

## Safety data sheet

This SDS is an English translation of COMMISSION REGULATION (EU) 2020/878, without any country-specific legislation

### Abena Käsihuuhde

Date of compilation: 09.10.2022

Version: 1

#### SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

- 1.1 Product identifier:** Abena Käsihuuhde  
**Other means of identification:**  
UFI: U68C-NAG7-E008-CXS2
- 1.2 Relevant identified uses of the substance or mixture and uses advised against:**  
Relevant uses: Antiseptic. For professional use only  
Uses advised against: All uses not specified in this section or in section 7.3
- 1.3 Details of the supplier of the safety data sheet:**  
Abena Finland OY  
Kutojantie 7  
02630 Espoo, Finland  
Tel.: +358 20 7129780  
www.abena.fi
- 1.4 Emergency telephone number:** 112

#### SECTION 2: HAZARDS IDENTIFICATION

- 2.1 Classification of the substance or mixture:**  
**CLP Regulation (EC) No 1272/2008:**  
Classification of this product has been carried out in accordance with CLP Regulation (EC) No 1272/2008.  
Eye Irrit. 2: Eye irritation, Category 2, H319  
Flam. Liq. 2: Flammable liquids, Category 2, H225
- 2.2 Label elements:**  
**CLP Regulation (EC) No 1272/2008:**  
**Danger**  
  
**Hazard statements:**  
Eye Irrit. 2: H319 - Causes serious eye irritation.  
Flam. Liq. 2: H225 - Highly flammable liquid and vapour.  
**Precautionary statements:**  
P210: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.  
P233: Keep container tightly closed.  
P305+P351: IF IN EYES: Rinse cautiously with water for several minutes.  
P501: Dispose of contents/ container in accordance with local/regional/national/international regulation.
- 2.3 Other hazards:**  
Product fails to meet PBT/vPvB criteria  
Endocrine-disrupting properties: The product fails to meet the criteria.

#### SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

- 3.1 Substance:**  
Non-applicable
- 3.2 Mixture:**  
**Chemical description:** Solution  
**Components:**  
In accordance with Annex II of Regulation (EC) No 1907/2006 (point 3), the product contains:

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#### SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS (continued)

| Identification                                                                       | Chemical name/Classification                       |                                                                                      | Concentration        |
|--------------------------------------------------------------------------------------|----------------------------------------------------|--------------------------------------------------------------------------------------|----------------------|
| CAS: 64-17-5<br>EC: 200-578-6<br>Index: 603-002-00-5<br>REACH: 01-2119457610-43-XXXX | <b>ethanol<sup>(1)</sup></b> Self-classified       |                                                                                      | <b>73,5 %</b>        |
|                                                                                      | Regulation 1272/2008                               | Eye Irrit. 2: H319; Flam. Liq. 2: H225 - Danger                                      |                      |
| CAS: 75-65-0<br>EC: 200-889-7<br>Index: 603-005-00-1<br>REACH: 01-2119444321-51-XXXX | <b>2-methylpropan-2-ol<sup>(1)</sup></b> ATP ATP01 |                                                                                      | <b>1 - &lt;2,5 %</b> |
|                                                                                      | Regulation 1272/2008                               | Acute Tox. 4: H332; Eye Irrit. 2: H319; Flam. Liq. 2: H225; STOT SE 3: H335 - Danger |                      |

<sup>(1)</sup> Substances presenting a health or environmental hazard which meet criteria laid down in Regulation (EU) No. 2020/878

To obtain more information on the hazards of the substances consult sections 11, 12 and 16.

#### Other information:

| Identification                           | Specific concentration limit      |
|------------------------------------------|-----------------------------------|
| ethanol<br>CAS: 64-17-5<br>EC: 200-578-6 | % (w/w) >=50: Eye Irrit. 2 - H319 |

#### SECTION 4: FIRST AID MEASURES

##### 4.1 Description of first aid measures:

The symptoms resulting from intoxication can appear after exposure, therefore, in case of doubt, seek medical attention for direct exposure to the chemical product or persistent discomfort, showing the SDS of this product.

##### By inhalation:

This product is not classified as hazardous through inhalation. However, in case of intoxication symptoms it is recommended to remove the person affected from the area of exposure, provide clean air and keep at rest. Request medical attention if symptoms persist.

