



SAFETY DATA SHEET ARBO CLEANER No. 16

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

1.1. Product identifier

Product name ARBO CLEANER No. 16

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

Identified uses Cleaning agent. Solvent

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 Flam. Liq. 2 - H225
Health hazards Eye Irrit. 2 - H319 STOT SE 3 - H336
Environmental hazards Not Classified

2.2. Label elements

Pictogram



Signal word Danger

Hazard statements H225 Highly flammable liquid and vapour.
H319 Causes serious eye irritation.
H336 May cause drowsiness or dizziness.

Precautionary statements P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P261 Avoid breathing vapours.
P280 Wear eye protection.
P337+P313 If eye irritation persists: Get medical advice/ attention.
P403+P233 Store in a well-ventilated place. Keep container tightly closed.
P501 Dispose of contents/ container in accordance with national regulations.

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Contains PROPAN-2-OL

2.3. Other hazards

SECTION 3: Composition/information on ingredients

3.2. Mixtures

PROPAN-2-OL	60-100%
CAS number: 67-63-0	EC number: 200-661-7
Classification Flam. Liq. 2 - H225 Eye Irrit. 2 - H319 STOT SE 3 - H336	

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

SECTION 4: First aid measures

4.1. Description of first aid measures

General information	In all cases of doubt, or if symptoms persist, seek medical attention. Never give anything by mouth to an unconscious person.
Inhalation	Move affected person to fresh air at once. Get medical attention if any discomfort continues.
Ingestion	Rinse mouth thoroughly with water. Give plenty of water to drink. Give milk instead of water if readily available. DO NOT induce vomiting. Get medical attention immediately.
Skin contact	Remove contaminated clothing immediately and wash skin with soap and water. Get medical attention if any discomfort continues.
Eye contact	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

Inhalation	Vapours may cause drowsiness and dizziness. Irritation of nose, throat and airway.
Ingestion	May cause stomach pain or vomiting. May cause nausea, headache, dizziness and intoxication.
Skin contact	Prolonged contact may cause redness, irritation and dry skin.
Eye contact	Irritation of eyes and mucous membranes.

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	Extinguish with alcohol-resistant foam, carbon dioxide or dry powder. Water spray, fog or mist.
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 Highly flammable liquid and vapour.

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

5.3. Advice for firefighters

Protective actions during firefighting Keep up-wind to avoid fumes. Fight fire from safe distance or protected location. Move containers from fire area if it can be done without risk. Cool containers exposed to flames with water until well after the fire is out. 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 Wear appropriate protective clothing. Avoid inhalation of vapours and contact with skin and eyes. Eliminate all sources of ignition.

6.2. Environmental precautions

Environmental precautions Avoid the spillage or runoff entering drains, sewers or watercourses. Avoid or minimise the creation of any environmental contamination. Contain spillage with sand, earth or other suitable non-combustible material.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up Wear suitable protective equipment, including gloves, goggles/face shield, respirator, boots, clothing or apron, as appropriate. Eliminate all sources of ignition. No smoking, sparks, flames or other sources of ignition near spillage. Provide adequate ventilation. Absorb spillage with non-combustible, absorbent material. Avoid the spillage or runoff entering drains, sewers or watercourses. Caution - spillages may be slippery. Inform authorities if large amounts are involved.

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. For waste disposal, see section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Usage precautions Avoid spilling. Avoid contact with skin and eyes. Avoid inhalation of vapours. Do not use in confined spaces without adequate ventilation and/or respirator. Good personal hygiene procedures should be implemented. Keep away from heat, sparks and open flame. Static electricity and formation of sparks must be prevented. Contaminated rags and cloths must be put in fireproof containers for disposal.

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 oxidising materials, heat and flames. May attack some plastics, rubber and coatings.

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.

Usage description Wipe-on, wipe-off application.

SECTION 8: Exposure Controls/personal protection

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8.1. Control parameters

Occupational exposure limits

PROPAN-2-OL

Long-term exposure limit (8-hour TWA): WEL 400 ppm 999 mg/m³

Short-term exposure limit (15-minute): WEL 500 ppm 1250 mg/m³

WEL = Workplace Exposure Limit

DNEL

Industry - Dermal; Long term systemic effects: 888 mg/kg/day

Industry - Inhalation; Long term systemic effects: 500 mg/m³

Consumer - Dermal; Long term systemic effects: 319 mg/kg/day

Consumer - Inhalation; Long term systemic effects: 89 mg/m³

Consumer - Oral; Long term systemic effects: 26 mg/kg/day

PNEC

- Fresh water; Long term 140.9 mg/l

- Marine water; Long term 140.9 mg/l

- Sediment; Long term 552 mg/kg

- Soil; Long term 28 mg/kg

8.2. Exposure controls

Protective equipment



Appropriate engineering controls

Provide adequate ventilation. Avoid inhalation of vapours. Observe any occupational exposure limits for the product or ingredients.

Eye/face protection

The following protection should be worn: Chemical splash goggles.

Hand protection

Wear protective gloves. It is recommended that gloves are made of the following material: Polyvinyl chloride (PVC). 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. Wear appropriate clothing to prevent repeated or prolonged skin contact.

Hygiene measures

Provide eyewash station and safety shower. Use engineering controls to reduce air contamination to permissible exposure level. Wash at the end of each work shift and before eating, smoking and using the toilet. Promptly remove any clothing that becomes contaminated. When using do not eat, drink or smoke.

