

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

Product form : Mixture  
Product name : Ethanol 30% (v/v)  
Product code : CM27576

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

Main use category : Professional use  
Use of the substance/mixture : Reference material  
Function or use category : Laboratory chemicals

**1.3. Details of the supplier of the safety data sheet****Spectracer UK Ltd.**

20 Seymour Mews,  
London,  
W1H 6BQ,  
United Kingdom.

Tel: +44 (0) 207 193 9114

Fax: +44 (0) 203 432 4686

Email: [contact@spectracer.com](mailto:contact@spectracer.com)Web: [www.spectracer.com](http://www.spectracer.com)**1.4. Emergency telephone number**

| Country/Area   | Organisation/Company                                     | Address   | Emergency number   | Comment |
|----------------|--|---|--|---------|
| Ireland        | National Poisons Information Centre<br>Beaumont Hospital | Beaumont Hospital Beaumont<br>Road<br>9 Dublin        | : +353 1 8379964   |         |
| Malta          | Medicines & Poisons Info Office                          | Mater Dei Hospital<br>Msida<br>MSD 2090 Msida         | 112<br>+356 2545 6508  |         |
| United Kingdom | National Poisons Information Service<br>(NHS Direct)     | <a href="http://www.npis.org">http://www.npis.org</a> | 111 (England & Wales<br>only) or 112 (EU) or<br>08454 24 24 24<br>(Scotland) |         |

**SECTION 2: Hazards identification****2.1. Classification of the substance or mixture****Classification according to Regulation (EC) No. 1272/2008 [CLP]**

Flammable liquids, Category 3 H226

Serious eye damage/eye irritation, Category 2 H319

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

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

Flammable liquid and vapour. Causes serious eye irritation.

# Ethanol 30% (v/v)

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

### 2.2. Label elements

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

Hazard pictograms (CLP) :



GHS02

GHS07

Signal word (CLP) :

Warning

Hazard statements (CLP) :

H226 - Flammable liquid and vapour.

H319 - Causes serious eye irritation.

Precautionary statements (CLP) :

P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P280 - Wear protective gloves/protective clothing/eye protection/face protection.

P337+P313 - If eye irritation persists: Get medical advice/attention.

### 2.3. Other hazards

Contains no PBT and/or vPvB substances  $\geq 0.1\%$  assessed in accordance with REACH Annex XIII

| Component   |                   |
|---|-------------------|
| Substance(s) not meeting the PBT criteria of REACH regulation, in accordance with Annex XIII  | ethanol (64-17-5) |
| Substance(s) not meeting the vPvB criteria of REACH regulation, in accordance with Annex XIII | ethanol (64-17-5) |

The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or substance(s) are not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0,1 %

## SECTION 3: Composition/information on ingredients

### 3.2. Mixtures

| Name   | Product identifier   | %       | Classification according to Regulation (EC) No. 1272/2008 [CLP] |
|--|--|---------|---|
| ethanol<br>substance with national workplace exposure limit(s)<br>(AT, BE, BG, CZ, DE, DK, EE, ES, FI, FR, GB, GR,<br>HR, HU, IE, LT, LV, NL, PT, RO, SE, SI, SK, IS, NO,<br>MK, CH) | CAS-No.: 64-17-5<br>EC-No.: 200-578-6<br>EC Index-No.: 603-002-00-5<br>REACH-no: 01-2119457610-<br>43-XXXX | 80 – 90 | Flam. Liq. 2, H225<br>Eye Irrit. 2, H319                        |

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

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

First-aid measures general

: If you feel unwell, seek medical advice.

First-aid measures after inhalation

: Remove person to fresh air and keep comfortable for breathing.

First-aid measures after skin contact

: Rinse skin with water/shower. Take off immediately all contaminated clothing.

First-aid measures after eye contact

: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

First-aid measures after ingestion

: Call a poison center or a doctor if you feel unwell.

First-aid measures for first aider

: First aid workers will be equipped with suitable personal protective equipment.

# Ethanol 30% (v/v)

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

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

|                                     |                                 |
|-------------------------------------|---------------------------------|
| Symptoms/effects after inhalation   | : None under normal conditions. |
| Symptoms/effects after skin contact | : None under normal conditions. |
| Symptoms/effects after eye contact  | : Eye irritation.               |
| Symptoms/effects after ingestion    | : None under normal conditions. |

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

Treat symptomatically.

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

|                                |  |
|--------------------------------|--|
| Suitable extinguishing media   | : Water spray. Dry powder. Foam. Carbon dioxide. |
| Unsuitable extinguishing media | : Do not use a heavy water stream.               |

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

|  |                                |
|--|--------------------------------|
| Fire hazard                                      | : Flammable liquid and vapour. |
| Explosion hazard                                 | : No direct explosion hazard.  |
| Hazardous decomposition products in case of fire | : Toxic fumes may be released. |

### 5.3. Advice for firefighters

|                                |   |
|--------------------------------|---|
| Firefighting instructions      | : Fight fire from safe distance and protected location. Do not enter fire area without proper protective equipment, including respiratory protection. |
| Protection during firefighting | : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.              |

## SECTION 6: Accidental release measures

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

|                  |  |
|------------------|--|
| General measures | : Stop leak if safe to do so. Notify authorities if product enters sewers or public waters.<br>Absorb spillage to prevent material damage. |
|------------------|--|

#### For non-emergency personnel

|                      |   |
|----------------------|---|
| Protective equipment | : Wear recommended personal protective equipment.   |
| Emergency procedures | : Ventilate spillage area. No open flames, no sparks, and no smoking. Avoid contact with skin and eyes. |

#### For emergency responders

|                      |   |
|----------------------|---|
| Protective equipment | : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection". |
| Emergency procedures | : Evacuate unnecessary personnel. Stop leak if safe to do so.   |

### 6.2. Environmental precautions

Avoid release to the environment.