##### By skin contact:

This product is not classified as hazardous when in contact with the skin. In case of changes to the skin (stinging, redness, rashes, blisters,...), seek medical advice with this Safety Data Sheet

##### By eye contact:

Rinse eyes thoroughly with lukewarm water for at least 15 minutes. Do not allow the person affected to rub or close their eyes. If the injured person uses contact lenses, these should be removed unless they are stuck to the eyes, in which case this could cause further damage. In all cases, after cleaning, a doctor should be consulted as quickly as possible with the SDS of the product.

##### By ingestion/aspiration:

In case of consumption, seek immediate medical assistance showing the SDS for the product.

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

Acute and delayed effects are indicated in sections 2 and 11.

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

Non-applicable

#### SECTION 5: FIREFIGHTING MEASURES

##### 5.1 Extinguishing media:

###### Suitable extinguishing media:

If possible use polyvalent powder fire extinguishers (ABC powder), alternatively use foam or carbon dioxide extinguishers (CO<sub>2</sub>).

###### Unsuitable extinguishing media:

IT IS RECOMMENDED NOT to use full jet water as an extinguishing agent.

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

As a result of combustion or thermal decomposition reactive sub-products are created that can become highly toxic and, consequently, can present a serious health risk.

##### 5.3 Advice for firefighters:

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#### SECTION 5: FIREFIGHTING MEASURES (continued)

Depending on the magnitude of the fire it may be necessary to use full protective clothing and self-contained breathing apparatus (SCBA). Minimum emergency facilities and equipment should be available (fire blankets, portable first aid kit,...) in accordance with Directive 89/654/EC.

##### **Additional provisions:**

Act in accordance with the Internal Emergency Plan and the Information Sheets on actions to take after an accident or other emergencies. Eliminate all sources of ignition. In case of fire, cool the storage containers and tanks for products susceptible to combustion, explosion or BLEVE as a result of high temperatures. Avoid spillage of the products used to extinguish the fire into an aqueous medium.

#### SECTION 6: ACCIDENTAL RELEASE MEASURES

##### **6.1 Personal precautions, protective equipment and emergency procedures:**

###### **For non-emergency personnel:**

Isolate leaks provided that there is no additional risk for the people performing this task. Evacuate the area and keep out those without protection. Personal protection equipment must be used against potential contact with the spilt product (See section 8). Above all prevent the formation of any vapour-air flammable mixtures, through either ventilation or the use of an inert medium. Remove any source of ignition. Eliminate electrostatic charges by interconnecting all the conductive surfaces on which static electricity could form, and also ensuring that all surfaces are connected to the ground.

###### **For emergency responders:**

See section 8.

##### **6.2 Environmental precautions:**

This product is not classified as hazardous to the environment. Keep product away from drains, surface and underground water.

##### **6.3 Methods and material for containment and cleaning up:**

It is recommended:

Absorb the spillage using sand or inert absorbent and move it to a safe place. Do not absorb in sawdust or other combustible absorbents. For any concern related to disposal consult section 13.

##### **6.4 Reference to other sections:**

See sections 8 and 13.

#### SECTION 7: HANDLING AND STORAGE

##### **7.1 Precautions for safe handling:**

###### **A.- General precautions for safe use**

Comply with the current legislation concerning the prevention of industrial risks. Keep containers hermetically sealed. Control spills and residues, destroying them with safe methods (section 6). Avoid leakages from the container. Maintain order and cleanliness where dangerous products are used.

###### **B.- Technical recommendations for the prevention of fires and explosions**

Transfer in well ventilated areas, preferably through localized extraction. Fully control sources of ignition (mobile phones, sparks,...) and ventilate during cleaning operations. Avoid the existence of dangerous atmospheres inside containers, applying inertization systems where possible. Transfer at a slow speed to avoid the creation of electrostatic charges. Against the possibility of electrostatic charges: ensure a perfect equipotential connection, always use groundings, do not wear work clothes made of acrylic fibres, preferably wearing cotton clothing and conductive footwear. Comply with the essential security requirements for equipment and systems defined in Directive 2014/34/EC (ATEX 100) and with the minimum requirements for protecting the security and health of workers under the selection criteria of Directive 1999/92/EC (ATEX 137). Consult section 10 for conditions and materials that should be avoided.

