



This product does not contain any substances classified as PBT or vPvB.

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

**3.2. Mixtures**

|  |
|--|
| <p><b>ethanol</b> <span style="float: right;">60-100%</span></p> <p>CAS number: 64-17-5 <span style="margin-left: 150px;">EC number: 200-578-6</span></p>                              |
| <p><b>Classification</b></p> <p>Flam. Liq. 2 - H225<br/>Eye Irrit. 2 - H319</p>  |
| <p><b>butanone</b> <span style="float: right;">1-5%</span></p> <p>CAS number: 78-93-3 <span style="margin-left: 150px;">EC number: 201-159-0</span></p>                                |
| <p><b>Classification</b></p> <p>Flam. Liq. 2 - H225<br/>Eye Irrit. 2 - H319<br/>STOT SE 3 - H336</p>   |
| <p><b>propan-2-ol</b> <span style="float: right;">1-5%</span></p> <p>CAS number: 67-63-0 <span style="margin-left: 150px;">EC number: 200-661-7</span></p>                             |
| <p><b>Classification</b></p> <p>Flam. Liq. 2 - H225 Eye Irrit. 2 - H319 STOT SE 3 - H336</p> <p>The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.</p> |

**SECTION 4: First aid measures**

**4.1. Description of first aid measures**

|                                   |  |
|-----------------------------------|--|
| <b>General information</b>        | Get medical attention if any discomfort continues. Show this Safety Data Sheet to the medical personnel.   |
| <b>Inhalation</b>                 | Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Loosen tight clothing such as collar, tie or belt. Get medical attention if symptoms are severe or persist. |
| <b>Ingestion</b>                  | Rinse mouth thoroughly with water. Get medical advice/attention if you feel unwell. Do not induce vomiting unless under the direction of medical personnel.  |
| <b>Skin contact</b>               | Rinse with water.  |
| <b>Eye contact</b>                | Rinse with water. Do not rub eye. Remove any contact lenses and open eyelids wide apart. Get medical attention if any discomfort continues.  |
| <b>Protection of first aiders</b> | First aid personnel should wear appropriate protective equipment during any rescue.  |

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

|                            |   |
|----------------------------|---|
| <b>General information</b> | The severity of the symptoms described will vary dependent on the concentration and the length of exposure. |
| <b>Inhalation</b>          | No specific symptoms known.   |
| <b>Ingestion</b>           | No specific symptoms known.   |
| <b>Skin contact</b>        | No specific symptoms known.   |

**Eye contact** Irritating to eyes.

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

**Notes for the doctor** Treat symptomatically.

**SECTION 5: Firefighting measures**

**5.1. Extinguishing media**

**Suitable extinguishing media** The product is flammable. Extinguish with alcohol-resistant foam, carbon dioxide, dry powder or water fog. Use fire-extinguishing media suitable for the surrounding fire.

**Unsuitable extinguishing media** Do not use water jet as an extinguisher, as this will spread the fire.

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

**Specific hazards** Containers can burst violently or explode when heated, due to excessive pressure build-up. Flammable liquid and vapour. Vapours may be ignited by a spark, a hot surface or an ember. Vapours may form explosive mixtures with air. Fire-water run-off in sewers may create fire or explosion hazard.

**Hazardous combustion products**

Thermal decomposition or combustion products may include the following substances:  
Harmful gases or vapours.

**5.3. Advice for firefighters**

**Protective actions during firefighting** Avoid breathing fire gases or vapours. Evacuate area. Cool containers exposed to heat with water spray and remove them from the fire area if it can be done without risk. Cool containers exposed to flames with water until well after the fire is out. If a leak or spill has not ignited, use water spray to disperse vapours and protect men stopping the leak. Control run-off water by containing and keeping it out of sewers and watercourses. If risk of water pollution occurs, notify appropriate authorities.

**Special protective equipment for firefighters** Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing. Firefighter's clothing conforming to European standard EN469 (including helmets, protective boots and gloves) will provide a basic level of protection for chemical incidents.

**SECTION 6: Accidental release measures**

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

**Personal precautions** Wear protective clothing as described in Section 8 of this safety data sheet. No action shall be taken without appropriate training or involving any personal risk. Evacuate area. Provide adequate ventilation. No smoking, sparks, flames or other sources of ignition near spillage. Promptly remove any clothing that becomes contaminated.

**6.2. Environmental precautions**

**Environmental precautions** Avoid discharge into drains or watercourses or onto the ground.

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

**Methods for cleaning up** Wear protective clothing as described in Section 8 of this safety data sheet. Clear up spills immediately and dispose of waste safely. Eliminate all ignition sources if safe to do so. No smoking, sparks, flames or other sources of ignition near spillage. Do not allow material to enter confined spaces, due to the risk of explosion. Absorb small quantities with paper towels and evaporate in a safe place. Once evaporation is complete, place paper in a suitable waste disposal container and seal securely. Flush contaminated area with plenty of water. Wash thoroughly after dealing with a spillage. For waste disposal, see Section 13.