Respiratory protection

Respiratory protection must be used if the airborne contamination exceeds the recommended occupational exposure limit. Chemical respirator with organic vapour cartridge and full facepiece.

Environmental exposure controls

Residues and empty containers should be taken care of as hazardous waste according to local and national provisions.

SECTION 9: Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

Appearance

Liquid.

Colour

Colourless.

Odour

Alcoholic.

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Odour threshold	Lower 3 ppm Upper 60 ppm
pH	Not applicable.
Melting point	-89°C
Initial boiling point and range	82°C @
Flash point	12°C OC (Open cup).
Evaporation rate	2.93 (butyl acetate = 1)
Evaporation factor	«184»
Upper/lower flammability or explosive limits	Upper flammable/explosive limit: 12 g/100 g Lower flammable/explosive limit: 2 g/100 g
Vapour pressure	42 hPa @ 20°C
Vapour density	2.1
Relative density	0.785 @ 20°C
Solubility(ies)	Miscible with water.
Partition coefficient	log Pow: 0.05
Auto-ignition temperature	>399°C
Decomposition Temperature	Not available.
Viscosity	2.65 cSt @ 20°C
Explosive properties	Above flash point, vapour - air mixtures are explosive within flammable limits noted above.
Oxidising properties	Does not meet the criteria for classification as oxidising.

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 Not known. Will not polymerise.

10.4. Conditions to avoid

Conditions to avoid Avoid heat, flames and other sources of ignition. Avoid excessive heat for prolonged periods of time.

10.5. Incompatible materials

Materials to avoid Strong oxidising agents.

10.6. Hazardous decomposition products

Hazardous decomposition products None at ambient temperatures. Oxides of carbon. Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours.

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SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity - oral

Notes (oral LD₅₀) LD₅₀ 4700 mg/kg, Oral, Rat LD₅₀ >2000 mg/kg, Oral, Rabbit

Acute toxicity - inhalation

Notes (inhalation LC₅₀) LD₅₀ 46.5 mg/l/4hr/day, Inhalation, Rat

Skin corrosion/irritation

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

Serious eye damage/irritation

Serious eye damage/irritation Moderately irritating.

Skin sensitisation

Skin sensitisation Buehler test - Guinea pig: Not sensitising.

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.

General information

Prolonged and repeated contact with solvents over a long period may lead to permanent health problems.

Inhalation

Vapours may cause drowsiness and dizziness.

Ingestion

May cause stomach pain or vomiting. May cause nausea, headache, dizziness and intoxication.

Skin contact

Repeated exposure may cause skin dryness or cracking.

Eye contact

Irritating to eyes.

Route of entry

Inhalation Ingestion. Skin and/or eye contact

Target organs

Central nervous system Eyes Gastro-intestinal tract Respiratory system, lungs Skin

Medical symptoms

Irritation of eyes and mucous membranes. Liquid irritates mucous membranes and may cause abdominal pain if swallowed. Drowsiness, dizziness, disorientation, vertigo.

Medical considerations

Skin disorders and allergies. Central nervous system depression.

SECTION 12: Ecological Information

Ecotoxicity

The product components are not classified as environmentally hazardous. However, large or frequent spills may have hazardous effects on the environment.

12.1. Toxicity

Acute toxicity - fish

LC₅₀, 48 hours: >100 mg/l, *Leuciscus idus* (Golden orfe)
LC₅₀, 96 hours: 9640 -10400 mg/l, *Pimephales promelas* (Fat-head Minnow)

Acute toxicity - aquatic invertebrates

EC₅₀, 48 hours: >100 mg/l, *Daphnia magna*

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Acute toxicity - aquatic plants IC₅₀, 72 hours: >100 mg/l, Fish

12.2. Persistence and degradability

Persistence and degradability The product is readily biodegradable. Propan-2-ol: DOC > 99.9% (OECD 303A)

12.3. Bioaccumulative potential

Bioaccumulative potential This product is not expected to significantly bioaccumulate.

Partition coefficient log Pow: 0.05

12.4. Mobility in soil

Mobility The product is miscible with water 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 known.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

General information Waste is classified as hazardous waste. Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority. When handling waste, the safety precautions applying to handling of the product should be considered. Materials such as cleaning rags and paper wipes that are contaminated with flammable liquids may self-ignite after use and should be stored in designated fireproof containers with tight-fitting, self-closing lids.

Disposal methods Absorb in vermiculite, dry sand or earth and place into containers. Dispose of waste via a licensed waste disposal contractor. Confirm disposal procedures with environmental engineer and local regulations.

Waste class HP3 Flammable HP4 Irritant Recommended EWC Code 14 06 03*

SECTION 14: Transport information

14.1. UN number

UN No. (ADR/RID) 1219

UN No. (IMDG) 1219

UN No. (ICAO) 1219

UN No. (ADN) 1219

14.2. UN proper shipping name

Proper shipping name (ADR/RID) ISOPROPANOL (ISOPROPYL ALCOHOL)

Proper shipping name (IMDG) ISOPROPANOL (ISOPROPYL ALCOHOL)

Proper shipping name (ICAO) ISOPROPANOL (ISOPROPYL ALCOHOL)

Proper shipping name (ADN) ISOPROPANOL (ISOPROPYL ALCOHOL)

14.3. Transport hazard class(es)

ADR/RID class 3

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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

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

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

Revision comments	General review
Revision date	05/05/2017

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Revision	1
Supersedes date	01/06/2015
SDS number	10019
Hazard statements in full	H225 Highly flammable liquid and vapour. H319 Causes serious eye irritation. 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.