

## SAFETY DATA SHEET ADMIRAL GLASS CLEANER

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** ADMIRAL GLASS CLEANER

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

**Identified uses** Glass and mirror cleaner.

**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** Not Classified

**Health hazards** Not Classified

**Environmental hazards** Not Classified

#### 2.2. Label elements

**Hazard statements** NC Not Classified

**Supplemental label information** EUH210 Safety data sheet available on request.

#### 2.3. Other hazards

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

### SECTION 3: Composition/information on ingredients

#### 3.2. Mixtures

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|   |  |  |
|---|--|--|
| <b>2-BUTOXYETHANOL</b>  |  | <b>1-5%</b>                                      |
| CAS number: 111-76-2  | EC number: 203-905-0   | REACH registration number: 01-2119475108-36      |
| <b>Classification</b><br>Acute Tox. 4 - H302<br>Acute Tox. 4 - H312<br>Acute Tox. 4 - H332<br>Skin Irrit. 2 - H315<br>Eye Irrit. 2 - H319 | <b>Classification (67/548/EEC or 1999/45/EC)</b><br>Xn;R20/21/22 Xi;R36/38 |  |
| <b>1-METHOXY-2-PROPANOL</b>   |  | <b>1-5%</b>                                      |
| CAS number: 107-98-2  | EC number: 203-539-1   | REACH registration number: 01-2119457435-35-0000 |
| <b>Classification</b><br>Flam. Liq. 3 - H226<br>STOT SE 3 - H336  | <b>Classification (67/548/EEC or 1999/45/EC)</b><br>R10 R67                |  |

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>        | In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).  |
| <b>Inhalation</b>                 | Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Get medical attention if any discomfort continues.  |
| <b>Ingestion</b>                  | Do not induce vomiting. Rinse mouth thoroughly with water. Get medical attention immediately. Show this Safety Data Sheet to the medical personnel.  |
| <b>Skin contact</b>               | Remove contaminated clothing immediately and wash skin with soap and water. Get medical attention if irritation persists after washing.  |
| <b>Eye contact</b>                | Remove any contact lenses and open eyelids wide apart. Promptly wash eyes with plenty of water while lifting the eyelids. Continue to rinse for at least 15 minutes. Get medical attention if irritation persists after washing. |
| <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> | Prolonged contact may result in dryness of skin. Eye contact may result in redness and stinging discomfort.   |
| <b>Inhalation</b>          | Unlikely route of exposure. Inhalation of sprayed droplets may result in soreness of the throat, mouth and nose.  |
| <b>Ingestion</b>           | Unlikely route of exposure without deliberate abuse. There may be soreness and redness of mouth and throat. A soapy taste may be reported. May cause irritation/discomfort to mucous membranes. |

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**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 redness and irritation (stinging sensation) to 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, dry powder or water fog. Use fire-extinguishing media suitable for the surrounding fire.

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

**Specific hazards** On heating irritating fumes may be formed.

##### 5.3. Advice for firefighters

**Protective actions during firefighting** Protective clothing and respiratory protection should be worn when tackling fires involving this product. Control run-off water by containing and keeping it out of sewers and watercourses.

**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** Ensure adequate ventilation of the working area. 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 safe to do so. Contain and absorb spillage with sand, earth or other non-combustible material. Collect and place in suitable labelled containers and seal securely. For waste disposal, see Section 13.

##### 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** Refer to section 8. Ensure adequate ventilation of the working area. Wear suitable protective equipment for prolonged exposure and/or high concentrations of vapours, spray or mist.

##### 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. Store below 40°C.

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

**Specific end use(s)** Glass and mirror cleaner. Refer to Product Information Sheet.

**Usage description** Refer to use instructions.

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

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### 8.1. Control parameters

#### Occupational exposure limits

##### **2-BUTOXYETHANOL**

Long-term exposure limit (8-hour TWA): WEL 25 ppm(Sk)

Short-term exposure limit (15-minute): WEL 50 ppm(Sk)

##### **1-METHOXY-2-PROPANOL**

Long-term exposure limit (8-hour TWA): WEL 100 ppm(Sk) 375 mg/m<sup>3</sup>(Sk)

Short-term exposure limit (15-minute): WEL 150 ppm(Sk) 560 mg/m<sup>3</sup>(Sk)

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). Where a worker is exposed to levels approaching a limit, further exposure control measures should be considered to reduce exposure to the substance. 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.

