



## SAFETY DATA SHEET ARBO GLASS CLEANER

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

#### 1.1. Product identifier

Product name ARBO GLASS CLEANER

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

Identified uses General purpose glass cleaner.

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

Supplier Adshead Ratcliffe & Co. Ltd.  
Derby Road, Belper  
Derbyshire.  
DE56 1WJ  
Tel. (+44) 01773 826661  
Fax. (+44) 01773 821215  
sds@arbo.co.uk

#### 1.4. Emergency telephone number

Emergency telephone (+44) 01773 826661 (office hours only)

### SECTION 2: Hazards identification

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

##### Classification (EC 1272/2008)

Physical hazards Not Classified  
Health hazards Eye Irrit. 2 - H319  
Environmental hazards Not Classified

#### 2.2. Label elements

##### Pictogram



Signal word Warning

Hazard statements H319 Causes serious eye irritation.

Precautionary statements P102 Keep out of reach of children.  
P264 Wash hands thoroughly after handling.  
P280 Wear eye protection.  
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P337+P313 If eye irritation persists: Get medical advice/ attention.

#### 2.3. Other hazards

Although a quantity of a flammable material is present, this mixture is non- flammable as supplied.

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### SECTION 3: Composition/information on ingredients

#### 3.2. Mixtures

<b>PROPAN-2-OL</b>	<b>10-30%</b>
CAS number: 67-63-0	EC number: 200-661-7
<b>Classification</b> Flam. Liq. 2 - H225 Eye Irrit. 2 - H319 STOT SE 3 - H336	
<b>2-BUTOXYETHANOL</b>	<b>5-10%</b>
CAS number: 111-76-2	EC number: 203-905-0
<b>Classification</b> Acute Tox. 4 - H302 Acute Tox. 4 - H312 Acute Tox. 4 - H332 Skin Irrit. 2 - H315 Eye Irrit. 2 - H319	

The full text for all hazard statements is displayed in Section 16.

### SECTION 4: First aid measures

#### 4.1. Description of first aid measures

<b>General information</b>	In all cases of doubt, or if symptoms persist, seek medical attention. Never give anything by mouth to an unconscious person.
<b>Inhalation</b>	If inhalation causes adverse effects, remove to fresh air.
<b>Ingestion</b>	Rinse mouth thoroughly with water.
<b>Skin contact</b>	Wash skin thoroughly with soap and water. Get medical attention if any discomfort continues.
<b>Eye contact</b>	Rinse immediately with plenty of water. Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 15 minutes. Get medical attention if any discomfort continues.

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

<b>Inhalation</b>	No specific symptoms known.
<b>Ingestion</b>	May cause discomfort if swallowed. May cause irritation to mouth, throat and stomach.
<b>Skin contact</b>	Prolonged skin contact may cause temporary irritation.
<b>Eye contact</b>	Irritating and may cause redness and pain. May cause serious eye damage.

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

<b>Notes for the doctor</b>	No specific recommendations.
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### SECTION 5: Firefighting measures

#### 5.1. Extinguishing media

**Suitable extinguishing media** Use fire-extinguishing media suitable for the surrounding fire.

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**Unsuitable extinguishing media**            None known.

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

**Specific hazards**                            No unusual fire or explosion hazards noted.

**Hazardous combustion products**            Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours.

### 5.3. Advice for firefighters

**Protective actions during firefighting**            Avoid breathing fire gases or vapours. Keep up-wind to avoid fumes. Containers close to fire should be removed or cooled with water.

**Special protective equipment for firefighters**            Wear self contained breathing apparatus.

## 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**            Avoid the spillage or runoff entering drains, sewers or watercourses.

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

**Methods for cleaning up**                Contain and absorb spillage with sand, earth or other non-combustible material.

