol<br>107-98-2 | 10 mg/L    | 100 mg/L                             | 1 mg/L       | -                                      | -   |

| Chemical name                    | Freshwater<br>sediment     | Marine sediment            | Sewage treatment | Soil               | Food chain     |
|----------------------------------|----------------------------|----------------------------|------------------|--------------------|----------------|
| Cyclohexane<br>110-82-7          | 16.68 mg/kg<br>sediment dw | 16.68 mg/kg<br>sediment dw | 3.24 mg/L        | 3.38 mg/kg soil dw | -              |
| Propan-2-ol<br>67-63-0           | 552 mg/kg sediment<br>dw   | 552 mg/kg sediment<br>dw   | 2251 mg/L        | 28 mg/kg soil dw   | 160 mg/kg food |
| 1-Methoxy-2-propanol<br>107-98-2 | 52.3 mg/kg<br>sediment dw  | 5.2 mg/kg sediment<br>dw   | 100 mg/L         | 4.59 mg/kg soil dw | -              |

#### 8.2. Exposure controls

**Engineering controls** No information available.

#### Personal protective equipment

**Eye/face protection** Tight sealing safety goggles. Safety glasses with side shields are recommended for medical or industrial exposures. Eye protection must conform to standard EN 166.

**Hand protection** Impervious gloves. Wear suitable gloves. Gloves must conform to standard EN 374.

|                                        |                                                                                                                                                                                                                                                                                                                                                                |
|----------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Skin and body protection</b>        | Wear suitable protective clothing. Long sleeved clothing. Chemical resistant apron. Antistatic boots. (EN ISO 6529).                                                                                                                                                                                                                                           |
| <b>Respiratory protection</b>          | No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.                                                                                                                                                                                       |
| <b>General hygiene considerations</b>  | Do not eat, drink or smoke when using this product. Contaminated work clothing should not be allowed out of the workplace. Regular cleaning of equipment, work area and clothing is recommended. Wash hands before breaks and immediately after handling the product. Wear suitable gloves and eye/face protection. Avoid contact with skin, eyes or clothing. |
| <b>Environmental exposure controls</b> | No information available.                                                                                                                                                                                                                                                                                                                                      |

## SECTION 9: Physical and chemical properties

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

|                        |                          |
|------------------------|--------------------------|
| <b>Physical state</b>  | Liquid                   |
| <b>Appearance</b>      | Aerosol                  |
| <b>Colour</b>          | Colourless               |
| <b>Odour</b>           | Fruit-like odour.        |
| <b>Odour threshold</b> | No information available |

| <b>Property</b>                                | <b>Values</b>            | <b>Remarks • Method</b> |
|------------------------------------------------|--------------------------|-------------------------|
| <b>Melting point / freezing point</b>          | No data available        | None known              |
| <b>Initial boiling point and boiling range</b> | No data available        | None known              |
| <b>Flammability</b>                            | No data available        | None known              |
| <b>Flammability Limit in Air</b>               |                          | None known              |
| <b>Upper flammability or explosive limits</b>  | No data available        |                         |
| <b>Lower flammability or explosive limits</b>  | No data available        |                         |
| <b>Flash point</b>                             | -20 °C                   |                         |
| <b>Autoignition temperature</b>                | No data available        | None known              |
| <b>Decomposition temperature</b>               |                          | None known              |
| <b>pH</b>                                      | No data available        | None known              |
| <b>pH (as aqueous solution)</b>                | No data available        | None known              |
| <b>Kinematic viscosity</b>                     | No data available        | None known              |
| <b>Dynamic viscosity</b>                       | No data available        | None known              |
| <b>Water solubility</b>                        | Immiscible in water      |                         |
| <b>Solubility(ies)</b>                         | No data available        | None known              |
| <b>Partition coefficient</b>                   | No data available        | None known              |
| <b>Vapour pressure</b>                         | No data available        | None known              |
| <b>Relative density</b>                        | No data available        | None known              |
| <b>Bulk density</b>                            | 0.810 kg/l               |                         |
| <b>Liquid Density</b>                          | No data available        |                         |
| <b>Relative vapour density</b>                 | No data available        | None known              |
| <b>Particle characteristics</b>                |                          |                         |
| <b>Particle Size</b>                           | No information available |                         |
| <b>Particle Size Distribution</b>              | No information available |                         |

