



## SAFETY DATA SHEET ARBO CLEANER No. 16

According to the REACH etc. (Amendment etc.) (EU Exit) Regulations 2020 No. 1577, as amended.

### 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. For further information, see attached Exposure Scenario.

**Uses advised against** Restricted to professional users.

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

**Supplier** Adshead Ratcliffe & Co. Ltd.  
Derby Road, Belper  
Derbyshire.  
DE56 1WJ  
T: (+44) 01773 826661  
F: (+44) 01773 821215  
E: sds.carlisle@ccm-europe.com

#### 1.4. Emergency telephone number

**Emergency telephone** NPIS (National Poisons Information Service): 0344 892 0111 (for medical professionals only).  
For medical advice, members of the public should contact NHS 111 in England: 111; NHS 24 in Scotland: 111; NHS Direct in Wales: 111 or 0845 4647. In Northern Ireland: contact your local GP or pharmacist.

### SECTION 2: Hazards identification

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

##### Classification (SI 2019 No. 720)

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

#### 2.2. Label elements

##### Hazard pictograms



**Signal word** Danger

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

## ARBO CLEANER No. 16

**Precautionary statements**

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P261 Avoid breathing vapour/ spray.

P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.

P312 Call a POISON CENTRE/doctor if you feel unwell.

P337+P313 If eye irritation persists: Get medical advice/ attention.

P403+P235 Store in a well-ventilated place. Keep cool.

**Contains** Propan-2-ol

### 2.3. Other hazards

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

## SECTION 3: Composition/information on ingredients

### 3.1. Substances

<b>Propan-2-ol</b>	<b>100%</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	

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

**Product name** ARBO CLEANER No. 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.

## ARBO CLEANER No. 16

### SECTION 5: Firefighting measures

#### 5.1. Extinguishing media

**Suitable extinguishing media** Alcohol-resistant foam. Carbon dioxide (CO<sub>2</sub>). Dry chemicals, sand, dolomite etc. Water spray.

**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.

**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** Cool containers exposed to flames with water until well after the fire is out. Use water spray to reduce vapours. If risk of water pollution occurs, notify appropriate authorities. Do not use water jet as an extinguisher, as this will spread the fire. Fight fire from safe distance or protected location. Move containers from fire area if it can be done without risk. 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 suitable protective equipment, including gloves, goggles/face shield, respirator, boots, clothing or apron, as appropriate. Provide adequate ventilation. No smoking, sparks, flames or other sources of ignition near spillage.

#### 6.2. Environmental precautions

**Environmental precautions** Do not discharge into drains or watercourses or onto the ground.

#### 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. Collect and place in suitable waste disposal containers and seal securely. 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** Keep away from heat, sparks and open flame. Provide adequate ventilation. Avoid contact with skin and eyes. Avoid inhalation of vapours. Wear protective clothing as described in Section 8 of this safety data sheet. Vapours may accumulate on the floor and in low-lying areas. Do not use in confined spaces without adequate ventilation and/or respirator. Good personal hygiene procedures should be implemented. Contaminated rags and cloths must be put in fireproof containers for disposal.

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

## ARBO CLEANER No. 16

<b>Storage precautions</b>	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.
<b>Storage class</b>	Flammable liquid storage.
<b>7.3. Specific end use(s)</b>	
<b>Specific end use(s)</b>	The identified uses for this product are detailed in Section 1.2.
<b>Usage description</b>	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>

WEL = Workplace Exposure Limit.

