

# SAFETY DATA SHEET

## UNIVERSAL HAND SANITISER

According to Regulation (EC) No. 1272/2008 on Classification, Labelling and Packaging of Substances and Mixtures.

### SECTION 1: Identification of the substance/mixture and of the company/undertaking

#### 1.1. Product identifier

**Product name** UNIVERSAL HAND SANITISER

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

**Identified uses** Hand Sanitiser.

**Uses advised against** Not for oral consumption.

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

**Supplier** MERLIN CHEMICALS  
UNIT 5, PASSFIELD MILL INDUSTRIAL PARK, LIPHOOK, HAMPSHIRE, GU30 7RR  
+44 (0) 1428 751122  
+44 (0) 1428 751133  
technical@merlinchemicals .co.uk

#### 1.4. Emergency telephone number

**Emergency telephone** Out of Office Hours Emergency Information:-  
For accidents and spillages involving this product that pose a threat to the environment, or human health, or require immediate first aid advice call:- +44(0) 7050 265597.  
Note:- This number will not accept order queries or calls dealing with equipment breakdowns.  
UK Environment Agency 24hour Advisory Service 0800 807060. Irish Environmental Protection Agency 1890 335599.

### SECTION 2: Hazards identification

#### 2.1. Classification of the substance or mixture

##### Classification

**Physical hazards** Flam. Liq. 3 - H226

**Health hazards** Not Classified

**Environmental hazards** Not Classified

#### 2.2. Label elements

##### Pictogram



**Signal word** Warning

**Hazard statements** H226 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.  
P370+P378 In case of fire: Use foam, carbon dioxide, dry powder or water fog to extinguish.  
P403+P235 Store in a well-ventilated place. Keep cool.  
P501 Dispose of contents/container in accordance with national regulations.

#### 2.3. Other hazards

## UNIVERSAL HAND SANITISER

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

### SECTION 3: Composition/information on ingredients

#### 3.2. Mixtures

|                     |                      |
|---------------------|----------------------|
| <b>ETHANOL</b>      | <b>60-100%</b>       |
| CAS number: 64-17-5 | EC number: 200-578-6 |

|  |  |
|--|--|
| <b>Classification</b><br>Flam. Liq. 2 - H225 | <b>Classification (67/548/EEC or 1999/45/EC)</b><br>F;R11. |
|--|--|

|                     |                      |
|---------------------|----------------------|
| <b>METHANOL</b>     | <b>1-5%</b>          |
| CAS number: 67-56-1 | EC number: 200-659-6 |

|   |  |
|---|--|
| <b>Classification</b><br>Flam. Liq. 2 - H225<br>Acute Tox. 3 - H301<br>Acute Tox. 3 - H311<br>Acute Tox. 3 - H331<br>STOT SE 1 - H370 | <b>Classification (67/548/EEC or 1999/45/EC)</b><br>F;R11 T;R23/24/25,R39/23/24/25 |
|---|--|

|                      |                        |
|----------------------|------------------------|
| <b>CYCLOHEXANE</b>   | <b>&lt;1%</b>          |
| CAS number: 110-82-7 | EC number: 203-806-2   |
| M factor (Acute) = 1 | M factor (Chronic) = 1 |

|  |  |
|--|--|
| <b>Classification</b><br>Flam. Liq. 2 - H225<br>Skin Irrit. 2 - H315<br>STOT SE 3 - H336<br>Asp. Tox. 1 - H304<br>Aquatic Acute 1 - H400<br>Aquatic Chronic 1 - H410 | <b>Classification (67/548/EEC or 1999/45/EC)</b><br>F;R11 Xn;R65 Xi;R38 R67 N;R50/53 |
|--|--|

The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

**Composition comments** To the best of our knowledge, all of the substances used in this product are being supported for the relevant application in REACH.

### SECTION 4: First aid measures

#### 4.1. Description of first aid measures

|                            |  |
|----------------------------|--|
| <b>General information</b> | When it is safe to do so, remove victim immediately from source of exposure. However, consideration should be given as to whether moving the victim will cause further injury.   |
| <b>Inhalation</b>          | Remove affected person from source of contamination. Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. If breathing stops, provide artificial respiration. Get medical attention if any discomfort continues. |
| <b>Ingestion</b>           | Do not induce vomiting. Rinse mouth thoroughly with water. Place unconscious person on the side in the recovery position and ensure breathing can take place. Get medical attention.   |
| <b>Skin contact</b>        | Remove contaminated clothing that is not stuck to the skin. Flush area with clean water. Continue to rinse for at least 15 minutes. Get medical attention if any discomfort continues.   |

## UNIVERSAL HAND SANITISER

**Eye contact** Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 15 minutes and get medical attention.

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

**General information** Neat product may cause irritation to skin and eyes. Dilute chemical may result in mild irritation to skin. Contact of dilute chemical with eyes should still be treated as outlined above.