###### **C.- Technical recommendations on general occupational hygiene**

Do not eat or drink during the process, washing hands afterwards with suitable cleaning products.

###### **D.- Technical recommendations to prevent environmental risks**

It is recommended to have absorbent material available at close proximity to the product (See subsection 6.3)

##### **7.2 Conditions for safe storage, including any incompatibilities:**

###### **A.- Technical measures for storage**

Minimum Temp.: 5 °C

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#### SECTION 7: HANDLING AND STORAGE (continued)

Maximum Temp.: 30 °C

B.- General conditions for storage

Avoid sources of heat, radiation, static electricity and contact with food. For additional information see subsection 10.5

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

Except for the instructions already specified it is not necessary to provide any special recommendation regarding the uses of this product.

#### SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

##### 8.1 Control parameters:

Substances whose occupational exposure limits have to be monitored in the workplace (European OEL, not country-specific legislation):

There are no applicable occupational exposure limits for the substances contained in the product

##### DNEL (Workers):

| Identification                                       |            | Short exposure        |                | Long exposure         |                |
|------------------------------------------------------|------------|-----------------------|----------------|-----------------------|----------------|
|                                                      |            | Systemic              | Local          | Systemic              | Local          |
| ethanol<br>CAS: 64-17-5<br>EC: 200-578-6             | Oral       | Non-applicable        | Non-applicable | Non-applicable        | Non-applicable |
|                                                      | Dermal     | Non-applicable        | Non-applicable | 343 mg/kg             | Non-applicable |
|                                                      | Inhalation | Non-applicable        | Non-applicable | 950 mg/m <sup>3</sup> | Non-applicable |
| 2-methylpropan-2-ol<br>CAS: 75-65-0<br>EC: 200-889-7 | Oral       | Non-applicable        | Non-applicable | Non-applicable        | Non-applicable |
|                                                      | Dermal     | Non-applicable        | Non-applicable | 5,5 mg/kg             | Non-applicable |
|                                                      | Inhalation | 214 mg/m <sup>3</sup> | Non-applicable | 2,7 mg/m <sup>3</sup> | Non-applicable |

##### DNEL (General population):

| Identification                                       |            | Short exposure          |                | Long exposure         |                |
|------------------------------------------------------|------------|-------------------------|----------------|-----------------------|----------------|
|                                                      |            | Systemic                | Local          | Systemic              | Local          |
| ethanol<br>CAS: 64-17-5<br>EC: 200-578-6             | Oral       | Non-applicable          | Non-applicable | 87 mg/kg              | Non-applicable |
|                                                      | Dermal     | Non-applicable          | Non-applicable | 206 mg/kg             | Non-applicable |
|                                                      | Inhalation | Non-applicable          | Non-applicable | 114 mg/m <sup>3</sup> | Non-applicable |
| 2-methylpropan-2-ol<br>CAS: 75-65-0<br>EC: 200-889-7 | Oral       | Non-applicable          | Non-applicable | 0,3 mg/kg             | Non-applicable |
|                                                      | Dermal     | Non-applicable          | Non-applicable | 2,7 mg/kg             | Non-applicable |
|                                                      | Inhalation | 159,8 mg/m <sup>3</sup> | Non-applicable | 0,5 mg/m <sup>3</sup> | Non-applicable |

##### PNEC:

| Identification                                       |              |            |                         |             |  |
|------------------------------------------------------|--------------|------------|-------------------------|-------------|--|
| ethanol<br>CAS: 64-17-5<br>EC: 200-578-6             | STP          | 580 mg/L   | Fresh water             | 0,96 mg/L   |  |
|                                                      | Soil         | 0,63 mg/kg | Marine water            | 0,79 mg/L   |  |
|                                                      | Intermittent | 2,75 mg/L  | Sediment (Fresh water)  | 3,6 mg/kg   |  |
|                                                      | Oral         | 0,38 g/kg  | Sediment (Marine water) | 2,9 mg/kg   |  |
| 2-methylpropan-2-ol<br>CAS: 75-65-0<br>EC: 200-889-7 | STP          | 690 mg/L   | Fresh water             | 2 mg/L      |  |
|                                                      | Soil         | 1 mg/kg    | Marine water            | 0,2 mg/L    |  |
|                                                      | Intermittent | 9,33 mg/L  | Sediment (Fresh water)  | 8,04 mg/kg  |  |
|                                                      | Oral         | 88700 g/kg | Sediment (Marine water) | 0,804 mg/kg |  |

