



SAFETY DATA SHEET

WINDOW CLEAN

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

1.1. Product identifier

Product name WINDOW CLEAN
Product number 000450
Internal identification C401

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

Identified uses Window glass cleaner.

1.3. Details of the supplier of the safety data sheet

Supplier ARROW SOLUTIONS
RAWDON ROAD
MOIRA
SWADLINCOTE
DERBYSHIRE
DE12 6DA
TEL: +44 (0)1283 221044
FAX: +44 (0)1283 225731
sales@arrowchem.com

1.4. Emergency telephone number

Emergency telephone +44 (0) 777 8505 330

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification

Physical hazards

Not Classified

Health hazards

Elicitation (Skin Sens.)

Environmental hazards

Not Classified

Classification (67/548/EEC or 1999/45/EC)

2.2. Label elements

Hazard statements

EUH208 Contains METHYL-2H or METHYL-4 (3:1) Mixture of EC NO 220-239-6. May produce an allergic reaction.

Precautionary statements

P501 Dispose of contents/container in accordance with national regulations.

Supplemental label information

EUH210 Safety data sheet available on request.

Detergent labelling

5 - < 15% aliphatic hydrocarbons, < 5% perfumes, Contains METHYL-2H or METHYL-4 (3:1) Mixture of EC NO 220-239-6

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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

2-BUTOXYETHANOL	5-10%
CAS number: 111-76-2 EC number: 203-905-0 REACH registration number: 01-2119475108-36	
Classification	Classification (67/548/EEC or 1999/45/EC)
Acute Tox. 4 - H302	Xn;R20/21/22 Xi;R36/38
Acute Tox. 4 - H312	
Acute Tox. 4 - H332	
Skin Irrit. 2 - H315	
Eye Irrit. 2 - H319	

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

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation

Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing.

Ingestion

Rinse mouth thoroughly with water. Do not induce vomiting. Get medical attention if any discomfort continues.

Skin contact

Rinse immediately with plenty of water.

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

Coughing, chest tightness, feeling of chest pressure.

Ingestion

May cause discomfort if swallowed.

Skin contact

Prolonged contact may cause redness, irritation and dry skin.

Eye contact

May cause discomfort.

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

Use fire-extinguishing media suitable for the surrounding fire.

5.2. Special hazards arising from the substance or mixture

Hazardous combustion products

Thermal decomposition or combustion products may include the following substances: Carbon monoxide (CO). Carbon dioxide (CO₂). Nitrous gases (NO_x). Sulphurous gases (SO_x).

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5.3. Advice for firefighters

Protective actions during firefighting

No specific firefighting precautions known.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions

Avoid inhalation of vapours and contact with skin and eyes. Do not touch or walk into spilled material. Wear protective gloves, eye and face protection. Provide adequate ventilation. Wash thoroughly after dealing with a 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. Absorb spillage with inert, damp, non-combustible material. Flush contaminated area with plenty of water. Wash thoroughly after dealing with a spillage.

6.4. Reference to other sections

Reference to other sections

For personal protection, see Section 8.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Usage precautions

Wear protective gloves. Avoid inhalation of vapours/spray and contact with skin and eyes. Provide adequate ventilation. Wash hands thoroughly after handling.

7.2. Conditions for safe storage, including any incompatibilities

Storage precautions

Store at temperatures between 4°C and 40°C.

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.

SECTION 8: Exposure Controls/personal protection

8.1. Control parameters

Occupational exposure limits

2-BUTOXYETHANOL

Long-term exposure limit (8-hour TWA): WEL 25 ppm 123 mg/m³

Short-term exposure limit (15-minute): WEL 50 ppm 246 mg/m³

Sk

WEL = Workplace Exposure Limit

Sk = Can be absorbed through the skin.

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

DNEL

Industry - Dermal; Short term systemic effects: 89 mg/kg/day
Industry - Inhalation; Short term systemic effects: 663 mg/m³
Industry - Dermal; Long term systemic effects: 75 mg/kg/day
Industry - Inhalation; Long term systemic effects: 98 mg/m³
Consumer - Dermal; Short term systemic effects: 44.5 mg/kg
Consumer - Inhalation; Short term systemic effects: 426 mg/m³
Consumer - Oral; Short term systemic effects: 13.4 mg/m³
Consumer - Dermal; Long term systemic effects: 38 mg/kg
Consumer - Oral; Long term systemic effects: 3.2 mg/kg
Consumer - Inhalation; Long term systemic effects: 49 mg/kg
Consumer - Inhalation; local effects: 123 mg/kg
Industry - Inhalation; local effects: 246 mg/m³

PNEC

- Fresh water; 8.8 mg/l
- Marine water; 0.88 mg/l
- Sediment (Freshwater); 8.14 mg/kg
- Soil; 2.8 mg/kg
- STP; 463 mg/l

8.2. Exposure controls

Protective equipment



Appropriate engineering controls

Provide adequate ventilation.

Eye/face protection

Eyewear complying with an approved standard should be worn if a risk assessment indicates eye contact is possible. The following protection should be worn: Tight-fitting safety glasses.

Hand protection

Chemical-resistant, impervious gloves complying with an approved standard should be worn if a risk assessment indicates skin contact is possible. Wear protective gloves made of the following material: Rubber (natural, latex). Neoprene. Polyvinyl chloride (PVC).