**Inhalation** Unlikely route of exposure without deliberate abuse. Likely to cause light-headed dizzy sensation.

**Ingestion** Unlikely route of exposure without deliberate abuse. If neat chemical is ingested, irritation of the mouth, throat and GI tract may occur. If dilute chemical is ingested some soreness of the mouth, throat and GI tract may occur.

**Skin contact** Prolonged or repeated contact with skin may cause irritation, redness and dermatitis. Use solutions may cause mild irritation, especially to open cuts and abrasions.

**Eye contact** May cause irritation to the eyes.

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

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

#### **5.1. Extinguishing media**

**Suitable extinguishing media** Extinguish with alcohol-resistant foam, carbon dioxide or dry powder.

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

**Specific hazards** The product is flammable.

#### **5.3. Advice for firefighters**

**Protective actions during firefighting** Protective clothing and respiratory protection should be worn when tackling fires involving this product.

**Special protective equipment for firefighters** Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing.

### **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.

#### **6.2. Environmental precautions**

**Environmental precautions** Spillages or uncontrolled discharges into watercourses must be reported immediately to the Environmental Agency or other appropriate regulatory body.

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

**Methods for cleaning up** Stop leak if possible without risk. Absorb in vermiculite, dry sand or earth and place into containers. Collect and place in suitable waste disposal containers and seal securely. For waste disposal, see Section 13. Containers with collected spillage must be properly labelled with correct contents and hazard symbol.

#### **6.4. Reference to other sections**

**Reference to other sections** See sections 8, 12 & 13

### **SECTION 7: Handling and storage**

#### **7.1. Precautions for safe handling**

**Usage precautions** Keep away from heat, sparks and open flame. Wear protective clothing as described in Section 8 of this safety data sheet.

## UNIVERSAL HAND SANITISER

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

**Storage precautions** Store in tightly-closed, original container in a dry, cool and well-ventilated place. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Store below 30 Degrees C Keep out of the reach of children.

### 7.3. Specific end use(s)

**Specific end use(s)** The identified uses for this product are detailed in Section 1.2.

**Usage description** Use as instructed on the product information sheet.

## 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> vapour

##### **METHANOL**

Long-term exposure limit (8-hour TWA): WEL 200 ppm(Sk) 266 mg/m<sup>3</sup>(Sk)

Short-term exposure limit (15-minute): WEL 250 ppm(Sk) 333 mg/m<sup>3</sup>(Sk)

##### **CYCLOHEXANE**

Long-term exposure limit (8-hour TWA): WEL 100 ppm 350 mg/m<sup>3</sup>

Short-term exposure limit (15-minute): WEL 300 ppm 1050 mg/m<sup>3</sup>

WEL = Workplace Exposure Limit

#### **Ingredient comments**

Where an exposure level is quoted, a risk assessment should consider if there is a need to monitor the atmosphere of the working environment. Results should be compared against the WEL and/or DNEL information provided. The Long Term WEL refers to total exposure of a worker to a specific substance averaged out over an 8 hour period.

The Short Term WEL refers to a single exposure of a worker to a specific substance over a 15 minute period.

If the Short Term WEL is exceeded and no Long Term Limit is set, further exposure during the working shift is not permitted. Further controls should be implemented to ensure that future exposure to the substance is reduced below the levels set before the activity is repeated/continued. Where no Short Term WEL exists, guidance from the HSE is to use a value of three times the Long Term WEL.

The WEL limits are laid down in the EH40 list as supplied by the HSE. This is taken from the Chemical Agents Directive (98/24/EC). DNEL and/or PNEC information is supplied by manufacturers of substances in accordance with REACH legislation (Regulation (EC) No 1907/2006), and is used to provide suitable risk reduction measures to limit exposure of the user of the substance to a non hazardous level. If the measured level of exposure by a route divided by the DNEL for the route is greater than 1, then further exposure controls should be implemented as described in section 8.2. Where new information becomes available under REACH, this will be passed on as revisions to the Safety Data Sheet. Where a worker is exposed to levels approaching a limit, further exposure control measures should be considered to reduce exposure to the substance.