##### 8.2 Exposure controls:

A.- Individual protection measures, such as personal protective equipment

As a preventative measure it is recommended to use basic Personal Protective Equipment, with the corresponding <<CE marking>> in accordance with Regulation (EU) 2016/425. For more information on Personal Protective Equipment (storage, use, cleaning, maintenance, class of protection,...) consult the information leaflet provided by the manufacturer. For more information see subsection 7.1. All information contained herein is a recommendation which needs some specification from the labour risk prevention services as it is not known whether the company has additional measures at its disposal.

B.- Respiratory protection

The use of protection equipment will be necessary if a mist forms or if the occupational exposure limits are exceeded.

C.- Specific protection for the hands

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#### SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continued)

Non-applicable

D.- Eye and face protection

Non-applicable

E.- Body protection

Non-applicable

F.- Additional emergency measures

| Emergency measure                                                                                     | Standards                                       | Emergency measure                                                                                      | Standards                                      |
|-------------------------------------------------------------------------------------------------------|-------------------------------------------------|--------------------------------------------------------------------------------------------------------|------------------------------------------------|
| <br>Emergency shower | ANSI Z358-1<br>ISO 3864-1:2011, ISO 3864-4:2011 | <br>Eyewash stations | DIN 12 899<br>ISO 3864-1:2011, ISO 3864-4:2011 |

#### Environmental exposure controls:

In accordance with the community legislation for the protection of the environment it is recommended to avoid environmental spillage of both the product and its container. For additional information see subsection 7.1.D

#### Volatile organic compounds:

With regard to Directive 2010/75/EU, this product has the following characteristics:

|                           |                                       |
|---------------------------|---------------------------------------|
| V.O.C. (Supply):          | 75,77 % weight                        |
| V.O.C. density at 20 °C:  | 647,81 kg/m <sup>3</sup> (647,81 g/L) |
| Average carbon number:    | 2,06                                  |
| Average molecular weight: | 46,94 g/mol                           |

#### SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

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

For complete information see the product datasheet.

#### Appearance:

|                          |                  |
|--------------------------|------------------|
| Physical state at 20 °C: | Liquid           |
| Appearance:              | Gel              |
| Colour:                  | Colourless       |
| Odour:                   | Alcohol          |
| Odour threshold:         | Non-applicable * |

#### Volatility:

|                                        |                         |
|----------------------------------------|-------------------------|
| Boiling point at atmospheric pressure: | 82 °C                   |
| Vapour pressure at 20 °C:              | 4723 Pa                 |
| Vapour pressure at 50 °C:              | 22772,41 Pa (22,77 kPa) |
| Evaporation rate at 20 °C:             | Non-applicable *        |

#### Product description:

|                                              |                             |
|----------------------------------------------|-----------------------------|
| Density at 20 °C:                            | 850 - 860 kg/m <sup>3</sup> |
| Relative density at 20 °C:                   | 0,85 - 0,86                 |
| Dynamic viscosity at 20 °C:                  | Non-applicable *            |
| Kinematic viscosity at 20 °C:                | Non-applicable *            |
| Kinematic viscosity at 40 °C:                | Non-applicable *            |
| Concentration:                               | Non-applicable *            |
| pH:                                          | 7 - 8                       |
| Vapour density at 20 °C:                     | Non-applicable *            |
| Partition coefficient n-octanol/water 20 °C: | Non-applicable *            |

\*Not relevant due to the nature of the product, not providing information property of its hazards.