### 9.2. Other information

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

|                             |                                                             |
|-----------------------------|-------------------------------------------------------------|
| <b>Explosive properties</b> | Not considered to be explosive.                             |
| <b>Oxidising properties</b> | Does not meet the criteria for classification as oxidizing. |

### 9.2.2. Other safety characteristics

Evaporation rate 16 (diethyl ether = 1)

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

Reactivity No information available.

### 10.2. Chemical stability

Stability Stable under normal conditions.

### Explosion data

Sensitivity to mechanical impact None.

Sensitivity to static discharge Yes.

### 10.3. Possibility of hazardous reactions

Possibility of hazardous reactions None under normal processing.

### 10.4. Conditions to avoid

Conditions to avoid Heat, flames and sparks.

### 10.5. Incompatible materials

Incompatible materials Strong acids. Strong bases. Strong oxidising agents.

### 10.6. Hazardous decomposition products

Hazardous decomposition products None known based on information supplied.

## SECTION 11: Toxicological information

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

#### Information on likely routes of exposure

#### Product Information

|              |                                                                                                                                                                                                                                                                                                                                                                |
|--------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Inhalation   | Intentional misuse by deliberately concentrating and inhaling contents may be harmful or fatal. Specific test data for the substance or mixture is not available. Aspiration into lungs can produce severe lung damage. May cause pulmonary edema. Pulmonary edema can be fatal. May cause irritation of respiratory tract. May cause drowsiness or dizziness. |
| Eye contact  | Specific test data for the substance or mixture is not available. May cause irritation. Causes serious eye irritation. (based on components). May cause redness, itching, and pain.                                                                                                                                                                            |
| Skin contact | May cause sensitisation by skin contact. Specific test data for the substance or mixture is not available. Repeated or prolonged skin contact may cause allergic reactions with susceptible persons. (based on components). Repeated exposure may cause skin dryness or cracking. Causes skin irritation.                                                      |
| Ingestion    | Specific test data for the substance or mixture is not available. Potential for aspiration if swallowed. May cause lung damage if swallowed. Aspiration may cause pulmonary edema and pneumonitis. May be fatal if swallowed and enters airways. Ingestion may cause                                                                                           |

gastrointestinal irritation, nausea, vomiting and diarrhoea.

**Symptoms related to the physical, chemical and toxicological characteristics**

**Symptoms** Itching. Rashes. Hives. Difficulty in breathing. Coughing and/ or wheezing. Dizziness. Redness. May cause redness and tearing of the eyes. Inhalation of high vapour concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting.

**Acute toxicity**

**Numerical measures of toxicity**

**Component Information**

| Chemical name                                    | Oral LD50             | Dermal LD50             | Inhalation LC50                       |
|--------------------------------------------------|-----------------------|-------------------------|---------------------------------------|
| Cyclohexane                                      | = 12705 mg/kg ( Rat ) | > 2000 mg/kg ( Rabbit ) | > 32880 mg/m <sup>3</sup> ( Rat ) 4 h |
| Propan-2-ol                                      | = 1870 mg/kg ( Rat )  | = 4059 mg/kg ( Rabbit ) | > 10000 ppm ( Rat ) 6 h               |
| 1-Methoxy-2-propanol                             | = 5000 mg/kg ( Rat )  | = 13 g/kg ( Rabbit )    | > 7559 ppm ( Rat ) 6 h                |
| Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics | > 5000 mg/kg ( Rat )  | > 3160 mg/kg ( Rabbit ) | = 73680 ppm ( Rat ) 4 h               |
| Orange Terpenes                                  | -                     | > 5000 mg/kg ( Rabbit ) | -                                     |
| 2-Methoxypropanol                                | = 5710 mg/kg ( Rat )  | = 5660 mg/kg ( Rabbit ) | -                                     |

**Delayed and immediate effects as well as chronic effects from short and long-term exposure**

**Skin corrosion/irritation** Classification based on data available for ingredients. Causes skin irritation.

**Serious eye damage/eye irritation** Classification based on data available for ingredients. Causes serious eye irritation.