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

|                         |   |
|-------------------------|---|
| For containment         | : Absorb spilled material with sand or earth. Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams. Stop leak without risks if possible. |
| Methods for cleaning up | : Take up liquid spill into absorbent material. Notify authorities if product enters sewers or public waters.   |
| Other information       | : Dispose of materials or solid residues at an authorized site.   |

### 6.4. Reference to other sections

For further information refer to section 13.

# Ethanol 30% (v/v)

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

### SECTION 7: Handling and storage

#### 7.1. Precautions for safe handling

- Additional hazards when processed : Not expected to present a significant hazard under anticipated conditions of normal use.
- Precautions for safe handling : Ensure good ventilation of the work station. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Ground/bond container and receiving equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Flammable vapours may accumulate in the container. Use explosion-proof equipment. Wear personal protective equipment. Avoid contact with skin and eyes.
- Hygiene measures : Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

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

- Technical measures : Ground/bond container and receiving equipment.
- Storage conditions : Store in a well-ventilated place. Keep cool. Keep container tightly closed.
- Packaging materials : Store always product in container of same material as original container.

#### Germany

Storage class (LGK, TRGS 510) : LGK 3 - Flammable liquids

Joint storage table

|          |         |          |          |           |
|----------|---------|----------|----------|-----------|
| LGK 1    | LGK 2A  | LGK 2B   | LGK 3    | LGK 4.1A  |
| LGK 4.1B | LGK 4.2 | LGK 4.3  | LGK 5.1A | LGK 5.1B  |
| LGK 5.1C | LGK 5.2 | LGK 6.1A | LGK 6.1B | LGK 6.1C  |
| LGK 6.1D | LGK 6.2 | LGK 7    | LGK 8A   | LGK 8B    |
| LGK 10   | LGK 11  | LGK 12   | LGK 13   | LGK 10-13 |

- Joint storage not permitted for : LGK 1, LGK 2A, LGK 4.1A, LGK 4.1B, LGK 4.2, LGK 4.3, LGK 5.1A, LGK 5.1C, LGK 5.2, LGK 6.1B, LGK 6.2, LGK 7
- Joint storage with restrictions permitted for : LGK 5.1B, LGK 6.1D, LGK 11, LGK 10-13
- Joint storage permitted for : LGK 2B, LGK 3, LGK 6.1A, LGK 6.1C, LGK 8A, LGK 8B, LGK 10, LGK 12, LGK 13

#### 7.3. Specific end use(s)

No additional information available

### SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters

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

| ethanol (64-17-5)                             |  |
|---|--|
| <b>Austria - Occupational Exposure Limits</b> |  |
| Local name                                    | Ethanol (Ethylalkohol)                     |
| MAK (OEL TWA)                                 | 1900 mg/m <sup>3</sup>                     |
|   | 1000 ppm                                   |
| MAK (OEL STEL)                                | 3800 mg/m <sup>3</sup> (3x 60(Mow) min)    |
|   | 2000 ppm (3x 60(Mow) min)                  |
| Regulatory reference                          | BGBI. II Nr. 156/2021                      |
| <b>Belgium - Occupational Exposure Limits</b> |  |
| Local name                                    | Alcool éthylique # Ethanol                 |
| OEL TWA                                       | 1907 mg/m <sup>3</sup>                     |
|   | 1000 ppm                                   |
| Regulatory reference                          | Koninklijk besluit/Arrêté royal 16/11/2023 |

# Ethanol 30% (v/v)

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

| ethanol (64-17-5)                                    |   |
|--|---|
| <b>Bulgaria - Occupational Exposure Limits</b>       |   |
| Local name   | Етилов алкохол  |
| OEL TWA  | 1000 mg/m <sup>3</sup>  |
| Regulatory reference                                 | Наредба № 13 от 30.12.2003 г. за защита на работещите от рискове, свързани с експозиция на химични агенти при работа (изм. и доп. ДВ. бр. 28 от 2024 г., в сила от 05.04.2024 г.) |
| <b>Croatia - Occupational Exposure Limits</b>        |   |
| Local name   | Etanol; etil-alkohol  |
| GVI (OEL TWA)  | 1900 mg/m <sup>3</sup><br>1000 ppm  |
| Regulatory reference                                 | Pravilnik o zaštiti radnika od izloženosti opasnim kemikalijama na radu, graničnim vrijednostima izloženosti i biološkim graničnim vrijednostima (NN 148/2023)                    |
| <b>Czech Republic - Occupational Exposure Limits</b> |   |
| Local name   | Ethanol (Ethylalkohol)  |
| PEL (OEL TWA)  | 1000 mg/m <sup>3</sup><br>522 ppm   |
| NPK-P (OEL C)  | 3000 mg/m <sup>3</sup><br>1566 ppm  |
| Regulatory reference                                 | Nařízení vlády č. 361/2007 Sb. (Předpis 330/2023 Sb.)   |
| <b>Denmark - Occupational Exposure Limits</b>        |   |
| Local name   | Ethanol (Ethylalkohol)  |
| OEL TWA  | 1900 mg/m <sup>3</sup><br>1000 ppm  |
| Regulatory reference                                 | BEK nr 291 af 19/03/2024  |
| <b>Estonia - Occupational Exposure Limits</b>        |   |
| Local name   | Etanool (etüülalkohol)  |
| OEL TWA  | 1000 mg/m <sup>3</sup><br>500 ppm   |
| OEL STEL   | 1900 mg/m <sup>3</sup><br>1000 ppm  |
| Regulatory reference                                 | Vabariigi Valitsuse 20. märtsi 2001. a määruse nr 105 (RT I, 02.04.2024, 13)  |
| <b>Finland - Occupational Exposure Limits</b>        |   |
| Local name   | Etanoli   |
| HTP (OEL TWA)  | 1900 mg/m <sup>3</sup><br>1000 ppm  |
| HTP (OEL STEL)                                       | 2500 mg/m <sup>3</sup><br>1300 ppm  |
| Regulatory reference                                 | HTP-ARVOT 2020 (Sosiaali- ja terveystieteiden ministeriö)   |
| <b>France - Occupational Exposure Limits</b>         |   |
| Local name   | Alcool éthylique  |