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#### SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES (continued)

|                               |                  |
|-------------------------------|------------------|
| Solubility in water at 20 °C: | Non-applicable * |
| Solubility properties:        | Non-applicable * |
| Decomposition temperature:    | Non-applicable * |
| Melting point/freezing point: | Non-applicable * |

**Flammability:**

|                            |                  |
|----------------------------|------------------|
| Flash Point:               | 21 °C            |
| Flammability (solid, gas): | Non-applicable * |
| Autoignition temperature:  | 423 °C           |
| Lower flammability limit:  | Not available    |
| Upper flammability limit:  | Not available    |

**Particle characteristics:**

|                             |                |
|-----------------------------|----------------|
| Median equivalent diameter: | Non-applicable |
|-----------------------------|----------------|

**9.2 Other information:**

**Information with regard to physical hazard classes:**

|                                                              |                  |
|--------------------------------------------------------------|------------------|
| Explosive properties:                                        | Non-applicable * |
| Oxidising properties:                                        | Non-applicable * |
| Corrosive to metals:                                         | Non-applicable * |
| Heat of combustion:                                          | Non-applicable * |
| Aerosols-total percentage (by mass) of flammable components: | Non-applicable * |

**Other safety characteristics:**

|                           |                  |
|---------------------------|------------------|
| Surface tension at 20 °C: | Non-applicable * |
| Refraction index:         | Non-applicable * |

\*Not relevant due to the nature of the product, not providing information property of its hazards.

#### SECTION 10: STABILITY AND REACTIVITY

**10.1 Reactivity:**

No hazardous reactions are expected because the product is stable under recommended storage conditions. See section 7.

**10.2 Chemical stability:**

Chemically stable under the indicated conditions of storage, handling and use.

**10.3 Possibility of hazardous reactions:**

Under the specified conditions, hazardous reactions that lead to excessive temperatures or pressure are not expected.

**10.4 Conditions to avoid:**

Applicable for handling and storage at room temperature:

|                    |                  |                         |                     |                |
|--------------------|------------------|-------------------------|---------------------|----------------|
| Shock and friction | Contact with air | Increase in temperature | Sunlight            | Humidity       |
| Not applicable     | Not applicable   | Risk of combustion      | Avoid direct impact | Not applicable |

**10.5 Incompatible materials:**

|                    |                |                     |                       |                               |
|--------------------|----------------|---------------------|-----------------------|-------------------------------|
| Acids              | Water          | Oxidising materials | Combustible materials | Others                        |
| Avoid strong acids | Not applicable | Avoid direct impact | Not applicable        | Avoid alkalis or strong bases |

**10.6 Hazardous decomposition products:**

See subsection 10.3, 10.4 and 10.5 to find out the specific decomposition products. Depending on the decomposition conditions, complex mixtures of chemical substances can be released: carbon dioxide (CO<sub>2</sub>), carbon monoxide and other organic compounds.

#### SECTION 11: TOXICOLOGICAL INFORMATION

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

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#### SECTION 11: TOXICOLOGICAL INFORMATION (continued)

The experimental information related to the toxicological properties of the product itself is not available

##### **Dangerous health implications:**

In case of exposure that is repetitive, prolonged or at concentrations higher than the recommended occupational exposure limits, adverse effects on health may result, depending on the means of exposure:

##### A- Ingestion (acute effect):

- Acute toxicity : Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for consumption. For more information see section 3
- Corrosivity/Irritability: Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for this effect. For more information see section 3.

##### B- Inhalation (acute effect):

- Acute toxicity : Based on available data, the classification criteria are not met. However, it contains substances classified as hazardous for inhalation. For more information see section 3.
- Corrosivity/Irritability: Based on available data, the classification criteria are not met. However, it contains substances classified as hazardous for inhalation. For more information see section 3.

##### C- Contact with the skin and the eyes (acute effect):

- Contact with the skin: Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for skin contact. For more information see section 3.
- Contact with the eyes: Produces eye damage after contact.

##### D- CMR effects (carcinogenicity, mutagenicity and toxicity to reproduction):

- Carcinogenicity: Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for the effects mentioned. For more information see section 3.  
IARC: ethanol (1)
- Mutagenicity: Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for this effect. For more information see section 3.
- Reproductive toxicity: Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for this effect. For more information see section 3.

##### E- Sensitizing effects:

- Respiratory: Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous with sensitising effects. For more information see section 3.
- Skin: Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for this effect. For more information see section 3.

##### F- Specific target organ toxicity (STOT) - single exposure:

Based on available data, the classification criteria are not met. However, it contains substances classified as hazardous for inhalation. For more information see section 3.