**6.4. Reference to other sections**

**Reference to other sections** For personal protection, see Section 8. See Section 11 for additional information on health hazards. See Section 12 for additional information on ecological hazards. For waste disposal, see Section 13.

**SECTION 7: Handling and storage**

**7.1. Precautions for safe handling**

**Usage precautions**

Read and follow manufacturer's recommendations. Wear protective clothing as described in Section 8 of this safety data sheet. Keep away from food, drink and animal feeding stuffs. Handle all packages and containers carefully to minimise spills. Keep container tightly sealed when not in use. Avoid the formation of mists. The product is flammable. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Do not handle until all safety precautions have been read and understood. Do not handle broken packages without protective equipment. Do not reuse empty containers.

**Advice on general occupational hygiene**

Wash promptly if skin becomes contaminated. Take off contaminated clothing. Wash contaminated clothing before reuse.

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

**Storage precautions**

Keep away from oxidising materials, heat and flames. Keep only in the original container. Keep container tightly closed, in a cool, well ventilated place. Keep containers upright. Protect containers from damage.

**Storage class**

Flammable liquid storage.

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

**Specific end use(s)**

The identified uses for this product are detailed in Section 1.2.

**SECTION 8: Exposure Controls/personal protection**

**8.1. Control parameters**

**Occupational exposure limits ethanol**

Long-term exposure limit (8-hour TWA): WEL 1000 ppm 1920 mg/m<sup>3</sup> **propan-2-ol**

Long-term exposure limit (8-hour TWA): WEL 400 ppm 999 mg/m<sup>3</sup>

Short-term exposure limit (15-minute): WEL 500 ppm 1250 mg/m<sup>3</sup> WEL = Workplace Exposure Limit

**8.2. Exposure controls**

**Protective equipment**



**Appropriate engineering controls**

Provide adequate ventilation. Observe any occupational exposure limits for the product or ingredients.

**Eye/face protection**

Wear tight-fitting, chemical splash goggles or face shield. If inhalation hazards exist, a full-face respirator may be required instead.

**Hand protection**

No specific hand protection recommended.

**Other skin and body protection**

Wear appropriate clothing to prevent repeated or prolonged skin contact.

**Hygiene measures**

Wash hands thoroughly after handling. Wash at the end of each work shift and before eating, smoking and using the toilet. Do not eat, drink or smoke when using this product.

**Respiratory protection** Ensure all respiratory protective equipment is suitable for its intended use and is 'CE'-marked. Check that the respirator fits tightly and the filter is changed regularly. Gas and combination filter cartridges should comply with European Standard EN14387. Full face mask respirators with replaceable filter cartridges should comply with European Standard EN136. Half mask and quarter mask respirators with replaceable filter cartridges should comply with European Standard EN140.

**Environmental exposure controls** Keep container tightly sealed when not in use.

**SECTION 9: Physical and Chemical Properties**

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

**Appearance** Liquid.  
**Colour** Purple.  
**Odour** Alcoholic.  
**Odour threshold** No information available.  
**pH** No information available.  
**Flash point** No information available.  
**Relative density** 0.805 @ 20°C  
**Auto-ignition temperature** No information available.

**9.2. Other information**

**SECTION 10: Stability and reactivity**

**10.1. Reactivity**

**Reactivity** There are no known reactivity hazards associated with this product.

**10.2. Chemical stability**

**Stability** Stable at normal ambient temperatures and when used as recommended. Stable under the prescribed storage conditions.

**10.3. Possibility of hazardous reactions**

**Possibility of hazardous reactions** The following materials may react strongly with the product: Oxidising agents.

**10.4. Conditions to avoid**

**Conditions to avoid** Avoid heat, flames and other sources of ignition. Containers can burst violently or explode when heated, due to excessive pressure build-up. Static electricity and formation of sparks must be prevented.

**10.5. Incompatible materials**

**Materials to avoid** Oxidising materials. Acids - oxidising.

**10.6. Hazardous decomposition products**

**Hazardous decomposition products** Does not decompose when used and stored as recommended. Thermal decomposition or combustion products may include the following substances: Harmful gases or vapours.