### 6.4. Reference to other sections

**Reference to other sections**            Wear protective clothing as described in Section 8 of this safety data sheet. See Section 11 for additional information on health hazards. For waste disposal, see section 13.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

**Usage precautions**                        Avoid spilling, skin and eye contact.

**Advice on general occupational hygiene**            Good personal hygiene procedures should be implemented.

### 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.

**Storage class**                              Unspecified storage.

### 7.3. Specific end use(s)

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

**Usage description**                        Wipe-on, wipe-off application.

## SECTION 8: Exposure Controls/personal protection

### 8.1. Control parameters

#### Occupational exposure limits

#### **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>

#### **2-BUTOXYETHANOL**

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

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

WEL = Workplace Exposure Limit

**Ingredient comments** DNEL and PNEC values given for Propan-2-ol

**DNEL**

Industry - Dermal; : 888 mg/kg/day  
 Industry - Inhalation; : 500 mg/m<sup>3</sup>  
 Consumer - Dermal; : 319 mg/kg/day  
 Consumer - Inhalation; : 89 mg/m<sup>3</sup>  
 Consumer - Oral; : 26 mg/kg/day

**PNEC**

- Fresh water; 140.9 mg/l  
 - Marine water; 140.9 mg/l  
 - Sediment; 552 mg/kg  
 - Soil; 28 mg/kg

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

**DNEL**

Workers - Inhalation; Long term systemic effects: 98 mg/m<sup>3</sup>  
 Workers - Inhalation; Short term systemic effects: 1091 mg/m<sup>3</sup>  
 Workers - Inhalation; Short term local effects: 246 mg/m<sup>3</sup>  
 Workers - Dermal; Long term systemic effects: 125 mg/kg/day  
 Workers - Dermal; Short term systemic effects: 89 mg/kg/day  
 General population - Inhalation; Long term systemic effects: 59 mg/m<sup>3</sup>  
 General population - Inhalation; Short term systemic effects: 426 mg/m<sup>3</sup>  
 General population - Inhalation; Long term local effects: 147 mg/m<sup>3</sup>  
 General population - Dermal; Long term systemic effects: 75 mg/kg/day  
 General population - Dermal; Short term systemic effects: 89 mg/kg/day  
 General population - Oral; Long term systemic effects: 6.3 mg/kg/day  
 General population - Oral; Short term systemic effects: 26.7 mg/kg/day

**PNEC**

- Fresh water; 8.8 mg/l  
 - Marine water; 0.88 mg/l  
 - Intermittent release; 9.1 mg/l  
 - STP; 463 mg/l  
 - Sediment (Freshwater); 34.6 mg/kg  
 - Sediment (Marinewater); 3.46 mg/kg  
 - Soil; 2.33 mg/kg  
 - Oral (food); 0.02 g/kg

### 8.2. Exposure controls

#### Protective equipment



#### Eye/face protection

Wear eye protection. Personal protective equipment for eye and face protection should comply with European Standard EN166.

#### Hand protection

Use protective gloves. The most suitable glove should be chosen in consultation with the glove supplier/manufacturer, who can provide information about the breakthrough time of the glove material. To protect hands from chemicals, gloves should comply with European Standard EN374.

#### Other skin and body protection

Provide eyewash station.

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**Hygiene measures** Wash at the end of each work shift and before eating, smoking and using the toilet. Wash promptly if skin becomes contaminated.

**Respiratory protection** Respiratory protection not required.

### 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>	Alcoholic.
<b>Odour threshold</b>	No specific test data are available.
<b>pH</b>	Not applicable.
<b>Melting point</b>	No specific test data are available.
<b>Initial boiling point and range</b>	100°C @ 760 mm Hg
<b>Flash point</b>	60 - 93°C
<b>Evaporation rate</b>	No specific test data are available.
<b>Upper/lower flammability or explosive limits</b>	No specific test data are available.
<b>Vapour pressure</b>	Not applicable.
<b>Vapour density</b>	No specific test data are available.
<b>Relative density</b>	0.92 @ 25°C
<b>Solubility(ies)</b>	Soluble in water. Soluble in organic solvents.
<b>Partition coefficient</b>	Not applicable.
<b>Auto-ignition temperature</b>	Not applicable.
<b>Decomposition Temperature</b>	Not determined.
<b>Viscosity</b>	Comparable with water.
<b>Explosive properties</b>	Not applicable.
<b>Oxidising properties</b>	Not applicable.

#### 9.2. Other information

**Other information** None.

### 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.

#### 10.3. Possibility of hazardous reactions

**Possibility of hazardous reactions** No potentially hazardous reactions known.

#### 10.4. Conditions to avoid

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**Conditions to avoid** There are no known conditions that are likely to result in a hazardous situation.