<b>DNEL</b>	Industry - Dermal; Long term systemic effects: 888 mg/kg/day Industry - Inhalation; Long term systemic effects: 500 mg/m <sup>3</sup> Consumer - Dermal; Long term systemic effects: 319 mg/kg/day Consumer - Inhalation; Long term systemic effects: 89 mg/m <sup>3</sup> Consumer - Oral; Long term systemic effects: 26 mg/kg/day
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<b>PNEC</b>	- 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
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#### Propan-2-ol (CAS: 67-63-0)

<b>DNEL</b>	Workers - Inhalation; Long term systemic effects: 500 mg/m <sup>3</sup> Workers - Dermal; Long term systemic effects: 888 mg/kg/day
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<b>PNEC</b>	Fresh water; 140.9 mg/l Intermittent release; 140.9 mg/l marine water; 140.9 mg/l STP; 2251 mg/l Sediment (Freshwater); 552 mg/kg Sediment (Marinewater); 552 mg/kg Soil; 28 mg/kg Oral (food); 160 mg/kg food
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#### 8.2. Exposure controls

##### Protective equipment



##### Appropriate engineering controls

Provide adequate general and local exhaust ventilation. Mechanical ventilation or local exhaust ventilation may be required.

##### Eye/face protection

Wear chemical splash goggles. Personal protective equipment that provides appropriate eye and face protection should be worn.

## ARBO CLEANER No. 16

<b>Hand protection</b>	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, wear gloves that are proven to be impervious to the chemical and resist degradation. It should be noted that liquid may penetrate the gloves. Frequent changes are recommended.
<b>Other skin and body protection</b>	Use engineering controls to reduce air contamination to permissible exposure level. Provide eyewash station and safety shower. Wear appropriate clothing to prevent any possibility of liquid contact and repeated or prolonged vapour contact.
<b>Hygiene measures</b>	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. Wash promptly if skin becomes contaminated.
<b>Respiratory protection</b>	Respiratory protection must be used if the airborne contamination exceeds the recommended occupational exposure limit. CCROVF, CCR with organic vapour respirator and full face piece
<b>Environmental exposure controls</b>	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

<b>Appearance</b>	Liquid.
<b>Colour</b>	Colourless.
<b>Odour</b>	Alcoholic.
<b>Odour threshold</b>	No information available.
<b>pH</b>	Technically not feasible.
<b>Melting point</b>	Technically not feasible.
<b>Initial boiling point and range</b>	82°C
<b>Flash point</b>	12°C
<b>Evaporation rate</b>	4 (butyl acetate = 1)
<b>Flammability (solid, gas)</b>	Technically not feasible.
<b>Upper/lower flammability or explosive limits</b>	Upper flammable/explosive limit: 12 g/100 g Lower flammable/explosive limit: 2 g/100 g
<b>Vapour pressure</b>	4 kPa @ 20°C
<b>Vapour density</b>	2.0
<b>Relative density</b>	0.7855 @ 20°C
<b>Solubility(ies)</b>	Miscible with the following materials: Organic solvents. Miscible with water.
<b>Partition coefficient</b>	: 0.05
<b>Auto-ignition temperature</b>	>399°C
<b>Decomposition Temperature</b>	Not available.
<b>Viscosity</b>	1.8 cSt @ 40°C 3.1 cSt @ 20°C
<b>Explosive properties</b>	Above flash point, vapour - air mixtures are explosive within flammable limits noted above.

## ARBO CLEANER No. 16

**Oxidising properties** Does not meet the criteria for classification as oxidising.

### 9.2. Other information

**Other information** None.

**Refractive index** 1.376 - 1.378

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

**Reactivity** See Section 10.3 (Possibility of hazardous reactions) for further information.

### 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** 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. Does not decompose when used and stored as recommended. Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours.

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

#### Acute toxicity - oral

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

**Acute toxicity oral (LD<sub>50</sub> mg/kg)** 5,840.0

**Species** Rat

#### Acute toxicity - dermal

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

**Acute toxicity dermal (LD<sub>50</sub> mg/kg)** 13,900.0

**Species** Rabbit

**ATE dermal (mg/kg)** 13,900.0

#### Acute toxicity - inhalation

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

**Acute toxicity inhalation (LC<sub>50</sub> vapours mg/l)** 25.0

**Species** Rat

## ARBO CLEANER No. 16

### Skin corrosion/irritation

**Skin corrosion/irritation** Based on available data the classification criteria are not met.

### Serious eye damage/irritation

**Serious eye damage/irritation** Eye Irrit. 2 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. Buehler test - Guinea pig: Not sensitising.