#### **ETHANOL (CAS: 64-17-5)**

## UNIVERSAL HAND SANITISER

|             |  |
|-------------|--|
| <b>DNEL</b> | <p>Workers - Inhalation; Short term local effects: 1900 mg/m<sup>3</sup></p> <p>Workers - Dermal; Long term : 343 mg/kg</p> <p>Workers - Inhalation; Long term : 950 mg/m<sup>3</sup></p> <p>Consumer - Inhalation; Short term local effects: 950 mg/m<sup>3</sup></p> <p>Consumer - Dermal; Long term : 206 mg/kg</p> <p>Consumer - Inhalation; Long term : 114 mg/m<sup>3</sup></p> <p>Consumer - Oral; Long term : 87 mg/kg</p> |
| <b>PNEC</b> | <p>- Fresh water; 0.96 mg/l</p> <p>- Marine water; 0.79 mg/l</p> <p>- Sediment (Freshwater); 3.6 mg/kg</p> <p>- Soil; 0.63 mg/kg</p>   |

### METHANOL (CAS: 67-56-1)

|             |  |
|-------------|--|
| <b>DNEL</b> | <p>Workers - Dermal; Short term : 40 mg/kg</p> <p>Workers - Inhalation; Short term : 260 mg/m<sup>3</sup></p> <p>Workers - Dermal; Long term : 40 mg/kg</p> <p>Workers - Inhalation; Long term : 260 mg/m<sup>3</sup></p> <p>Consumer - Dermal; Short term : 8 mg/kg</p> <p>Consumer - Inhalation; Short term : 50 mg/m<sup>3</sup></p> <p>Consumer - Oral; Short term : 8 mg/kg</p> <p>Consumer - Dermal; Long term : 8 mg/kg</p> <p>Consumer - Inhalation; Long term : 50 mg/m<sup>3</sup></p> <p>Consumer - Oral; Long term : 8 mg/kg</p> |
| <b>PNEC</b> | <p>- Fresh water; 154 mg/l</p> <p>- Marine water; 15.4 mg/l</p> <p>- Sediment (Freshwater); 570.4 mg/kg</p> <p>- Soil; 23.5 mg/kg</p>  |

## 8.2. Exposure controls

### Protective equipment



### Appropriate engineering controls

Provide adequate general and local exhaust ventilation.

### Personal protection

The PPE indicated above is not a COSHH assessment. It represents PPE that should be considered during the manufacture, distribution, use and final disposal stages of this product's life cycle. It is the responsibility of employers to conduct a COSHH/risk assessment to determine appropriate PPE levels. The information given below should be used to support this assessment.

### Eye/face protection

Eyewear complying with an approved standard should be worn if a risk assessment indicates eye contact is possible. Refer to EN Standard 166 to select appropriate level of protection.

### Hand protection

Not Applicable

### Other skin and body protection

Wear suitable protective clothing as protection against splashing or contamination. Reference to EN 13832 and EN 943 is useful when selecting footwear and clothing.

### Hygiene measures

Provide eyewash station and safety shower. Promptly remove non-impervious clothing that has become contaminated, provided it is not adhered to the skin. Wash contaminated clothing before reuse.

## UNIVERSAL HAND SANITISER

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|--|---|
| <b>Respiratory protection</b>              | No specific recommendation made, but respiratory protection must be used if the general level exceeds the Workplace Exposure Limit.   |
| <b>Environmental exposure controls</b>     | Do not allow the substance to contaminate surface water/ground water. See points 6, 12 & 13.  |
| <b>General Health and Safety Measures.</b> | The above requirements refer to the neat chemical. In-use solutions may have a lower classification, however, a full risk assessment should be carried out before handling any chemical(s). Risk assessments should refer to COSHH and any other relevant legislation or industry specific guidelines governing the use of chemicals. |