# Ethanol 30% (v/v)

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

| ethanol (64-17-5)                                 |  |
|---|--|
| VME (OEL TWA)                                     | 1900 mg/m <sup>3</sup>   |
|   | 1000 ppm   |
| VLE (OEL C/STEL)                                  | 9500 mg/m <sup>3</sup>   |
|   | 5000 ppm   |
| Remark  | Valeurs recommandées/admises   |
| Regulatory reference                              | Circulaire du Ministère du travail (réf.: INRS ED 6443, 2022; Outil65)   |
| Germany - Occupational Exposure Limits (TRGS 900) |  |
| Local name  | Ethanol  |
| AGW (OEL TWA)                                     | 380 mg/m <sup>3</sup>  |
|   | 200 ppm  |
| Peak exposure limitation factor                   | 4(II)  |
| Remark  | DFG - Senatskommission zur Prüfung gesundheitsschädlicher Arbeitsstoffe der DFG (MAK-Kommission); Y - Ein Risiko der Fruchtschädigung braucht bei Einhaltung des Arbeitsplatzgrenzwertes und des biologischen Grenzwertes (BGW) nicht befürchtet zu werden |
| Regulatory reference                              | TRGS900  |
| Greece - Occupational Exposure Limits             |  |
| Local name  | Αιθνόλη  |
| OEL TWA   | 1900 mg/m <sup>3</sup>   |
|   | 1000 ppm   |
| Regulatory reference                              | Π.Δ. 90/1999 - Προστασία της υγείας των εργαζομένων που εκτίθενται σε ορισμένους χημικούς παράγοντες κατά τη διάρκεια της εργασίας τους  |
| Hungary - Occupational Exposure Limits            |  |
| Local name  | ETIL-ALKOHOL   |
| AK (OEL TWA)                                      | 1900 mg/m <sup>3</sup>   |
|   | 1000 ppm   |
| CK (OEL STEL)                                     | 3800 mg/m <sup>3</sup>   |
|   | 2000 ppm   |
| Remark  | N (Irritáló anyagok, egyszerű fojtógázok, csekély egészségkárosító hatással bíró anyagok)  |
| Regulatory reference                              | 5/2020. (II. 6.) ITM rendelet - A kémiai kóroki tényezők hatásának kitett munkavállalók egészségének és biztonságának védelméről   |
| Ireland - Occupational Exposure Limits            |  |
| Local name  | Ethanol [Ethyl alcohol]  |
| OEL STEL  | 1000 ppm   |
| Remark  | Advisory OELV (Advisory Occupational Exposure Limit Values)  |
| Regulatory reference                              | Chemical Agents Code of Practice 2024  |
| Latvia - Occupational Exposure Limits             |  |
| Local name  | Etilspirts (etanols)   |
| OEL TWA   | 1000 mg/m <sup>3</sup>   |
| Regulatory reference                              | Ministru kabineta 2007. gada 15. maija noteikumiem Nr. 325 (Grozījumi Ministru kabineta 2024. gada 26. martā noteikumiem Nr. 191).   |

# Ethanol 30% (v/v)

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

| ethanol (64-17-5)                                 |   |
|---|---|
| <b>Lithuania - Occupational Exposure Limits</b>   |   |
| Local name  | Etanolis (etilo alkoholis)  |
| IPRV (OEL TWA)                                    | 1000 mg/m <sup>3</sup>  |
|   | 500 ppm   |
| TPRV (OEL STEL)                                   | 1900 mg/m <sup>3</sup>  |
|   | 1000 ppm  |
| Regulatory reference                              | LIETUVOS HIGIENOS NORMA HN 23:2011 (Nr. V-695/A1-272, 2018-06-12)   |
| <b>Netherlands - Occupational Exposure Limits</b> |   |
| Local name  | Ethanol   |
| TGG-8u (OEL TWA)                                  | 260 mg/m <sup>3</sup>   |
|   | 136 ppm (Ethanol; Netherlands; Time-weighted average exposure limit 8 h; Public occupational exposure limit value)  |
| TGG-15min (OEL STEL)                              | 1900 mg/m <sup>3</sup>  |
|   | 992 ppm (Ethanol; Netherlands; Short time value; Public occupational exposure limit value)  |
| Remark  | Kankerverwekkende stof. H (Huidopname) Stoffen die relatief gemakkelijk door de huid kunnen worden opgenomen, hetgeen een substantiële bijdrage kan betekenen aan de totale inwendige blootstelling, hebben in de lijst een H-aanduiding. Bij deze stoffen moeten naast maatregelen tegen inademing ook adequate maatregelen ter voorkoming van huidcontact worden genomen. |
| Regulatory reference                              | Arbeidsomstandighedenregeling 2024  |
| <b>Portugal - Occupational Exposure Limits</b>    |   |
| Local name  | Etanol (Álcool etílico)   |
| OEL STEL  | 1000 ppm  |
| Remark  | A3 (Agente carcinogénico confirmado nos animais de laboratorio con relevância desconhecida no Homem)  |
| Regulatory reference                              | Norma Portuguesa NP 1796:2014   |
| <b>Romania - Occupational Exposure Limits</b>     |   |
| Local name  | Alcool etilic/Etanol  |
| OEL TWA   | 1900 mg/m <sup>3</sup>  |
|   | 1000 ppm  |
| OEL STEL  | 9500 mg/m <sup>3</sup>  |
|   | 5000 ppm  |
| Regulatory reference                              | Hotărârea Guvernului nr. 1.218/2006 (Hotărârea nr. 179/2024)  |
| <b>Slovakia - Occupational Exposure Limits</b>    |   |
| Local name  | Etylalkohol (etanol)  |
| NPHV (OEL TWA)                                    | 960 mg/m <sup>3</sup>   |
|   | 500 ppm   |
| NPHV (OEL STEL)                                   | 1920 mg/m <sup>3</sup>  |
|   | 1000 ppm  |
| Regulatory reference                              | Nariadenie vlády č. 355/2006 Z. z. (122/2024 Z. z.)   |