### 10.5. Incompatible materials

**Materials to avoid** No specific material or group of materials is likely to react with the product to produce a hazardous situation.

### 10.6. Hazardous decomposition products

**Hazardous decomposition products** Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours. Oxides of carbon.

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

#### Acute toxicity - oral

**Notes (oral LD<sub>50</sub>)** LD<sub>50</sub> Propan-2-ol: 4700 mg/kg, Oral, Rat

**ATE oral (mg/kg)** 10,204.08

#### Acute toxicity - dermal

**ATE dermal (mg/kg)** 22,448.98

#### Acute toxicity - inhalation

**Notes (inhalation LC<sub>50</sub>)** Propan-2-ol: 46.5 (4h) mg/l, Inhalation, Rat

**ATE inhalation (gases ppm)** 91,836.73

**ATE inhalation (vapours mg/l)** 224.49

**ATE inhalation (dusts/mists mg/l)** 30.61

#### Skin corrosion/irritation

**Animal data** Based on available data the classification criteria are not met.

#### Serious eye damage/irritation

**Serious eye damage/irritation** Based on available data the classification criteria are not met.

#### Respiratory sensitisation

**Respiratory sensitisation** Based on available data the classification criteria are not met.

#### Germ cell mutagenicity

**Genotoxicity - in vitro** Does not contain any substances known to be mutagenic.

#### Carcinogenicity

**Carcinogenicity** Does not contain any substances known to be carcinogenic.

#### Reproductive toxicity

**Reproductive toxicity - fertility** Does not contain any substances known to be toxic to reproduction.

#### 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.

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<b>Inhalation</b>	No specific health hazards known.
<b>Ingestion</b>	May cause discomfort if swallowed.
<b>Skin contact</b>	May be slightly irritating to skin.
<b>Eye contact</b>	Causes serious eye irritation.

### SECTION 12: Ecological Information

**Ecotoxicity** Not regarded as dangerous for the environment.

#### 12.1. Toxicity

**Toxicity** There are no data for the product.

**Acute toxicity - fish** LC<sub>50</sub>, 48 hours: Propan-2-ol: >100 mg/l, Leuciscus idus (Golden orfe)

**Acute toxicity - aquatic invertebrates** EC<sub>50</sub>, 48 hours: Propan-2-ol: >100 mg/l, Daphnia magna

**Acute toxicity - aquatic plants** IC<sub>50</sub>, 72 hours: Propan-2-ol: >100 mg/l, Fish

#### 12.2. Persistence and degradability

**Persistence and degradability** There are no data on the degradability of this product.

#### 12.3. Bioaccumulative potential

**Bioaccumulative potential** Bioaccumulation in aquatic organisms is not expected.

**Partition coefficient** Not applicable.

#### 12.4. Mobility in soil

**Mobility** The product is soluble in water.

#### 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** None known.

### 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. Discharge of small quantities to the sewer with plenty of water may be permitted.

**Waste class** HP4 Irritant

### 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

No information required.

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### 14.2. UN proper shipping name

No information required.

### 14.3. Transport hazard class(es)

No information required.

### 14.4. Packing group

No information required.

### 14.5. Environmental hazards

#### **Environmentally hazardous substance/marine pollutant**

No information required.

### 14.6. Special precautions for user

No information required.

### 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 No information required.

## SECTION 15: Regulatory information

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

**EU legislation** Regulation (EC) 1907/2006 REACH (as amended).  
Regulation (EC) 1272/2008 CLP (as amended).

**Guidance** Workplace Exposure Limits EH40.

### 15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

## SECTION 16: Other information

<b>Revision comments</b>	General review
<b>Revision date</b>	09/05/2017
<b>Revision</b>	1
<b>Supersedes date</b>	26/11/2012
<b>SDS number</b>	10016
<b>Hazard statements in full</b>	H225 Highly flammable liquid and vapour. H302 Harmful if swallowed. H312 Harmful in contact with skin. H315 Causes skin irritation. H319 Causes serious eye irritation. H332 Harmful if inhaled. H336 May cause drowsiness or dizziness.

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.