### Germ cell mutagenicity

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

### Carcinogenicity

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

### Reproductive toxicity

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

### Specific target organ toxicity - single exposure

**STOT - single exposure** STOT SE 3 - H336 May cause drowsiness or dizziness.

### Specific target organ toxicity - repeated exposure

**STOT - repeated exposure** Based on available data the classification criteria are not met.

### Aspiration hazard

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

### **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.

### **Acute and chronic health hazards**

Symptoms following overexposure may include the following: Irritation of eyes and mucous membranes. Narcotic effect. A single exposure may cause the following adverse effects: Central nervous system depression.

### **Route of exposure**

Inhalation Ingestion. Skin and/or eye contact

### **Target organs**

Central nervous system Eyes Respiratory system, lungs Skin

### **Medical symptoms**

Irritation of eyes and mucous membranes. Dilated pupils. Rhinitis (inflammation of the nasal mucous membranes). General respiratory distress, unproductive cough. Central nervous system depression. Drowsiness, dizziness, disorientation, vertigo.

### **Medical considerations**

Skin disorders and allergies. Central nervous system depression.

## SECTION 12: Ecological information

## ARBO CLEANER No. 16

**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 aquatic toxicity

**Acute toxicity - fish** LC<sub>50</sub>, 96 hours: 9640 mg/l, Pimephales promelas (Fat-head Minnow)

**Acute toxicity - aquatic invertebrates** LC<sub>50</sub>, 24 hours: >10000 mg/l, Daphnia magna

### 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** : 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 HP5 STOT / Aspiration toxicity 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



**ARBO CLEANER No. 16**

**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

**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

**ICAO packing group** II

**ADN 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** Not applicable.

**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**

## ARBO CLEANER No. 16

**National regulations** The Chemicals (Health and Safety) and Genetically Modified Organisms (Contained Use) (Amendment etc.) (EU Exit) Regulations 2019 (as amended).  
The Control of Substances Hazardous to Health Regulations 2002 (SI 2002 No. 2677) (as amended).  
The REACH etc. (Amendment etc.) (EU Exit) Regulations 2020 (SI 2020 No. 1577) (as amended).  
The Carriage of Dangerous Goods and Use of Transportable Pressure Equipment Regulations 2009 (SI 2009 No. 1348) (as amended) ["CDG 2009"].  
Health and Safety at Work etc. Act 1974 (as amended).

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

**Guidance** Workplace Exposure Limits EH40.

**Restrictions (SI 2020 No. 1577 Annex XVII)** No relevant restrictions.

**Seveso Directive - Control of major accident hazards** P5c Lower-tier 5000 tonnes Upper-tier 50000 tonnes.

### 15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

## SECTION 16: Other information

**Abbreviations and acronyms used in the safety data sheet**

ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways.  
ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.  
ATE: Acute Toxicity Estimate.  
BCF: Bioconcentration Factor.  
CAS: Chemical Abstracts Service.  
DNEL: Derived No Effect Level.  
EC<sub>50</sub>: 50% of maximal Effective Concentration.  
IARC: International Agency for Research on Cancer.  
IATA: International Air Transport Association.  
IBC: International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk (International Bulk Chemical Code).  
ICAO: Technical Instructions for the Safe Transport of Dangerous Goods by Air.  
IMDG: International Maritime Dangerous Goods.  
Kow: Octanol-water partition coefficient.  
LC50: Lethal Concentration to 50 % of a test population.  
LD50: Lethal Dose to 50% of a test population (Median Lethal Dose).  
MARPOL 73/78: International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978.  
PBT: Persistent, Bioaccumulative and Toxic substance.  
PNEC: Predicted No Effect Concentration.  
REACH: The REACH etc. (Amendment etc.) (EU Exit) Regulations 2020 No. 1577.  
RID: European Agreement concerning the International Carriage of Dangerous Goods by Rail.  
SVHC: Substances of Very High Concern.  
vPvB: Very Persistent and Very Bioaccumulative.