# Ethanol 30% (v/v)

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

| ethanol (64-17-5)                                    |  |
|--|--|
| <b>Slovenia - Occupational Exposure Limits</b>       |  |
| Local name   | etanol (etilalkohol)   |
| OEL TWA  | 960 mg/m <sup>3</sup>  |
|  | 500 ppm  |
| OEL STEL   | 7600 mg/m <sup>3</sup>   |
|  | 4000 ppm   |
| Remark   | Y (Snovi, pri katerih ni nevarnosti za zarodek ob upoštevanju mejnih vrednosti in bat vrednosti)   |
| Regulatory reference                                 | Uradni list RS, št. 29/2024 z dne 4. 4. 2024 - Pravilnik o varovanju delavcev pred tveganji zaradi izpostavljenosti kemičnim snovem pri delu   |
| <b>Spain - Occupational Exposure Limits</b>          |  |
| Local name   | Etanol (Alcohol etílico)   |
| VLA-EC (OEL STEL)                                    | 1910 mg/m <sup>3</sup>   |
|  | 1000 ppm   |
| Remark   | s (Esta sustancia tiene prohibida total o parcialmente su comercialización y uso como fitosanitario y/o como biocida. Para una información detallada acerca de las prohibiciones consúltese: Base de datos de productos biocidas: <a href="http://www.msssi.gob.es/ciudadanos/productos.do?tipo=plaguicidas">http://www.msssi.gob.es/ciudadanos/productos.do?tipo=plaguicidas</a> Base de datos de productos fitosanitarios <a href="http://www.magrama.gob.es/agricultura/pags/fitos/registro/fichas/pdf/Lista_sa.pdf">http://www.magrama.gob.es/agricultura/pags/fitos/registro/fichas/pdf/Lista_sa.pdf</a> ). |
| Regulatory reference                                 | Límites de Exposición Profesional para Agentes Químicos en España 2024. INSHT  |
| <b>Sweden - Occupational Exposure Limits</b>         |  |
| Local name   | Etanol   |
| NGV (OEL TWA)  | 1000 mg/m <sup>3</sup>   |
|  | 500 ppm  |
| KGV (OEL STEL)                                       | 1900 mg/m <sup>3</sup>   |
|  | 1000 ppm   |
| Remark   | V (Vägledande kortidsgränsvärde ska användas som ett rekommenderat högsta värde som inte bör överskridas)  |
| Regulatory reference                                 | Hygieniska gränsvärden (AFS 2018:1)  |
| <b>United Kingdom - Occupational Exposure Limits</b> |  |
| Local name   | Ethanol  |
| WEL TWA (OEL TWA)                                    | 1920 mg/m <sup>3</sup>   |
|  | 1000 ppm   |
| Regulatory reference                                 | EH40/2005 (Fourth edition, 2020). HSE  |
| <b>Iceland - Occupational Exposure Limits</b>        |  |
| Local name   | Etanól (etylalkóhól)   |
| OEL TWA  | 1900 mg/m <sup>3</sup>   |
|  | 1000 ppm   |
| Regulatory reference                                 | Reglugerð um mengunarmörk og aðgerðir til að draga úr mengun á vinnustöðum (Nr. 390/2009)  |



# Ethanol 30% (v/v)

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

| ethanol (64-17-5)                                     |  |
|---|--|
| <b>Norway - Occupational Exposure Limits</b>          |  |
| Local name  | Ethanol  |
| Grenseverdi (OEL TWA)                                 | 950 mg/m <sup>3</sup>  |
|   | 500 ppm  |
| Regulatory reference                                  | FOR-2024-04-05-581   |
| <b>North Macedonia - Occupational Exposure Limits</b> |  |
| Local name  | етанол (етилалкохол)   |
| OEL TWA   | 1900 mg/m <sup>3</sup>   |
|   | 1000 ppm   |
| KTV   | 4  |
| Short time value [mg/m <sup>3</sup> ]                 | 7600 mg/m <sup>3</sup>   |
| Short time value [ppm]                                | 4000 ppm   |
| Remark  | (KTV) краткотрајна вредност (КТВ) значи концентрација на опасни хемиски супстанции во воздухот на работното место внатре во зона на дишење, на која работникот без опасност по здравјето може да е изложен на покусо време. Изложеноста на краткотрајни вредности може да трае највеќе 15 минути и не смее да се повтори повеќе од четирипати во работната смена, при што меѓу две изложености на оваа концентрација мора да измине најмалку 60 минути. Краткотрајната вредност е изразена во mg/m <sup>3</sup> или во ml/m <sup>3</sup> (ppm) а е дадена како многукратни дозволени пречекорувања на граничната вредност; (Y) |
| Regulatory reference                                  | Правилник за минималните барања за безбедност и здравје при работа на вработени од ризици поврзани со изложување на хемиски супстанции („Службен весник на Република Македонија“ бр.46/10)   |
| <b>Switzerland - Occupational Exposure Limits</b>     |  |
| Local name  | Ethanol  |
| MAK (OEL TWA)   | 960 mg/m <sup>3</sup>  |
|   | 960 mg/m <sup>3</sup>  |
|   | 500 ppm  |
|   | 500 ppm  |
| KZGW (OEL STEL)                                       | 1920 mg/m <sup>3</sup>   |
|   | 1920 mg/m <sup>3</sup>   |
|   | 1000 ppm   |
|   | 1000 ppm   |
| Notation  | SS <sub>c</sub> / SS <sub>c</sub>  |
| Remark  | SS <sub>c</sub> - OAW, Formal <sup>KT</sup> HU - INRS, NIOSH   |
| Regulatory reference                                  | www.suva.ch, 01.01.2024  |
| <b>USA - ACGIH - Occupational Exposure Limits</b>     |  |
| Local name  | Ethanol  |
| ACGIH OEL STEL  | 1000 ppm   |
| Remark (ACGIH)  | TLV® Basis: URT irr. Notations: A3 (Confirmed Animal Carcinogen with Unknown Relevance to Humans)  |
| Regulatory reference                                  | ACGIH 2024   |

# Ethanol 30% (v/v)

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

### 8.2. Exposure controls

#### Appropriate engineering controls

##### Appropriate engineering controls:

Ensure good ventilation of the work station.