##### G- Specific target organ toxicity (STOT)-repeated exposure:

- Specific target organ toxicity (STOT)-repeated exposure: Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for this effect. For more information see section 3.
- Skin: Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for this effect. For more information see section 3.

##### H- Aspiration hazard:

Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for this effect. For more information see section 3.

##### **Other information:**

Non-applicable

##### **Specific toxicology information on the substances:**

| Identification      | Acute toxicity  |                  | Genus  |
|---------------------|-----------------|------------------|--------|
| ethanol             | LD50 oral       | 6200 mg/kg       | Rat    |
| CAS: 64-17-5        | LD50 dermal     | 20000 mg/kg      | Rabbit |
| EC: 200-578-6       | LC50 inhalation | 124,7 mg/L (4 h) | Rat    |
| 2-methylpropan-2-ol | LD50 oral       | 3500 mg/kg       | Rat    |
| CAS: 75-65-0        | LD50 dermal     | Non-applicable   |        |
| EC: 200-889-7       | LC50 inhalation | 11 mg/L (ATEi)   |        |

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#### SECTION 11: TOXICOLOGICAL INFORMATION (continued)

##### 11.2 Information on other hazards:

###### Endocrine disrupting properties

Endocrine-disrupting properties: The product fails to meet the criteria.

###### Other information

Non-applicable

#### SECTION 12: ECOLOGICAL INFORMATION

The experimental information related to the eco-toxicological properties of the product itself is not available

##### 12.1 Toxicity:

###### Acute toxicity:

| Identification                                       | Concentration |                   | Species                | Genus      |
|------------------------------------------------------|---------------|-------------------|------------------------|------------|
| ethanol<br>CAS: 64-17-5<br>EC: 200-578-6             | LC50          | 11000 mg/L (96 h) | Alburnus alburnus      | Fish       |
|                                                      | EC50          | 9268 mg/L (48 h)  | Daphnia magna          | Crustacean |
|                                                      | EC50          | 1450 mg/L (192 h) | Microcystis aeruginosa | Algae      |
| 2-methylpropan-2-ol<br>CAS: 75-65-0<br>EC: 200-889-7 | LC50          | 961 mg/L (96 h)   | Pimephales promelas    | Fish       |
|                                                      | EC50          | Non-applicable    |                        |            |
|                                                      | EC50          | Non-applicable    |                        |            |

###### Chronic toxicity:

| Identification                                    | Concentration |          | Species            | Genus      |
|---------------------------------------------------|---------------|----------|--------------------|------------|
| ethanol<br>CAS: 64-17-5 EC: 200-578-6             | NOEC          | 250 mg/L | Danio rerio        | Fish       |
|                                                   | NOEC          | 2 mg/L   | Ceriodaphnia dubia | Crustacean |
| 2-methylpropan-2-ol<br>CAS: 75-65-0 EC: 200-889-7 | NOEC          | 332 mg/L | Clarias Gariepinus | Fish       |
|                                                   | NOEC          | 100 mg/L | Daphnia magna      | Crustacean |

##### 12.2 Persistence and degradability:

| Identification                           | Degradability |                | Biodegradability |          |
|------------------------------------------|---------------|----------------|------------------|----------|
|                                          |               |                |                  |          |
| ethanol<br>CAS: 64-17-5<br>EC: 200-578-6 | BOD5          | Non-applicable | Concentration    | 100 mg/L |
|                                          | COD           | Non-applicable | Period           | 14 days  |
|                                          | BOD5/COD      | Non-applicable | % Biodegradable  | 89 %     |

##### 12.3 Bioaccumulative potential:

| Identification                           | Bioaccumulation potential |       |
|------------------------------------------|---------------------------|-------|
| ethanol<br>CAS: 64-17-5<br>EC: 200-578-6 | BCF                       | 3     |
|                                          | Pow Log                   | -0.31 |
|                                          | Potential                 | Low   |

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#### SECTION 12: ECOLOGICAL INFORMATION (continued)