**Classification abbreviations and acronyms**

Flam. Liq. = Flammable liquid  
Eye Irrit. = Eye irritation  
STOT SE = Specific target organ toxicity-single exposure

**ARBO CLEANER No. 16**

<b>Key literature references and sources for data</b>	SDS from supplier. Source: European Chemicals Agency, <a href="http://echa.europa.eu/">http://echa.europa.eu/</a>
<b>Classification procedures according to SI 2019 No. 720</b>	Flam. Liq. 2 - H225: On basis of test data. Eye Irrit. 2 - H319, STOT SE 3 - H336: Calculation method.
<b>Revision comments</b>	Revised sections: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 15, 16.
<b>Revision date</b>	09/09/2022
<b>Revision</b>	2
<b>Supersedes date</b>	05/05/2017
<b>SDS number</b>	10019
<b>SDS status</b>	Approved.
<b>Hazard statements in full</b>	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.

**EXPOSURE SCENARIOS - ARBO CLEANER No. 16**

<b>Section 1</b>	<b>Exposure Scenario: Worker</b>
Title	<b>Uses in Cleaning Agents, Professional</b>
Sector of Use	SU22
Process Category	PROC2, PROC3, PROC4, PROC8a, PROC8b, PROC10, PROC11, PROC13
Product Category	n/a
Article Category	n/a
Environmental release Category	ERC8A, ERC8D
Specific environmental release category	n/a
Processes, tasks, activities covered	Covers the professional use as a component of cleaning products including pouring/unloading from drums or containers; and exposures during mixing/diluting in the preparatory phase and cleaning activities (including spraying, brushing, dipping, wiping automated and by hand).
<b>Section 2</b>	<b>Operational conditions and risk management measures</b>
<b>Product characteristics</b>	

Physical form of product	Liquid, Vapour pressure 0.5 -10 kPa
Volatility	Vapour pressure 5 - 100 hPa at 20 Deg C
Concentration of substance in product	Up to 100%
Other product characteristics	n/a
<b>Section 2.1</b>	<b>Control of worker exposure</b>
<b>Operational conditions</b>	
Frequency and duration of use	Covers daily exposures up to 8 hours (unless stated differently)
Human factors not influenced by risk management	n/a
Other Operational Conditions affecting worker exposure	Assumes use at not more than 20 deg above ambient temperature Assumes a good basic standard of occupational hygiene is implemented
<b>Risk Management Measures</b>	
<b>Contributing Scenarios</b>	<b>Risk Management Measures</b>
Filling / preparation of equipment from drums or containers.	No specific measures identified
Automated process with (semi) closed systems. Use in contained systems	No specific measures identified
Automated process with (semi) closed systems. Drum/batch transfers. Use in contained systems	No specific measures identified
Semi Automated process. (e.g.: Semi automatic application of floor care and maintenance	No specific measures identified
Filling / preparation of equipment from drums or containers.	No specific measures identified
Manual. Surfaces. Cleaning. Dipping, immersion and pouring	No specific measures identified
Cleaning with low-pressure washers. Rolling, Brushing. no spraying	No specific measures identified
Cleaning with high pressure washers. Spraying. Indoor	Provide a good standard of general ventilation. Natural ventilation is from windows and doors etc. Controlled ventilation means air is supplied or removed by a powered fan.
Cleaning with high pressure washers. Spraying. Outdoor	Limit the substance content in the product to 5 %. Ensure operation is undertaken outdoors
Manual. Surfaces. Cleaning. Spraying	No specific measures identified
Ad hoc manual application via trigger sprays, dipping, etc. Rolling, Brushing	No specific measures identified
Application of cleaning products in closed systems. Outdoor	No specific measures identified
Cleaning of medical devices	No specific measures identified

**EXPOSURE SCENARIOS - ARBO CLEANER No. 16**

<b>Section 2.2</b>	<b>Control of environmental exposure</b>
<b>Operational conditions</b>	
Contributing scenario	<b>Uses in Cleaning Agents</b>
Operational Conditions	No exposure assessment presented for the environment.