#### Personal protection equipment

##### Personal protective equipment:

Avoid all unnecessary exposure. Personal protective equipment should be chosen according to the CEN standards and in discussion with the supplier of the protective equipment.

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



#### Eye and face protection

##### Eye protection:

Safety glasses

#### Skin protection

##### Skin and body protection:

Wear suitable protective clothing

##### Hand protection:

Protective gloves

#### Respiratory protection

##### Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment

#### Environmental exposure controls

##### Environmental exposure controls:

Avoid release to the environment.

## SECTION 9: Physical and chemical properties

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

|   |                                  |
|---|----------------------------------|
| Physical state                                  | : Liquid                         |
| Colour  | : Colourless.                    |
| Odour   | : Alcohol odour. Pleasant odour. |
| Odour threshold                                 | : Not available                  |
| Melting point                                   | : Not applicable                 |
| Freezing point                                  | : Not available                  |
| Boiling point                                   | : 78.29001 °C (1013,25 hPa)      |
| Flammability                                    | : Flammable liquid and vapour.   |
| Lower explosion limit                           | : Not available                  |
| Upper explosion limit                           | : Not available                  |
| Flash point                                     | : 26 °C                          |
| Auto-ignition temperature                       | : Not available                  |
| Decomposition temperature                       | : Not available                  |
| pH  | : Not available                  |
| Viscosity, kinematic                            | : Not available                  |
| Solubility                                      | : Miscible with water.           |
| Partition coefficient n-octanol/water (Log Kow) | : Not available                  |
| Vapour pressure                                 | : Not available                  |
| Vapour pressure at 50°C                         | : Not available                  |
| Density   | : Not available                  |
| Relative density                                | : Not available                  |
| Relative vapour density at 20°C                 | : Not available                  |
| Particle characteristics                        | : Not applicable                 |

# Ethanol 30% (v/v)

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

### 9.2. Other information

No additional information available

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

Flammable liquid and vapour.

### 10.2. Chemical stability

Stable under normal conditions.

### 10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

### 10.4. Conditions to avoid

Avoid contact with hot surfaces. Heat. No flames, no sparks. Eliminate all sources of ignition.

### 10.5. Incompatible materials

No additional information available

### 10.6. Hazardous decomposition products

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

## SECTION 11: Toxicological information

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

Acute toxicity (oral) : Not classified

Acute toxicity (dermal) : Not classified

Acute toxicity (inhalation) : Not classified

| ethanol (64-17-5)     |                               |
|-----------------------|-------------------------------|
| LD50 oral rat         | < 15010 mg/kg bodyweight      |
| LD50 oral             | 8300 mg/kg bodyweight (mouse) |
| LD50 dermal rabbit    | 17100 mg/kg                   |
| LC50 Inhalation - Rat | 117 mg//4h                    |

Skin corrosion/irritation : Not classified

Serious eye damage/irritation : Causes serious eye irritation.

Respiratory or skin sensitisation : Not classified

Germ cell mutagenicity : Not classified

Carcinogenicity : Not classified

| ethanol (64-17-5) |                            |
|-------------------|----------------------------|
| IARC group        | 1 - Carcinogenic to humans |

Reproductive toxicity : Not classified

STOT-single exposure : Not classified

STOT-repeated exposure : Not classified

| ethanol (64-17-5)                              |                               |
|--|-------------------------------|
| LOAEL (oral, rat, 90 days)                     | 3200 mg/kg bodyweight         |
| NOAEL (oral, rat, 90 days)                     | 1730 mg/kg bodyweight         |
| NOAEL (subchronic, oral, animal/male, 90 days) | < 9700 mg/kg bodyweight mouse |

# Ethanol 30% (v/v)

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

### ethanol (64-17-5)

NOAEL (subchronic, oral, animal/female, 90 days) > 9400 mg/kg bodyweight mouse

Aspiration hazard : Not classified

### ethanol (64-17-5)

Viscosity, kinematic 1.481 mm<sup>2</sup>/s

## 11.2. Information on other hazards

No additional information available

## SECTION 12: Ecological information

### 12.1. Toxicity

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

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

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

### ethanol (64-17-5)

LC50 - Fish [1] 14.2 g/l Pimephales promelas (Fathead minnow)

EC50 - Crustacea [1] 5012 mg/l Daphnia magna (Water flea)

EC50 96h - Algae [1] ≈ 22000 mg/l Pseudokirchneriella subcapitata

NOEC (chronic) 9.6 mg/l Daphnia magna (Water flea)

### 12.2. Persistence and degradability

#### Ethanol 30% (v/v)

Persistence and degradability Rapidly degradable

### ethanol (64-17-5)

Persistence and degradability Readily biodegradable in water, Biodegradable in soil, Very mobile in soil.

Biochemical oxygen demand (BOD) 0.8 – 0.967 g O<sub>2</sub>/g substance

Chemical oxygen demand (COD) 1.7 g O<sub>2</sub>/g substance

ThOD 2.1 g O<sub>2</sub>/g substance

BOD (% of ThOD) 0.43

### 12.3. Bioaccumulative potential

### ethanol (64-17-5)

Partition coefficient n-octanol/water (Log Pow) -0.31

Bioaccumulative potential Low bioaccumulation potential (Log Kow < 4).