##### 12.4 Mobility in soil:

| Identification      | Absorption/desorption |                      | Volatility |                                |
|---------------------|-----------------------|----------------------|------------|--------------------------------|
| ethanol             | Koc                   | 1                    | Henry      | 4,61E-1 Pa·m <sup>3</sup> /mol |
| CAS: 64-17-5        | Conclusion            | Very High            | Dry soil   | Yes                            |
| EC: 200-578-6       | Surface tension       | 2,339E-2 N/m (25 °C) | Moist soil | Yes                            |
| 2-methylpropan-2-ol | Koc                   | Non-applicable       | Henry      | Non-applicable                 |
| CAS: 75-65-0        | Conclusion            | Non-applicable       | Dry soil   | Non-applicable                 |
| EC: 200-889-7       | Surface tension       | 2,111E-2 N/m (25 °C) | Moist soil | Non-applicable                 |

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

Product fails to meet PBT/vPvB criteria

##### 12.6 Endocrine disrupting properties:

Endocrine-disrupting properties: The product fails to meet the criteria.

##### 12.7 Other adverse effects:

Not described

#### SECTION 13: DISPOSAL CONSIDERATIONS

##### 13.1 Waste treatment methods:

| Code | Description                                                                                 | Waste class (Regulation (EU) No 1357/2014) |
|------|---------------------------------------------------------------------------------------------|--------------------------------------------|
|      | It is not possible to assign a specific code, as it depends on the intended use by the user | Dangerous                                  |

##### Type of waste (Regulation (EU) No 1357/2014):

HP3 Flammable, HP4 Irritant — skin irritation and eye damage

##### Waste management (disposal and evaluation):

Consult the authorized waste service manager on the assessment and disposal operations in accordance with Annex 1 and Annex 2 (Directive 2008/98/EC). As under 15 01 (2014/955/EC) of the code and in case the container has been in direct contact with the product, it will be processed the same way as the actual product. Otherwise, it will be processed as non-dangerous residue. Waste should not be disposed of to drains. See paragraph 6.2.

##### Regulations related to waste management:

In accordance with Annex II of Regulation (EC) No 1907/2006 (REACH) the community or state provisions related to waste management are stated

Community legislation: Directive 2008/98/EC, 2014/955/EU, Regulation (EU) No 1357/2014

#### SECTION 14: TRANSPORT INFORMATION

##### Transport of dangerous goods by land:

With regard to ADR 2021 and RID 2021:



- 14.1 UN number or ID number:** UN1987
- 14.2 UN proper shipping name:** ALCOHOLS, N.O.S. (ethanol)
- 14.3 Transport hazard class(es):** 3
- Labels:** 3
- 14.4 Packing group:** II
- 14.5 Environmental hazards:** No
- 14.6 Special precautions for user**
  - Special regulations: 274, 601, 640D
  - Tunnel restriction code: D/E
  - Physico-Chemical properties: see section 9
  - Limited quantities: 1 L
- 14.7 Maritime transport in bulk according to IMO instruments:** Non-applicable

##### Transport of dangerous goods by sea:

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## Safety data sheet

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#### SECTION 14: TRANSPORT INFORMATION (continued)

With regard to IMDG 40-20:



- 14.1 UN number or ID number:** UN1987  
**14.2 UN proper shipping name:** ALCOHOLS, N.O.S. (ethanol)  
**14.3 Transport hazard class(es):** 3  
**Labels:** 3  
**14.4 Packing group:** II  
**14.5 Marine pollutant:** No  
**14.6 Special precautions for user**  
Special regulations: 274  
EmS Codes: F-E, S-D  
Physico-Chemical properties: see section 9  
Limited quantities: 1 L  
Segregation group: Non-applicable  
**14.7 Maritime transport in bulk according to IMO instruments:** Non-applicable

#### Transport of dangerous goods by air:

With regard to IATA/ICAO 2022:



- 14.1 UN number or ID number:** UN1987  
**14.2 UN proper shipping name:** ALCOHOLS, N.O.S. (ethanol)  
**14.3 Transport hazard class(es):** 3  
**Labels:** 3  
**14.4 Packing group:** II  
**14.5 Environmental hazards:** No  
**14.6 Special precautions for user**  
Physico-Chemical properties: see section 9  
**14.7 Maritime transport in bulk according to IMO instruments:** Non-applicable