**SECTION 11: Toxicological information**

**11.1. Information on toxicological effects**

**Acute toxicity - oral**

**Notes (oral LD<sub>50</sub>)** Based on available data the classification criteria are not met.

**Acute toxicity - dermal**

|  |   |
|--|---|
| Notes (dermal LD <sub>50</sub> )                   | Based on available data the classification criteria are not met.  |
| Acute toxicity - inhalation                        |   |
| Notes (inhalation LC <sub>50</sub> )               | Based on available data the classification criteria are not met.  |
| Skin corrosion/irritation                          |   |
| Animal data  | Based on available data the classification criteria are not met.  |
| Serious eye damage/irritation                      |   |
| Serious eye damage/irritation                      | Causes serious eye irritation.  |
| Respiratory sensitisation                          |   |
| Respiratory sensitisation                          | Based on available data the classification criteria are not met.  |
| Skin sensitisation                                 |   |
| Skin sensitisation                                 | Based on available data the classification criteria are not met.  |
| Germ cell mutagenicity                             |   |
| Genotoxicity - in vitro                            | Based on available data the classification criteria are not met.  |
| Carcinogenicity                                    |   |
| Carcinogenicity                                    | Based on available data the classification criteria are not met.  |
| IARC carcinogenicity                               | Contains a substance/a group of substances which may cause cancer. IARC Group 1<br>Carcinogenic to humans.  |
| Reproductive toxicity                              |   |
| Reproductive toxicity - fertility                  | Based on available data the classification criteria are not met.  |
| Reproductive toxicity - development                | Based on available data the classification criteria are not met.  |
| Specific target organ toxicity - single exposure   |   |
| STOT - single exposure                             | Not classified as a specific target organ toxicant after a single exposure.                                 |
| Specific target organ toxicity - repeated exposure |   |
| STOT - repeated exposure                           | Not classified as a specific target organ toxicant after repeated exposure.                                 |
| Aspiration hazard                                  |   |
| Aspiration hazard                                  | Based on available data the classification criteria are not met.  |
| General information                                | The severity of the symptoms described will vary dependent on the concentration and the length of exposure. |
| Inhalation   | No specific symptoms known.   |
| Ingestion  | No specific symptoms known.   |
| Skin contact                                       | No specific symptoms known.   |
| Eye contact  | Irritating to eyes.   |
| Route of entry                                     | Ingestion Inhalation Skin and/or eye contact  |
| Target organs                                      | No specific target organs known.  |

**SECTION 12: Ecological Information**

Ecotoxicity Not regarded as dangerous for the environment. However, large or frequent spills may have hazardous effects on the environment.

12.1. Toxicity

Toxicity Based on available data the classification criteria are not met.

12.2. Persistence and degradability

Persistence and degradability The degradability of the product is not known.

12.3. Bioaccumulative potential

Bioaccumulative potential No data available on bioaccumulation.

12.4. Mobility in soil

Mobility No data available.

12.5. Results of PBT and vPvB assessment 12.6. Other adverse effects

Other adverse effects None known.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

**General information** The generation of waste should be minimised or avoided wherever possible. Reuse or recycle products wherever possible. This material and its container must be disposed of in a safe way. When handling waste, the safety precautions applying to handling of the product should be considered. Care should be taken when handling emptied containers that have not been thoroughly cleaned or rinsed out. Empty containers or liners may retain some product residues and hence be potentially hazardous.

**Disposal methods** Dispose of surplus products and those that cannot be recycled via a licensed waste disposal contractor. Waste, residues, empty containers, discarded work clothes and contaminated cleaning materials should be collected in designated containers, labelled with their contents. Incineration or landfill should only be considered when recycling is not feasible.

SECTION 14: Transport information

**General** For limited quantity packaging/limited load information, consult the relevant modal documentation using the data shown in this section.

14.1. UN number

UN No. (ADR/RID) 1170

UN No. (IMDG) 1170

UN No. (ICAO) 1170

UN No. (ADN) 1170

14.2. UN proper shipping name

Proper shipping name (ADR/RID)

ETHANOL (ETHYL ALCOHOL) or ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION)

Proper shipping name (IMDG) ETHANOL (ETHYL ALCOHOL) or ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION)

Proper shipping name (ICAO) ETHANOL (ETHYL ALCOHOL) or ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION)

Proper shipping name (ADN) ETHANOL (ETHYL ALCOHOL) or ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION)

14.3. Transport hazard class(es)

ADR/RID class 3

ADR/RID classification code F1

ADR/RID label 3

IMDG class 3

ICAO class/division 3

ADN class 3

Transport labels



14.4. Packing group

ADR/RID packing group II

IMDG packing group II

ADN packing group II

ICAO packing group II

14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant No.

14.6. Special precautions for user

Always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

EmS F-E, S-D

ADR transport category 2

Emergency Action Code •2YE

Hazard Identification Number (ADR/RID)

33

Tunnel restriction code (D/E)

14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not applicable.

**SECTION 15: Regulatory information**

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

**National regulations**

Health and Safety at Work etc. Act 1974 (as amended).  
 The Chemicals (Hazard Information and Packaging for Supply) Regulations 2009 (SI 2009 No. 716).  
 The Carriage of Dangerous Goods and Use of Transportable Pressure Equipment Regulations 2009 (SI 2009 No. 1348) (as amended) ["CDG 2009"].  
 EH40/2005 Workplace exposure limits.

**EU legislation**

Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) (as amended).  
 Commission Regulation (EU) No 453/2010 of 20 May 2010.  
 Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures (as amended).  
 Dangerous Preparations Directive 1999/45/EC.  
 Dangerous Substances Directive 67/548/EEC.

15.2. Chemical safety assessment