**Respiratory or skin sensitisation** May cause an allergic skin reaction.

**Germ cell mutagenicity** Based on available data, the classification criteria are not met.

**Carcinogenicity** Based on available data, the classification criteria are not met.

**Reproductive toxicity** Based on available data, the classification criteria are not met.

The table below indicates ingredients above the cut-off threshold considered as relevant which are listed as reproductive toxins.

| Chemical name     | European Union |
|-------------------|----------------|
| 2-Methoxypropanol | Repr. 1B       |

**STOT - single exposure** May cause drowsiness or dizziness.

**STOT - repeated exposure** Based on available data, the classification criteria are not met.

**Aspiration hazard** May be fatal if swallowed and enters airways.

## 11.2. Information on other hazards

### 11.2.1. Endocrine disrupting properties

**Endocrine disrupting properties** The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

### 11.2.2. Other information

**Other adverse effects** No information available.

## **SECTION 12: Ecological information**

### 12.1. Toxicity

**Ecotoxicity** Very toxic to aquatic life with long lasting effects.

**Unknown aquatic toxicity** Contains 0 % of components with unknown hazards to the aquatic environment.

| Chemical name                                    | Algae/aquatic plants                                                                                             | Fish                                                                                                                                                                                                                                               | Toxicity to microorganisms | Crustacea                                     |
|--------------------------------------------------|------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------|-----------------------------------------------|
| Cyclohexane                                      | EC50: >500mg/L (72h, <i>Desmodesmus subspicatus</i> )                                                            | LC50: 3.96 - 5.18mg/L (96h, <i>Pimephales promelas</i> )<br>LC50: 23.03 - 42.07mg/L (96h, <i>Pimephales promelas</i> )<br>LC50: 24.99 - 44.69mg/L (96h, <i>Lepomis macrochirus</i> )<br>LC50: 48.87 - 68.76mg/L (96h, <i>Poecilia reticulata</i> ) | -                          | -                                             |
| Propan-2-ol                                      | EC50: >1000mg/L (96h, <i>Desmodesmus subspicatus</i> )<br>EC50: >1000mg/L (72h, <i>Desmodesmus subspicatus</i> ) | LC50: =9640mg/L (96h, <i>Pimephales promelas</i> )<br>LC50: =11130mg/L (96h, <i>Pimephales promelas</i> )<br>LC50: >1400000µg/L (96h, <i>Lepomis macrochirus</i> )                                                                                 | -                          | EC50: =13299mg/L (48h, <i>Daphnia magna</i> ) |
| 1-Methoxy-2-propanol                             | -                                                                                                                | LC50: =20.8g/L (96h, <i>Pimephales promelas</i> )                                                                                                                                                                                                  | -                          | EC50: =23300mg/L (48h, <i>Daphnia magna</i> ) |
| Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics | -                                                                                                                | LC50: =8.41mg/L (96h, <i>Oncorhynchus mykiss</i> )                                                                                                                                                                                                 | -                          | EC50: <0.26mg/L (48h, <i>Daphnia magna</i> )  |

### 12.2. Persistence and degradability

**Persistence and degradability** No information available.

### 12.3. Bioaccumulative potential

**Bioaccumulation**



#### Component Information

| Chemical name        | Partition coefficient |
|----------------------|-----------------------|
| Cyclohexane          | 3.44                  |
| Propan-2-ol          | 0.05                  |
| 1-Methoxy-2-propanol | 1                     |

#### 12.4. Mobility in soil

Mobility in soil No information available.