#### SECTION 15: REGULATORY INFORMATION

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

Candidate substances for authorisation under the Regulation (EC) No 1907/2006 (REACH): Non-applicable  
Substances included in Annex XIV of REACH ("Authorisation List") and sunset date: Non-applicable  
Regulation (EC) No 1005/2009, about substances that deplete the ozone layer: Non-applicable  
Article 95, REGULATION (EU) No 528/2012: ethanol (Product-type 1, 2, 4)  
REGULATION (EU) No 649/2012, in relation to the import and export of hazardous chemical products: Non-applicable

##### Seveso III:

| Section | Description       | Lower-tier requirements | Upper-tier requirements |
|---------|-------------------|-------------------------|-------------------------|
| P5c     | FLAMMABLE LIQUIDS | 5000                    | 50000                   |

##### Limitations to commercialisation and the use of certain dangerous substances and mixtures (Annex XVII REACH, etc ....):

Shall not be used in:

- ornamental articles intended to produce light or colour effects by means of different phases, for example in ornamental lamps and ashtrays,
- tricks and jokes,
- games for one or more participants, or any article intended to be used as such, even with ornamental aspects.

##### Specific provisions in terms of protecting people or the environment:

It is recommended to use the information included in this safety data sheet as a basis for conducting workplace-specific risk assessments in order to establish the necessary risk prevention measures for the handling, use, storage and disposal of this product.

##### Other legislation:

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#### SECTION 15: REGULATORY INFORMATION (continued)

The product could be affected by sectorial legislation

##### 15.2 Chemical safety assessment:

The supplier has not carried out evaluation of chemical safety.

#### SECTION 16: OTHER INFORMATION

##### Legislation related to safety data sheets:

The SDS shall be supplied in an official language of the country where the product is placed on the market. This safety data sheet has been designed in accordance with ANNEX II-Guide to the compilation of safety data sheets of Regulation (EC) No 1907/2006 (COMMISSION REGULATION (EU) 2020/878).

##### Modifications related to the previous Safety Data Sheet which concerns the ways of managing risks.:

Non-applicable

##### Texts of the legislative phrases mentioned in section 2:

H319: Causes serious eye irritation.

H225: Highly flammable liquid and vapour.

##### Texts of the legislative phrases mentioned in section 3:

The phrases indicated do not refer to the product itself; they are present merely for informative purposes and refer to the individual components which appear in section 3

##### CLP Regulation (EC) No 1272/2008:

Acute Tox. 4: H332 - Harmful if inhaled.

Eye Irrit. 2: H319 - Causes serious eye irritation.

Flam. Liq. 2: H225 - Highly flammable liquid and vapour.

STOT SE 3: H335 - May cause respiratory irritation.

##### Classification procedure:

Eye Irrit. 2: Calculation method

Flam. Liq. 2: Calculation method (2.6.4.3)

##### Advice related to training:

Training is recommended in order to prevent industrial risks for staff using this product and to facilitate their comprehension and interpretation of this safety data sheet, as well as the label on the product.

##### Principal bibliographical sources:

<http://echa.europa.eu>

<http://eur-lex.europa.eu>

##### Abbreviations and acronyms:

ADR: European agreement concerning the international carriage of dangerous goods by road

IMDG: International maritime dangerous goods code

IATA: International Air Transport Association

ICAO: International Civil Aviation Organisation

COD: Chemical Oxygen Demand

BOD5: 5day biochemical oxygen demand

BCF: Bioconcentration factor

LD50: Lethal Dose 50

LC50: Lethal Concentration 50

EC50: Effective concentration 50

LogPOW: Octanolwater partition coefficient

Koc: Partition coefficient of organic carbon

UFI: unique formula identifier

IARC: International Agency for Research on Cancer

The information contained in this safety data sheet is based on sources, technical knowledge and current legislation at European and state level, without being able to guarantee its accuracy. This information cannot be considered a guarantee of the properties of the product, it is simply a description of the security requirements. The occupational methodology and conditions for users of this product are not within our awareness or control, and it is ultimately the responsibility of the user to take the necessary measures to obtain the legal requirements concerning the manipulation, storage, use and disposal of chemical products. The information on this safety data sheet only refers to this product, which should not be used for needs other than those specified.

- END OF SAFETY DATA SHEET -