### SECTION 9: Physical and Chemical Properties

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

|   |   |
|---|---|
| <b>Appearance</b>                                   | Gel.  |
| <b>Colour</b>                                       | Colourless.                                       |
| <b>Odour</b>  | Characteristic.                                   |
| <b>Odour threshold</b>                              | Not applicable.                                   |
| <b>pH</b>   | Data lacking.                                     |
| <b>Melting point</b>                                | Not applicable.                                   |
| <b>Initial boiling point and range</b>              | Not applicable.                                   |
| <b>Flash point</b>                                  | 30°C  |
| <b>Evaporation rate</b>                             | Not applicable.                                   |
| <b>Evaporation factor</b>                           | Not applicable.                                   |
| <b>Flammability (solid, gas)</b>                    | Not applicable.                                   |
| <b>Upper/lower flammability or explosive limits</b> | Not applicable.                                   |
| <b>Other flammability</b>                           | FLAMMABLE   |
| <b>Vapour pressure</b>                              | Not applicable.                                   |
| <b>Vapour density</b>                               | Not applicable.                                   |
| <b>Relative density</b>                             | 0.870 - 0.880                                     |
| <b>Bulk density</b>                                 | Not applicable.                                   |
| <b>Solubility(ies)</b>                              | Soluble in water.                                 |
| <b>Partition coefficient</b>                        | Not technically practical for mixtures.           |
| <b>Auto-ignition temperature</b>                    | Not applicable.                                   |
| <b>Decomposition Temperature</b>                    | Not applicable.                                   |
| <b>Viscosity</b>                                    | Not determined.                                   |
| <b>Explosive properties</b>                         | Not applicable. Contains no Explosive Components. |
| <b>Explosive under the influence of a flame</b>     | Not considered to be explosive.                   |
| <b>Oxidising properties</b>                         | Not applicable. Contains no Oxidising Components. |

#### 9.2. Other information

## UNIVERSAL HAND SANITISER

|                                  |                             |
|----------------------------------|-----------------------------|
| <b>Refractive index</b>          | Not applicable.             |
| <b>Particle size</b>             | Not applicable.             |
| <b>Molecular weight</b>          | Not relevant.               |
| <b>Volatility</b>                | Not applicable.             |
| <b>Saturation concentration</b>  | Not applicable.             |
| <b>Critical temperature</b>      | Not applicable.             |
| <b>Volatile organic compound</b> | Not applicable.             |
| <b>Explosive Properties</b>      | Not Classified as Explosive |
| <b>Storage Temperature Range</b> | 0 - 30°C                    |

### SECTION 10: Stability and reactivity

#### 10.1. Reactivity

**Reactivity** Not expected to react when correctly stored and used. Mixing with other chemicals may produce unexpected reactions.

#### 10.2. Chemical stability

**Stability** Stable at normal ambient temperatures and when used as recommended. - See note 10.6.

#### 10.3. Possibility of hazardous reactions

**Possibility of hazardous reactions** FLAMMABLE. Refer to section 10.1.

#### 10.4. Conditions to avoid

**Conditions to avoid** Avoid heat, flames and other sources of ignition.

#### 10.5. Incompatible materials

**Materials to avoid** Strong acids. Oxidising agents.

#### 10.6. Hazardous decomposition products

**Hazardous decomposition products** Does not decompose when used and stored as recommended. - See section 10.5.

### SECTION 11: Toxicological information

#### 11.1. Information on toxicological effects

##### Acute toxicity - oral

**ATE oral (mg/kg)** 5,122.22

##### Acute toxicity - dermal

**ATE dermal (mg/kg)** 15,366.65

##### Acute toxicity - inhalation

**ATE inhalation (vapours mg/l)** 153.67

**General information** See section 4.2.

**Inhalation** Vapour may irritate respiratory system/lungs. Symptoms following overexposure may include the following: Headache. Fatigue. Nausea, vomiting. - See section 4.2.

**Ingestion** May cause nausea, headache, dizziness and intoxication. May cause discomfort if swallowed.

## UNIVERSAL HAND SANITISER

|                     |   |
|---------------------|---|
| <b>Skin contact</b> | May cause irritation. Long exposure may result in skin dryness. |
| <b>Eye contact</b>  | May irritate eyes.  |

### SECTION 12: Ecological Information

**Ecotoxicity** This product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

#### 12.1. Toxicity

**Toxicity** Normal use is not expected to pose an ecological risk.

#### 12.2. Persistence and degradability

**Persistence and degradability** The product is biodegradable.

#### 12.3. Bioaccumulative potential

**Bioaccumulative potential** Not expected to bioaccumulate.

**Partition coefficient** Not technically practical for mixtures.

#### 12.4. Mobility in soil

**Mobility** The product contains substances which are water soluble and may spread in water systems.

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

**Results of PBT and vPvB assessment** This product does not contain any substances classified as PBT or vPvB.

#### 12.6. Other adverse effects

**Other adverse effects** Not determined.

### SECTION 13: Disposal considerations

#### 13.1. Waste treatment methods

**General information** When handling waste, the safety precautions applying to handling of the product should be considered.