### 12.4. Mobility in soil

### ethanol (64-17-5)

Surface tension 0.022 N/m (20 °C)

# Ethanol 30% (v/v)

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

### 12.5. Results of PBT and vPvB assessment

| Component   |                   |
|---|-------------------|
| Substance(s) not meeting the PBT criteria of REACH regulation, in accordance with Annex XIII  | ethanol (64-17-5) |
| Substance(s) not meeting the vPvB criteria of REACH regulation, in accordance with Annex XIII | ethanol (64-17-5) |

### 12.6. Endocrine disrupting properties

No additional information available

### 12.7. Other adverse effects

No additional information available






## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

|  |   |
|--|---|
| Regional waste regulation                  | : Disposal must be done according to official regulations.                                    |
| Waste treatment methods                    | : Dispose of contents/container in accordance with licensed collector's sorting instructions. |
| Sewage disposal recommendations            | : Disposal must be done according to official regulations.                                    |
| Product/Packaging disposal recommendations | : Disposal must be done according to official regulations.                                    |
| Additional information                     | : Flammable vapours may accumulate in the container. Do not re-use empty containers.          |

## SECTION 14: Transport information

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

| ADR   | IMDG  | IATA  | ADN   | RID   |
|---|---|---|---|---|
| <b>14.1. UN number or ID number</b>   |   |   |   |   |
| UN 1170   | UN 1170   | UN 1170   | UN 1170   | UN 1170   |
| <b>14.2. UN proper shipping name</b>  |   |   |   |   |
| ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION)   | ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION)   | Ethanol solution  | ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION)   | ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION)   |
| <b>Transport document description</b>   |   |   |   |   |
| UN 1170 ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION), 3, III, (D/E)                    | UN 1170 ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION), 3, III                           | UN 1170 Ethanol solution, 3, III  | UN 1170 ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION), 3, III                             | UN 1170 ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION), 3, III                             |
| <b>14.3. Transport hazard class(es)</b>   |   |   |   |   |
| 3   | 3   | 3   | 3   | 3   |
|  |  |  |  |  |
| <b>14.4. Packing group</b>  |   |   |   |   |
| III   | III   | III   | III   | III   |

# Ethanol 30% (v/v)

## Safety Data Sheet

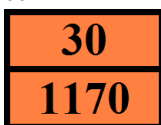
according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

| ADR                                    | IMDG  | IATA                              | ADN                               | RID                               |
|--|---|-----------------------------------|-----------------------------------|-----------------------------------|
| <b>14.5. Environmental hazards</b>     |   |                                   |                                   |                                   |
| Dangerous for the environment: No      | Dangerous for the environment: No<br>Marine pollutant: No<br>EmS-No. (Fire): F-E<br>EmS-No. (Spillage): S-D | Dangerous for the environment: No | Dangerous for the environment: No | Dangerous for the environment: No |
| No supplementary information available |   |                                   |                                   |                                   |

### 14.6. Special precautions for user

#### Overland transport

|   |                           |
|---|---------------------------|
| Classification code (ADR)                                 | : F1                      |
| Special provisions (ADR)                                  | : 144, 601                |
| Limited quantities (ADR)                                  | : 5I                      |
| Excepted quantities (ADR)                                 | : E1                      |
| Packing instructions (ADR)                                | : P001, IBC03, LP01, R001 |
| Mixed packing provisions (ADR)                            | : MP19                    |
| Portable tank and bulk container instructions (ADR)       | : T2                      |
| Portable tank and bulk container special provisions (ADR) | : TP1                     |
| Tank code (ADR)   | : LGBF                    |
| Vehicle for tank carriage                                 | : FL                      |
| Transport category (ADR)                                  | : 3                       |
| Special provisions for carriage - Packages (ADR)          | : V12                     |
| Special provisions for carriage - Operation (ADR)         | : S2                      |
| Hazard identification number (Kemler No.)                 | : 30                      |
| Orange plates   | :                         |



|                               |        |
|-------------------------------|--------|
| Tunnel restriction code (ADR) | : D/E  |
| EAC code                      | : •2YE |

#### Transport by sea

|                                    |  |
|------------------------------------|--|
| Special provisions (IMDG)          | : 144, 223   |
| Limited quantities (IMDG)          | : 5 L  |
| Excepted quantities (IMDG)         | : E1   |
| Packing instructions (IMDG)        | : P001, LP01   |
| IBC packing instructions (IMDG)    | : IBC03  |
| Tank instructions (IMDG)           | : T2   |
| Tank special provisions (IMDG)     | : TP1  |
| Stowage category (IMDG)            | : A  |
| Properties and observations (IMDG) | : Colourless, volatile liquids. Pure ETHANOL: flashpoint 13°C c.c. Explosive limits: 3.3% to 19%. Miscible with water. |

#### Air transport

|  |                 |
|--|-----------------|
| PCA Excepted quantities (IATA)               | : E1            |
| PCA Limited quantities (IATA)                | : Y344          |
| PCA limited quantity max net quantity (IATA) | : 10L           |
| PCA packing instructions (IATA)              | : 355           |
| PCA max net quantity (IATA)                  | : 60L           |
| CAO packing instructions (IATA)              | : 366           |
| CAO max net quantity (IATA)                  | : 220L          |
| Special provisions (IATA)                    | : A3, A58, A180 |
| ERG code (IATA)                              | : 3L            |

#### Inland waterway transport

|                           |            |
|---------------------------|------------|
| Classification code (ADN) | : F1       |
| Special provisions (ADN)  | : 144, 601 |

# Ethanol 30% (v/v)

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

|                                   |             |
|-----------------------------------|-------------|
| Limited quantities (ADN)          | : 5 L       |
| Excepted quantities (ADN)         | : E1        |
| Carriage permitted (ADN)          | : T         |
| Equipment required (ADN)          | : PP, EX, A |
| Ventilation (ADN)                 | : VE01      |
| Number of blue cones/lights (ADN) | : 0         |