Hygiene measures

Remove contaminated clothing and wash the skin thoroughly with soap and water after work.

SECTION 9: Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

Appearance

Liquid. Clear liquid.

Colour

Blue.

Odour

Pleasant, agreeable.

pH

pH (concentrated solution): 7.0

Relative density

1.00 @ 20°C

Solubility(ies)

Completely soluble in water.

9.2. Other information

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Other information

Not determined.

SECTION 10: Stability and reactivity

10.1. 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

Not applicable.

10.4. 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

Thermal decomposition or combustion products may include the following substances: Carbon monoxide (CO). Carbon dioxide (CO₂). Nitrous gases (NO_x). Sulphurous gases (SO_x).

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity - oral

ATE oral (mg/kg)

23,187.25099602

Acute toxicity - dermal

ATE dermal (mg/kg)

14077.0252324

Acute toxicity - inhalation

ATE inhalation (vapours mg/l)

146.08233732

Inhalation

Coughing, chest tightness, feeling of chest pressure.

Ingestion

May cause discomfort if swallowed.

Skin contact

Prolonged contact may cause dryness of the skin.

Eye contact

May cause discomfort.

WINDOW CLEAN**Toxicological information on ingredients.****2-BUTOXYETHANOL****Acute toxicity - oral****Acute toxicity oral (LD₅₀ mg/kg)**

1,746.0

Species

Rat

ATE oral (mg/kg)

1,746.0

Acute toxicity - dermal**Acute toxicity dermal (LD₅₀ mg/kg)**

1060.0

Species

Rabbit

ATE dermal (mg/kg)

1060.0

Acute toxicity - inhalation**ATE inhalation (vapours mg/l)**

11.0

METHYL-2H or METHYL-4 (3:1) Mixture of EC NO 220-239-6**Acute toxicity - oral****Acute toxicity oral (LD₅₀ mg/kg)**

53.0

Species

Rat

Estimated value.

ATE oral (mg/kg)

53.0

Acute toxicity - dermal**ATE dermal (mg/kg)**

300

Acute toxicity - inhalation**ATE inhalation (vapours mg/l)**

3.0

Skin sensitisation

Guinea pig maximization test (GPMT) - Guinea pig: Sensitising.

SECTION 12: Ecological Information

Ecotoxicity

Not regarded as dangerous for the environment.

12.1. Toxicity**Acute toxicity - fish**

Not determined.

WINDOW CLEAN

Ecological information on ingredients.

2-BUTOXYETHANOL

Acute toxicity - fish

LC₅₀, 96 hours: 820 - 1490 mg/l, Fish

Acute toxicity - aquatic invertebrates

EC₅₀, 48 hours: 835 - 1550 mg/l, Daphnia magna

Acute toxicity - aquatic plants

IC₅₀, 72 hours: 1840 mg/l, Algae

METHYL-2H or METHYL-4 (3:1) Mixture of EC NO 220-239-6

Acute aquatic toxicity

LE(C)₅₀

0.01 < L(E)C₅₀ ≤ 0.1

M factor (Acute)

10

Acute toxicity - fish

Estimated value. LC₅₀, 96 hours: 13 mg/l, Fish

Chronic aquatic toxicity

NOEC

0.001 < NOEC ≤ 0.01

Degradability

Non-rapidly degradable

M factor (Chronic)

10

12.2. Persistence and degradability

Persistence and degradability

The product is expected to be biodegradable.

Ecological information on ingredients.

2-BUTOXYETHANOL

Persistence and degradability

The product is readily biodegradable.

12.3. Bioaccumulative potential

The product is not bioaccumulating.

Ecological information on ingredients.

2-BUTOXYETHANOL

The product does not contain any substances expected to be bioaccumulating.

12.4. Mobility in soil

Mobility

The product is soluble in water.

12.5. Results of PBT and vPvB assessment

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

Ecological information on ingredients.

2-BUTOXYETHANOL

This substance is not classified as PBT or vPvB according to current EU criteria.

12.6. Other adverse effects

WINDOW CLEAN

Not determined.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

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

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)

Transport labels

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

Not applicable.

SECTION 15: Regulatory information

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

National regulations

Control of Substances Hazardous to Health Regulations 2002 (as amended).

EU legislation

Commission Regulation (EU) No 453/2010 of 20 May 2010. Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures (as amended).

Guidance

Workplace Exposure Limits EH40.

15.2. Chemical safety assessment

SECTION 16: Other information

Revision comments

NOTE: Lines within the margin indicate significant changes from the previous revision.

Revision date 11/06/2015

Revision 2.0

Supersedes date 21/12/2012

WINDOW CLEAN

Risk phrases in full

NC Not classified.

R20/21/22 Harmful by inhalation, in contact with skin and if swallowed.

R23/24/25 Toxic by inhalation, in contact with skin and if swallowed.

R34 Causes burns.

R36/38 Irritating to eyes and skin.

R43 May cause sensitisation by skin contact.

R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Hazard statements in full

EUH208 Contains METHYL-2H or METHYL-4 (3:1) Mixture of EC NO 220-239-6. May produce an allergic reaction.

H302 Harmful if swallowed.

H312 Harmful in contact with skin.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H332 Harmful if inhaled.

Disclaimer

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.