**Disposal methods** Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority.

### SECTION 14: Transport information

#### 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)



## UNIVERSAL HAND SANITISER

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

### 14.3. Transport hazard class(es)

|                                    |    |
|------------------------------------|----|
| <b>ADR/RID class</b>               | 3  |
| <b>ADR/RID classification code</b> | F1 |
| <b>ADR/RID label</b>               | 3  |
| <b>IMDG class</b>                  | 3  |
| <b>ICAO class/division</b>         | 3  |
| <b>ADN class</b>                   | 3  |

### Transport labels



### 14.4. Packing group

|                              |     |
|------------------------------|-----|
| <b>ADR/RID packing group</b> | III |
| <b>IMDG packing group</b>    | III |
| <b>ADN packing group</b>     | III |
| <b>ICAO packing group</b>    | III |

### 14.5. Environmental hazards

**Environmentally hazardous substance/marine pollutant**

No.

### 14.6. Special precautions for user

|   |          |
|---|----------|
| <b>EmS</b>                                    | F-E, S-D |
| <b>ADR transport category</b>                 | 3        |
| <b>Emergency Action Code</b>                  | •2Y      |
| <b>Hazard Identification Number (ADR/RID)</b> | 30       |
| <b>Tunnel restriction code</b>                | (D/E)    |

### 14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

#### SECTION 15: Regulatory information

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

|                       |   |
|-----------------------|---|
| <b>EU legislation</b> | European Regulation (EC) No 1272/2008 on Classification, Labelling and Packaging of Substances and Mixtures.<br>This replaces Directive 67/548/EEC - Classification, Packaging and Labelling of Dangerous Substances and Regulation (EC) No. 453/2010 relating to the Classification, Packaging and Labelling of Dangerous Preparations. Also considered is the REACH Regulation (EC) No.1907/2006. |
|-----------------------|---|

##### 15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

#### SECTION 16: Other information

## UNIVERSAL HAND SANITISER

|   |  |
|---|--|
| <b>Abbreviations and acronyms used in the safety data sheet</b> | (EC) No. 1272/2008 : EU Regulation on Classification, Labelling and Packaging of Substances and Mixtures.<br>NPIS - National Poisons Information Service.<br>vPvB - Very Persistent, Very bioaccumulative.<br>PBT - Persistent, Bioaccumulative & Toxic.<br>REACH - Registration, Evaluation, Authorisation & restriction of CHemicals (Regulation EC 1907/2006).<br>DNEL - Derived No Effect Limit.<br>PNEC - Predicted No Effect Concentration.<br>COSHH - Control of Substances Hazardous to Health.<br>Industry - Refers in section 8 to application of the substance in an industrial process.<br>Professional - Refers in section 8 to application/use of the preparation/product in a skilled trade premises. |
| <b>General information</b>                                      | This document is a Safety Data Sheet, NOT a CoSHH assessment. It is the customer's responsibility to conduct a full CoSHH assessment, taking into account the information held within this document along with other local factors considered in a risk assessment. The Risk and Hazard statements listed below are the full text of abbreviations used in this document. They are not the final classification, for this refer to section 2.  |
| <b>Revision comments</b>  | Review in line with CLP Regulation.  |
| <b>Revision date</b>  | 01/05/2015   |
| <b>SDS number</b>   | 22007  |
| <b>Hazard statements in full</b>                                | H225 Highly flammable liquid and vapour.<br>H226 Flammable liquid and vapour.<br>H301 Toxic if swallowed.<br>H304 May be fatal if swallowed and enters airways.<br>H311 Toxic in contact with skin.<br>H315 Causes skin irritation.<br>H331 Toxic if inhaled.<br>H336 May cause drowsiness or dizziness.<br>H370 Causes damage to organs .<br>H400 Very toxic to aquatic life.<br>H410 Very toxic to aquatic life with long lasting effects.   |
| <b>REACH extended MSDS comments</b>                             | REACH requires that persons handling chemicals should take the necessary risk management measures, in accordance with assessments from manufacturers and importers of chemical substances. The relevant recommendations must be passed along the supply chain. These assessments are generally reported in Exposure Scenarios. Where Exposure Scenarios have been provided for substances used in this product, the relevant information is incorporated into the safety data sheet.   |

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.