#### 12.5. Results of PBT and vPvB assessment

PBT and vPvB assessment The product does not contain any substance(s) classified as PBT or vPvB above the threshold of declaration.

| Chemical name                                    | PBT and vPvB assessment         |
|--------------------------------------------------|---------------------------------|
| Cyclohexane                                      | The substance is not PBT / vPvB |
| Propan-2-ol                                      | The substance is not PBT / vPvB |
| 1-Methoxy-2-propanol                             | The substance is not PBT / vPvB |
| Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics | The substance is not PBT / vPvB |
| Orange Terpenes                                  | The substance is not PBT / vPvB |

#### 12.6. Endocrine disrupting properties

Endocrine disrupting properties The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

#### 12.7. Other adverse effects

No information available.

### SECTION 13: Disposal considerations

#### 13.1. Waste treatment methods

Waste from residues/unused products Should not be released into the environment. Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.

Contaminated packaging Empty containers pose a potential fire and explosion hazard. Do not cut, puncture or weld containers.

### SECTION 14: Transport information

#### IATA

- 14.1 UN number or ID number UN1950
- 14.2 UN proper shipping name AEROSOLS, FLAMMABLE (CONTAINS Cyclohexane, Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics)
- 14.3 Transport hazard class(es) 2.1
- 14.4 Packing group None
- 14.5 Environmental hazards Yes
- 14.6 Special precautions for user
- Special Provisions None

#### IMDG

|                                                              |                                                                                              |
|--------------------------------------------------------------|----------------------------------------------------------------------------------------------|
| 14.1 UN number or ID number                                  | UN1950                                                                                       |
| 14.2 UN proper shipping name                                 | AEROSOLS, FLAMMABLE (CONTAINS Cyclohexane, Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics) |
| 14.3 Transport hazard class(es)                              | 2.1                                                                                          |
| 14.4 Packing group                                           | None                                                                                         |
| 14.5 Environmental hazards                                   | Yes                                                                                          |
| 14.6 Special precautions for user                            |                                                                                              |
| Special Provisions                                           | None                                                                                         |
| EmS-No.                                                      | F-D, S-U                                                                                     |
| 14.7 Maritime transport in bulk according to IMO instruments | No information available                                                                     |

#### RID

|                                   |                                                                                              |
|-----------------------------------|----------------------------------------------------------------------------------------------|
| 14.1 UN number or ID number       | UN1950                                                                                       |
| 14.2 UN proper shipping name      | AEROSOLS, FLAMMABLE (CONTAINS Cyclohexane, Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics) |
| 14.3 Transport hazard class(es)   | 2.1                                                                                          |
| 14.4 Packing group                | None                                                                                         |
| 14.5 Environmental hazards        | Yes                                                                                          |
| 14.6 Special precautions for user |                                                                                              |
| Special Provisions                | None                                                                                         |

#### ADR

|                                   |                                                                                              |
|-----------------------------------|----------------------------------------------------------------------------------------------|
| 14.1 UN number or ID number       | UN1950                                                                                       |
| 14.2 UN proper shipping name      | AEROSOLS, FLAMMABLE (CONTAINS Cyclohexane, Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics) |
| 14.3 Transport hazard class(es)   | Not regulated                                                                                |
| 14.4 Packing group                | None                                                                                         |
| 14.5 Environmental hazards        | Yes                                                                                          |
| 14.6 Special precautions for user |                                                                                              |
| Special Provisions                | None                                                                                         |
| Tunnel restriction code           | (D)                                                                                          |

## SECTION 15: Regulatory information

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

#### National regulations

##### France

##### Occupational Illnesses (R-463-3, France)

| Chemical name                                                 | French RG number |
|---------------------------------------------------------------|------------------|
| Cyclohexane - 110-82-7                                        | RG 84            |
| Propan-2-ol - 67-63-0                                         | RG 84            |
| 1-Methoxy-2-propanol - 107-98-2                               | RG 84            |
| Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics - 64742-49-0 | RG 84            |
| 2-Methoxypropanol - 1589-47-5                                 | RG 84            |

##### Germany

Water hazard class (WGK) obviously hazardous to water (WGK 2)

##### Netherlands

Carcinogenic, mutagenic and reproductive toxic effects

| Chemical name     | Netherlands - List of Carcinogens | Netherlands - List of Mutagens | Netherlands - List of Reproductive Toxins |
|-------------------|-----------------------------------|--------------------------------|-------------------------------------------|
| 2-Methoxypropanol | -                                 | -                              | Development Category 1B                   |

#### European Union

Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work.