### Rail transport

|   |                           |
|---|---------------------------|
| Classification code (RID)                                 | : F1                      |
| Special provisions (RID)                                  | : 144, 601                |
| Excepted quantities (RID)                                 | : E1                      |
| Packing instructions (RID)                                | : P001, IBC03, LP01, R001 |
| Mixed packing provisions (RID)                            | : MP19                    |
| Portable tank and bulk container instructions (RID)       | : T2                      |
| Portable tank and bulk container special provisions (RID) | : TP1                     |
| Tank codes for RID tanks (RID)                            | : LGBF                    |
| Transport category (RID)                                  | : 3                       |
| Special provisions for carriage – Packages (RID)          | : W12                     |
| Colis express (express parcels) (RID)                     | : CE4                     |
| Hazard identification number (RID)                        | : 30                      |

### 14.7. Maritime transport in bulk according to IMO instruments

Not applicable

## SECTION 15: Regulatory information

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

#### EU-Regulations

#### REACH Annex XVII (Restriction List)

| EU restriction list (REACH Annex XVII) |                             |  |
|--|-----------------------------|--|
| Reference code                         | Applicable on               | Entry title or description   |
| 3(a)                                   | Ethanol 30% (v/v) ; ethanol | Substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: Hazard classes 2.1 to 2.4, 2.6 and 2.7, 2.8 types A and B, 2.9, 2.10, 2.12, 2.13 categories 1 and 2, 2.14 categories 1 and 2, 2.15 types A to F   |
| 3(b)                                   | Ethanol 30% (v/v) ; ethanol | Substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: Hazard classes 3.1 to 3.6, 3.7 adverse effects on sexual function and fertility or on development, 3.8 effects other than narcotic effects, 3.9 and 3.10  |
| 40.                                    | ethanol                     | Substances classified as flammable gases category 1 or 2, flammable liquids categories 1, 2 or 3, flammable solids category 1 or 2, substances and mixtures which, in contact with water, emit flammable gases, category 1, 2 or 3, pyrophoric liquids category 1 or pyrophoric solids category 1, regardless of whether they appear in Part 3 of Annex VI to Regulation (EC) No 1272/2008 or not. |

#### REACH Annex XIV (Authorisation List)

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

#### REACH Candidate List (SVHC)

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

#### PIC Regulation (Prior Informed Consent)

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

#### POP Regulation (Persistent Organic Pollutants)

Contains no substance(s) listed on the POP list (Regulation EU 2019/1021 on persistent organic pollutants)

# Ethanol 30% (v/v)

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

### Ozone Regulation (2024/590)

Contains no substance(s) listed on the Ozone Depletion list (Regulation EU 2024/590 on substances that deplete the ozone layer)

### Council Regulation (EC) for the control of dual-use items

Contains no substance subject to the COUNCIL REGULATION (EC) for the control of dual-use items

### VOC Directive (2004/42)

Organic solvent : Yes

### Explosives Precursors Regulation (2019/1148)

Contains no substance(s) listed on the Explosives Precursors list (Regulation EU 2019/1148 on the marketing and use of explosives precursors)

### Drug Precursors Regulation (273/2004)

Contains no substance(s) listed on the Drug Precursors list (Regulation EC 273/2004 on the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances)

### National regulations

#### France

| Occupational diseases |   |
|-----------------------|---|
| Code                  | Description   |
| RG 84                 | Conditions caused by liquid organic solvents for professional use: saturated or unsaturated aliphatic or cyclic liquid hydrocarbons and mixtures thereof; liquid halogenated hydrocarbons; nitrated derivatives of aliphatic hydrocarbons; alcohols; glycols, glycol ethers; ketones; aldehydes; aliphatic and cyclic ethers, including tetrahydrofuran; esters; dimethylformamide and dimethylacetamine; acetonitrile and propionitrile; pyridine; dimethylsulfone and dimethylsulfoxide |

#### Germany

VOC ordinance (ChemVOCFarbV) :

Water hazard class (WGK) : WGK 1, Slightly hazardous to water (Classification according to AwSV, Annex 1).

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

#### Netherlands

ABM category : A(4) - low hazard for aquatic organisms, may have longterm hazardous effects in aquatic environment

SZW-lijst van kankerverwekkende stoffen : ethanol is listed

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

SZW-lijst van reprotoxische stoffen – Borstvoeding : ethanol is listed

SZW-lijst van reprotoxische stoffen – : ethanol is listed

Vruchtbaarheid

SZW-lijst van reprotoxische stoffen – Ontwikkeling : ethanol is listed

#### Denmark

Class for fire hazard : Class II-1

Store unit : 5 liter

Classification remarks : R10 <H226;H319>; Emergency management guidelines for the storage of flammable liquids must be followed

Danish National Regulations : Young people below the age of 18 years are not allowed to use the product  
Pregnant/breastfeeding women working with the product must not be in direct contact with the product



# Ethanol 30% (v/v)

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

### Poland

#### Polish National Regulations

: Act of 25 February 2011 on chemical substances and their mixtures (J. o L. No. 63, item 322 as amended; consolidated text J. o L. 2019, item 1225).  
Act of 14 December 2012 on waste (J. o L. 2013, item 322 as amended; consolidated text J. o L. 2020, item 797).  
The announcement of Marshal of the Sejm of the Republic of Poland dated 19 October 2016 concerning the consolidated text announcement of the decree on the management of packaging and packaging waste (J. o L. 2016, item 1863 as amended).  
Decree of the Minister of Environment of 14 December 2014 on the catalogue of waste (J. o L. 2014, item 1923).  
Act of 19 August 2011 on the Carriage of Dangerous Goods (J. o L. 2011 No. 227, item 1367 as amended; consolidated text J. o L. 2020, item 154).  
Regulation of the Minister of Family, Labour and Social Policy of 12 June 2018 on the highest permissible concentration and intensity of noxious agents for health at work environment (J. o L. item 1286 as amended).  
The announcement of Minister of Health dated 9 September 2016 concerning the consolidated text announcement of the decree of the Minister of Health of 30 December 2004 on health and safety at work related to exposure to chemical agents at work (J. o L. of 16 September 2016, item 1488)  
Regulation of the Minister of Health of 2 February 2011 on tests and measurements of the noxious agents for health at work environment (J. o L. No. 33, item 166 as amended).  
Regulation of the Minister of Environment of 9 December 2003 on particularly hazardous substances to the environment (J. o L. No. 217, item 2141).  
ADR Agreement: Government Statement of 13 March 2023 on the entry into force of amendments to Annexes A and B to the Agreement concerning the International Carriage of Dangerous Goods by Road (ADR), signed in Geneva on 30 September 1957 (J. o. L. 2023, item 891)