<b>Section 3</b>	<b>Exposure estimation</b>
3.1 Health	Predicted exposures are not expected to exceed the applicable exposure limits (given in section 8 of the SDS) when the operational conditions/risk management measures given in section 2 are implemented.

<b>Section 4</b>	<b>Guidance to check compliance with the Exposure Scenario</b>
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4.1 Health	The ECETOC TRA tool has been used to estimate workplace exposures unless otherwise indicated. Where other Risk Management Measures/Operational Conditions are adopted, then users should ensure that risks are managed to at least equivalent levels
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**EXPOSURE SCENARIOS - ARBO CLEANER No. 16**

<b>Section 1</b>	<b>Exposure Scenario: Worker</b>	
Title	<b>Uses in Cleaning Agents, Industrial</b>	
Sector of Use	SU3	
Process Category	PROC2, PROC3, PROC4, PROC7, PROC8a, PROC8b, PROC10, PROC13	
Product Category	n/a	
Article Category	n/a	
Environmental release Category	ERC4	
Specific environmental release category	n/a	
Processes, tasks, activities covered	Covers the industrial use as a component of cleaning products including transfer from storage, pouring/unloading from drums or containers. Exposures during mixing/diluting in the preparatory phase and cleaning activities (including spraying, brushing, dipping, wiping, automated and by hand), related equipment cleaning and maintenance.	
<b>Section 2</b>	<b>Operational conditions and risk management measures</b>	
<b>Product characteristics</b>		
Physical form of product	Liquid, Vapour pressure 0.5 -10 kPa	
Volatility	Vapour pressure 5 - 100 hPa at 20 Deg C	
Concentration of substance in product	Up to 100%	
Other product characteristics	n/a	
<b>Section 2.1</b>	<b>Control of worker exposure</b>	
<b>Operational conditions</b>		
Frequency and duration of use	Covers daily exposures up to 8 hours (unless stated differently)	
Human factors not influenced by risk management	n/a	
Other Operational Conditions affecting worker exposure	Assumes use at not more than 20 deg above ambient temperature Assumes a good basic standard of occupational hygiene is implemented	
<b>Risk Management Measures</b>		
<b>Contributing Scenarios</b>	<b>Risk Management Measures</b>	
Bulk transfers	Clear transfer lines prior to de-coupling	
Automated process with (semi) closed systems. Use in contained systems	No specific measures identified	



**EXPOSURE SCENARIOS - ARBO CLEANER No. 16**

Automated process with (semi) closed systems. Drum/batch transfers. Use in contained systems	No specific measures identified
Application of cleaning products in closed systems	No specific measures identified
Filling / preparation of equipment from drums or containers.	Clear transfer lines prior to de-coupling
Use in contained batch processes	No specific measures identified
Degreasing small objects in cleaning station	No specific measures identified
Cleaning with low-pressure washers	No specific measures identified
Cleaning with high pressure washers	Provide a good standard of general or controlled ventilation (5 to 10 air changes per hour)
Manual. Surfaces. Cleaning. no spraying	No specific measures identified

<b>Section 2.2</b>	<b>Control of environmental exposure</b>
<b>Operational conditions</b>	
Contributing scenario	<b>Uses in Cleaning Agents</b>
Operational Conditions	No exposure assessment presented for the environment.

<b>Section 3</b>	<b>Exposure estimation</b>
3.1 Health	Predicted exposures are not expected to exceed the applicable exposure limits (given in section 8 of the SDS) when the operational conditions/risk management measures given in section 2 are implemented.

<b>Section 4</b>	<b>Guidance to check compliance with the Exposure Scenario</b>
4.1 Health	The ECETOC TRA tool has been used to estimate workplace exposures unless otherwise indicated. Where other Risk Management Measures/Operational Conditions are adopted, then users should ensure that risks are managed to at least equivalent levels