#### Authorisations and/or restrictions on use:

This product contains one or more substance(s) subject to restriction (Regulation (EC) No. 1907/2006 (REACH), Annex XVII)

| Chemical name                                                 | Restricted substance per REACH Annex XVII | Substance subject to authorisation per REACH Annex XIV |
|---------------------------------------------------------------|-------------------------------------------|--------------------------------------------------------|
| Cyclohexane - 110-82-7                                        | 57.<br>75.                                | -                                                      |
| Propan-2-ol - 67-63-0                                         | 75.                                       | -                                                      |
| Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics - 64742-49-0 | 28.<br>29.<br>75.                         | -                                                      |
| 2-Methoxypropanol - 1589-47-5                                 | 30.<br>75.                                | -                                                      |

#### Persistent Organic Pollutants

Not applicable

#### Dangerous substance category per Seveso Directive (2012/18/EU)

P3a - FLAMMABLE AEROSOLS

P3b - FLAMMABLE AEROSOLS

E1 - Hazardous to the Aquatic Environment in Category Acute 1 or Chronic 1

#### Named dangerous substances per Seveso Directive (2012/18/EU)

| Chemical name                                                 | Lower-tier requirements (tons) | Upper-tier requirements (tons) |
|---------------------------------------------------------------|--------------------------------|--------------------------------|
| Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics - 64742-49-0 | -                              | 25000                          |

#### Ozone-depleting substances (ODS) regulation (EC) 1005/2009

Not applicable

#### EU - Plant Protection Products (1107/2009/EC)

| Chemical name               | EU - Plant Protection Products (1107/2009/EC) |
|-----------------------------|-----------------------------------------------|
| Orange Terpenes - 8028-48-6 | Plant protection agent                        |
| Carbon Dioxide - 124-38-9   | Plant protection agent                        |

#### Biocidal Products Regulation (EU) No 528/2012 (BPR)

| Chemical name               | Biocidal Products Regulation (EU) No 528/2012 (BPR)                                                                                                                                                                                                         |
|-----------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Propan-2-ol - 67-63-0       | Product-type 2: Disinfectants and algicides not intended for direct application to humans or animals Product-type 4: Food and feed area Product-type 1: Human hygiene                                                                                       |
| Orange Terpenes - 8028-48-6 | Product-type 19: Repellents and attractants                                                                                                                                                                                                                 |
| Carbon Dioxide - 124-38-9   | Product-type 9: Fibre, leather, rubber and polymerised materials preservatives Product-type 14: Rodenticides Product-type 15: Avicides Product-type 18: Insecticides, acaricides and products to control other arthropods Simplified procedure - Category 6 |

#### International Inventories

|               |                                                  |
|---------------|--------------------------------------------------|
| TSCA          | Contact supplier for inventory compliance status |
| DSL/NDL       | Contact supplier for inventory compliance status |
| EINECS/ELINCS | Contact supplier for inventory compliance status |
| ENCS          | Contact supplier for inventory compliance status |
| IECSC         | Contact supplier for inventory compliance status |
| KECI          | Contact supplier for inventory compliance status |
| PICCS         | Contact supplier for inventory compliance status |
| AIIC          | Contact supplier for inventory compliance status |
| NZIoC         | Contact supplier for inventory compliance status |

#### Legend:

**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory  
**DSL/NDL** - Canadian Domestic Substances List/Non-Domestic Substances List  
**EINECS/ELINCS** - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances  
**ENCS** - Japan Existing and New Chemical Substances  
**IECSC** - China Inventory of Existing Chemical Substances  
**KECI** - Korean Existing and Evaluated Chemical Substances  
**PICCS** - Philippines Inventory of Chemicals and Chemical Substances  
**AIIC** - Australian Inventory of Industrial Chemicals  
**NZIoC** - New Zealand Inventory of Chemicals