### 15.2. Chemical safety assessment

No chemical safety assessment has been carried out

## SECTION 16: Other information

### Indication of changes

| Section | Changed item                        | Comments        |
|---------|-------------------------------------|-----------------|
| 1.2     | Main use category                   | <b>Modified</b> |
| 4.1     | First-aid measures for first aider  | <b>Added</b>    |
| 4.1     | First-aid measures general          | <b>Added</b>    |
| 4.2     | Symptoms/effects after ingestion    | <b>Added</b>    |
| 4.2     | Symptoms/effects after inhalation   | <b>Added</b>    |
| 4.2     | Symptoms/effects after skin contact | <b>Added</b>    |
| 5.1     | Unsuitable extinguishing media      | <b>Added</b>    |
| 5.2     | Explosion hazard                    | <b>Added</b>    |
| 5.3     | Firefighting instructions           | <b>Added</b>    |
| 6.1     | Emergency procedures                | <b>Added</b>    |
| 6.1     | Protective equipment                | <b>Added</b>    |
| 6.1     | General measures                    | <b>Added</b>    |
| 6.3     | For containment                     | <b>Added</b>    |
| 7.1     | Additional hazards when processed   | <b>Added</b>    |
| 7.2     | Packaging materials                 | <b>Added</b>    |

# Ethanol 30% (v/v)

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

| Indication of changes |  |                 |
|-----------------------|--|-----------------|
| Section               | Changed item                               | Comments        |
| 8.2                   | Personal protective equipment              | <b>Added</b>    |
| 9                     | Flammability                               | <b>Modified</b> |
| 9                     | Boiling point                              | <b>Modified</b> |
| 13.1                  | Product/Packaging disposal recommendations | <b>Added</b>    |
| 13.1                  | Sewage disposal recommendations            | <b>Added</b>    |
| 13.1                  | Regional waste regulation                  | <b>Added</b>    |
| 13.1                  | Additional information                     | <b>Modified</b> |
| 15.1                  | REACH Annex XVII                           | <b>Modified</b> |
| 16                    | Abbreviations and acronyms                 | <b>Added</b>    |

| Abbreviations and acronyms: |   |
|-----------------------------|---|
| ACGIH                       | American Conference of Government Industrial Hygienists   |
| ADN                         | European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways |
| ADR                         | European Agreement concerning the International Carriage of Dangerous Goods by Road             |
| ATE                         | Acute Toxicity Estimate   |
| BCF                         | Bioconcentration factor   |
| BLV                         | Biological limit value  |
| BOD                         | Biochemical oxygen demand (BOD)   |
| CAS-No.                     | Chemical Abstract Service number  |
| CLP                         | Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008                     |
| COD                         | Chemical oxygen demand (COD)  |
| CSA                         | Chemical safety assessment  |
| DMEL                        | Derived Minimal Effect level  |
| DNEL                        | Derived-No Effect Level   |
| EC-No.                      | European Community number   |
| EC50                        | Median effective concentration  |
| ED                          | Endocrine disruptor   |
| EN                          | European Standard   |
| EWC                         | European waste catalogue  |
| IARC                        | International Agency for Research on Cancer   |
| IATA                        | International Air Transport Association   |
| IMDG                        | International Maritime Dangerous Goods  |
| LC50                        | Median lethal concentration   |
| LD50                        | Median lethal dose  |
| LOAEL                       | Lowest Observed Adverse Effect Level  |
| Log Kow                     | Partition coefficient n-octanol/water (Log Kow)   |
| Log Pow                     | Partition coefficient n-octanol/water (Log Pow)   |

# Ethanol 30% (v/v)

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

| Abbreviations and acronyms: |  |
|-----------------------------|--|
| MAK                         | maximum workplace concentration  |
| NOAEC                       | No-Observed Adverse Effect Concentration                                     |
| NOAEL                       | No-Observed Adverse Effect Level   |
| NOEC                        | No-Observed Effect Concentration   |
| N.O.S.                      | Not Otherwise Specified  |
| OECD                        | Organisation for Economic Co-operation and Development                       |
| OEL                         | Occupational Exposure Limit  |
| OSHA                        | Occupational Safety Health Administration                                    |
| PBT                         | Persistent Bioaccumulative Toxic   |
| PNEC                        | Predicted No-Effect Concentration  |
| PPE                         | Personal protection equipment  |
| RID                         | Regulations concerning the International Carriage of Dangerous Goods by Rail |
| SDS                         | Safety Data Sheet  |
| STP                         | Sewage treatment plant   |
| TF                          | Technical function   |
| ThOD                        | Theoretical oxygen demand (ThOD)   |
| TLM                         | Median Tolerance Limit   |
| TWA                         | Time Weighted Average  |
| VOC                         | Volatile Organic Compounds   |
| vPvB                        | Very Persistent and Very Bioaccumulative                                     |
| UFI                         | Unique Formula Identifier  |

| Full text of H- and EUH-statements: |   |
|-------------------------------------|---|
| Eye Irrit. 2                        | Serious eye damage/eye irritation, Category 2 |
| Flam. Liq. 2                        | Flammable liquids, Category 2                 |
| H225                                | Highly flammable liquid and vapour.           |
| H226                                | Flammable liquid and vapour.                  |
| H319                                | Causes serious eye irritation.                |

| Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]: |      |                       |
|---|------|-----------------------|
| Flam. Liq. 3  | H226 | On basis of test data |
| Eye Irrit. 2  | H319 | Calculation method    |

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.