#### **2-BUTOXYETHANOL (CAS: 111-76-2)**

|             |   |
|-------------|---|
| <b>DNEL</b> | Professional - Dermal; Acute systemic effects: 89 mg/kg bw/day<br>Professional - Dermal; Long term systemic effects: 75 mg/kg bw/day<br>Professional - Inhalation; Acute systemic effects: 246 mg/m <sup>3</sup><br>Professional - Inhalation; Long term systemic effects: 98 mg/m <sup>3</sup> |
| <b>PNEC</b> | - Fresh water; 8.8 mg/l<br>- Sediment (Freshwater); 34.6 mg/l<br>- Sediment (Marinewater); 3.46 mg/kg<br>- Marine water; 0.88 mg/l<br>- STP; 463 mg/l<br>- Soil; 2.8 mg/kg  |

#### **SODIUM ALKYL ETHER SULPHATE (CAS: 68891-38-3)**

|             |  |
|-------------|--|
| <b>DNEL</b> | Professional - Dermal; Long term systemic effects: 2750 mg/kg/day<br>Professional - Inhalation; Long term systemic effects: 175 mg/m <sup>3</sup><br>General population - Oral; Long term systemic effects: 15 mg/kg/day<br>General population - Dermal; Long term systemic effects: 1650 mg/kg/day<br>General population - Inhalation; Long term systemic effects: 52 mg/m <sup>3</sup> |
|-------------|--|

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### PNEC

- Fresh water; 0.24 mg/l
- Marine water; 0.024 mg/l
- Intermittent release; 0.071 mg/l
- Sediment (Freshwater); 5.45 mg/kg
- Sediment (Marinewater); 0.545 mg/kg
- Soil; 0.946 mg/kg
- STP; 10 g/l

### 8.2. Exposure controls

#### Protective equipment



#### Appropriate engineering controls

As this product contains ingredients with exposure limits, process enclosures, local exhaust ventilation or other engineering controls should be used to keep worker exposure below any statutory or recommended limits, if use generates dust, fumes, gas, vapour or mist.

#### 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. Where possible replace manual processes with automated or closed processes to minimise contact with the product.

#### Eye/face protection

Wear approved, tight fitting safety glasses where splashing is probable. Refer to EN Standard 166 to select appropriate level of protection.

#### Hand protection

Rubber (natural, latex). Neoprene. Polyvinyl chloride (PVC). Refer to Standard EN 374.

#### 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.

#### Respiratory protection

No specific recommendation made, but respiratory protection must be used if the general level exceeds the Workplace Exposure Limit.

#### Environmental exposure controls

Do not allow the substance to contaminate surface water/ground water. See points 6, 12 & 13.

#### General Health and Safety Measures.

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>      | Liquid                            |
| <b>Colour</b>          | Blue.                             |
| <b>Odour</b>           | Characteristic.                   |
| <b>Odour threshold</b> | Not applicable.                   |
| <b>pH</b>              | pH (concentrated solution): 6 - 8 |
| <b>Melting point</b>   | Not applicable.                   |

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|   |   |
|---|---|
| <b>Initial boiling point and range</b>              | Not applicable.   |
| <b>Flash point</b>                                  | 65°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>Vapour pressure</b>                              | Not applicable.   |
| <b>Vapour density</b>                               | Not applicable.   |
| <b>Relative density</b>                             | 0.995 - 1.005   |
| <b>Bulk density</b>                                 | Not applicable.   |
| <b>Solubility(ies)</b>                              | Soluble in water.   |
| <b>Partition coefficient</b>                        | Technically not feasible.                                   |
| <b>Auto-ignition temperature</b>                    | Not applicable.   |
| <b>Decomposition Temperature</b>                    | Not applicable.   |
| <b>Viscosity</b>                                    | Not determined.   |
| <b>Explosive properties</b>                         | Not applicable.   |
| <b>Explosive under the influence of a flame</b>     | Not considered to be explosive.                             |
| <b>Oxidising properties</b>                         | Does not meet the criteria for classification as oxidising. |