#### 15.2. Chemical safety assessment

**Chemical Safety Report** Chemical safety assessments for substances in this mixture were not carried out

### **SECTION 16: Other information**

#### Key or legend to abbreviations and acronyms used in the safety data sheet

#### **Full text of H-Statements referred to under section 3**

H225 - Highly flammable liquid and vapour  
H226 - Flammable liquid and vapour  
H280 - Contains gas under pressure; may explode if heated  
H304 - May be fatal if swallowed and enters airways  
H315 - Causes skin irritation  
H317 - May cause an allergic skin reaction  
H318 - Causes serious eye damage  
H319 - Causes serious eye irritation  
H335 - May cause respiratory irritation  
H336 - May cause drowsiness or dizziness  
H360D - May damage the unborn child  
H400 - Very toxic to aquatic life  
H410 - Very toxic to aquatic life with long lasting effects  
H411 - Toxic to aquatic life with long lasting effects

#### **Legend**

SVHC: Substances of Very High Concern for Authorisation:

#### **Legend SECTION 8: Exposure controls/personal protection**

|         |                             |      |                                  |
|---------|-----------------------------|------|----------------------------------|
| TWA     | TWA (time-weighted average) | STEL | STEL (Short Term Exposure Limit) |
| Ceiling | Maximum limit value         | Sk*  | Skin designation                 |
| +       | Sensitisers                 |      |                                  |

#### Classification procedure

| Classification according to Regulation (EC) No. 1272/2008 [CLP] | Method Used           |
|-----------------------------------------------------------------|-----------------------|
| Acute oral toxicity                                             | On basis of test data |
| Acute dermal toxicity                                           | On basis of test data |
| Acute inhalation toxicity - gas                                 | Calculation method    |
| Acute inhalation toxicity - vapour                              | Calculation method    |
| Acute inhalation toxicity - dust/mist                           | Calculation method    |
| Skin corrosion/irritation                                       | Calculation method    |
| Serious eye damage/eye irritation                               | Calculation method    |
| Respiratory sensitisation                                       | Calculation method    |
| Skin sensitisation                                              | Calculation method    |
| Mutagenicity                                                    | Calculation method    |
| Carcinogenicity                                                 | Calculation method    |
| Reproductive toxicity                                           | Calculation method    |
| STOT - single exposure                                          | Calculation method    |
| STOT - repeated exposure                                        | Calculation method    |
| Acute aquatic toxicity                                          | Calculation method    |
| Chronic aquatic toxicity                                        | Calculation method    |
| Aspiration hazard                                               | Calculation method    |
| Ozone                                                           | Calculation method    |
| Flammable aerosol                                               | On basis of test data |

**Key literature references and sources for data used to compile the SDS**

Agency for Toxic Substances and Disease Registry (ATSDR)  
U.S. Environmental Protection Agency ChemView Database  
European Food Safety Authority (EFSA)  
European Chemicals Agency (ECHA) Committee for Risk Assessment (ECHA\_RAC)  
European Chemicals Agency (ECHA) (ECHA\_API)  
Environmental Protection Agency  
Acute Exposure Guideline Level(s) (AEGL(s))  
U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act  
U.S. Environmental Protection Agency High Production Volume Chemicals  
Food Research Journal  
Hazardous Substance Database  
International Uniform Chemical Information Database (IUCLID)  
National Institute of Technology and Evaluation (NITE)  
Australian National Industrial Chemicals Notification and Assessment Scheme (NICNAS)  
NIOSH (National Institute for Occupational Safety and Health)  
National Library of Medicine's ChemID Plus (NLM CIP)  
National Library of Medicine's PubMed database (NLM PUBMED)  
U.S. National Toxicology Program (NTP)  
New Zealand's Chemical Classification and Information Database (CCID)  
Organisation for Economic Co-operation and Development Environment, Health, and Safety Publications  
Organisation for Economic Co-operation and Development High Production Volume Chemicals Programme  
Organisation for Economic Co-operation and Development Screening Information Data Set  
World Health Organization

Revision date 12/06/2024

**Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH)**

**Disclaimer**

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**End of Safety Data Sheet**