### 9.2. Other information

|                                  |                             |
|----------------------------------|-----------------------------|
| <b>Refractive index</b>          | Not applicable.             |
| <b>Particle size</b>             | Not applicable.             |
| <b>Molecular weight</b>          | Not applicable.             |
| <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 - 40°C                    |

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

|                   |   |
|-------------------|---|
| <b>Reactivity</b> | Not expected to react when correctly stored and used. Mixing with other chemicals may produce unexpected reactions. |
|-------------------|---|

### 10.2. Chemical stability

|                  |  |
|------------------|--|
| <b>Stability</b> | Stable at normal ambient temperatures and when used as recommended. - See note 10.6. |
|------------------|--|

### 10.3. Possibility of hazardous reactions

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**Possibility of hazardous reactions** 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. Chlorinated detergents.

### 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)** 44,368.60068259

#### Acute toxicity - dermal

**ATE dermal (mg/kg)** 37,542.66211604

#### Acute toxicity - inhalation

**ATE inhalation (gases ppm)** 153,583.61774744

**ATE inhalation (vapours mg/l)** 375.42662116

**ATE inhalation (dusts/mists mg/l)** 51.19453925

**General information** See section 4.2.

**Inhalation** Unlikely route of exposure. Inhalation of sprayed droplets may result in soreness of the throat, mouth and nose. - See section 4.2.

**Ingestion** Unlikely route of exposure without deliberate abuse. There may be soreness and redness of mouth and throat. A soapy taste may be reported. May cause irritation/discomfort to mucous membranes.

**Skin contact** Under normal conditions of use exposure time will be short and the likelihood of causing skin irritation will be very low. Long exposure may result in skin dryness.

**Eye contact** May cause irritation to 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

**Acute toxicity - fish** Normal use of diluted product is unlikely to pose a risk.  
See note 12.0.

### 12.2. Persistence and degradability

**Persistence and degradability** The surfactant(s) used in this preparation complies (comply) with the biodegradability criteria as laid down in the European Detergents Regulation No 648/2004 as amended.

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### 12.3. Bioaccumulative potential

**Bioaccumulative potential** Not expected to bioaccumulate.

**Partition coefficient** Technically not feasible.

### 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. Do not mix with other chemicals.

**Disposal methods** Disposal of this product, process solutions, residues and by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any local authority requirements. Small volumes of use solution can be disposed of to sewers.

## SECTION 14: Transport information

**General** The product is not covered by international regulations on the transport of dangerous goods (IMDG, IATA, ADR/RID).

### 14.1. UN number

Not applicable.

### 14.2. UN proper shipping name

Not applicable.

### 14.3. Transport hazard class(es)

No transport warning sign required.

### 14.4. Packing group

Not applicable.

### 14.5. Environmental hazards

**Environmentally hazardous substance/marine pollutant**

No.

### 14.6. Special precautions for user

Not applicable.

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

**Transport in bulk according to** Not applicable.

**Annex II of MARPOL 73/78**

**and the IBC Code**

## SECTION 15: Regulatory information



## ADMIRAL GLASS CLEANER

### 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

|   |  |
|---|--|
| <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>   | 21026  |
| <b>Hazard statements in full</b>                                | H226 Flammable liquid and vapour.<br>H302 Harmful if swallowed.<br>H312 Harmful in contact with skin.<br>H315 Causes skin irritation.<br>H319 Causes serious eye irritation.<br>H332 Harmful if inhaled.<br>H336 May cause drowsiness or dizziness.  |
| <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.<br>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.