SAFETY DATA SHEET
Glass Clear
According to Regulation (EC) No 1907/2006, Annex II, as amended by Regulation (EU) No 453/2010

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

1.1. Product identifier

Product name Glass Clear

Product number 177-5

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

Identified uses Glass cleaner.

Uses advised against For professional use only. This product is not recommended for any industrial, professional or consumer use other than the Identified uses above.

1.3. Details of the supplier of the safety data sheet

Supplier

Autosmart International Ltd
Lynn Lane,
Shenstone, nr Lichfield
Staffordshire. WS14 0DH
England
www.autosmartinternational.com
Tel: +44 (0) 1543 481616 (09:00 - 17:00)
Fax: +44 (0) 1543 481549 (09:00 - 17:00)
info@autosmartinternational.com

Contact person Mr. Russell Butler

1.4. Emergency telephone number

Emergency telephone

Mob: +44 (0) 7808 971321 (24hrs)
Tel: +44 (0) 1543 481616 (09:00 - 17:00)
Fax: +44 (0) 1543 481549 (09:00 - 17:00)

If you urgently need medical help or advice but it's not a life-threatening situation, call 111 free from any phone to speak to an NHS adviser. The 24-hour NHS 111 service can give you healthcare advice or direct you to the local service that can help you best.

The NHS 111 service will also be available via the harmonised European number for medical advice 116 117

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification

Physical hazards Not Classified

Health hazards Eye Irrit. 2 - H319

Environmental hazards Not Classified

2.2. Label elements

Glass Clear

Pictogram

Signal word	Warning
Hazard statements	H319 Causes serious eye irritation.
Precautionary statements	P264 Wash contaminated skin thoroughly after handling. P280 Wear protective gloves. 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.
Detergent labelling	< 5% perfumes

2.3. Other hazards

Poses little or no immediate hazard.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

PROPAN-2-OL **10-15%**

CAS number: 67-63-0 EC number: 200-661-7 REACH registration number: 01-2119457558-25-xxxx

Substance with a Community workplace exposure limit.

Classification	Classification (67/548/EEC or 1999/45/EC)
Flam. Liq. 2 - H225 Eye Irrit. 2 - H319 STOT SE 3 - H336	F;R11 Xi;R36 R67

2-BUTOXYETHANOL **5-10%**

CAS number: 111-76-2 EC number: 203-905-0 REACH registration number: 01-2119475108-36-xxxx

Substance with a Community workplace exposure limit.

Classification	Classification (67/548/EEC or 1999/45/EC)
Acute Tox. 4 - H302 Acute Tox. 4 - H312 Acute Tox. 4 - H332 Skin Irrit. 2 - H315 Eye Irrit. 2 - H319	Xn;R20/21/22 Xi;R36/38

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	Get medical attention if any discomfort continues.
Ingestion	Rinse mouth thoroughly with water. Give plenty of water to drink. Get medical attention if any discomfort continues.

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Skin contact	Remove contaminated clothing. Rinse with water. Use suitable lotion to moisturise skin. Get medical attention if any discomfort continues.
Eye contact	Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 15 minutes. 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

General information	The severity of the symptoms described will vary dependent on the concentration and the length of exposure.
Inhalation	No specific symptoms known.
Ingestion	May cause discomfort if swallowed.
Skin contact	Prolonged skin contact may cause redness and irritation.
Eye contact	Prolonged contact may cause redness and/or tearing.

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

Notes for the doctor	No specific recommendations. If in doubt, get medical attention promptly.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	The product is not flammable. Use fire-extinguishing media suitable for the surrounding fire.

5.2. Special hazards arising from the substance or mixture

Specific hazards	Oxides of the following substances: Carbon. Nitrogen. No unusual fire or explosion hazards noted.
Hazardous combustion products	Oxides of carbon. Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours.

5.3. Advice for firefighters

Protective actions during firefighting	No specific firefighting precautions known.
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	For personal protection, see Section 8.

6.2. Environmental precautions

Environmental precautions	Do not discharge into drains or watercourses or onto the ground. To prevent release, place container with damaged side up. Spillages or uncontrolled discharges into watercourses must be reported immediately to the Environmental Agency or other appropriate regulatory body. Contain spillage with sand, earth or other suitable non-combustible material.

6.3. Methods and material for containment and cleaning up

Glass Clear

Methods for cleaning up Stop leak if possible without risk. Large Spillages: Absorb in vermiculite, dry sand or earth and place into containers. Flush contaminated area with plenty of water. Take care as floors and other surfaces may become slippery. Avoid the spillage or runoff entering drains, sewers or watercourses. Flush away spillage with plenty of water. Wash thoroughly after dealing with a spillage. Collect and place in suitable waste disposal containers and seal securely. Label the containers containing waste and contaminated materials and remove from the area as soon as possible.

6.4. Reference to other sections

Reference to other sections For personal protection, see Section 8. For waste disposal, see Section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Usage precautions Read and follow manufacturer's recommendations. Avoid spilling. Avoid contact with skin and eyes.

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 in closed original container at temperatures between 5°C and 30°C. Keep above the chemical's freezing point to avoid rupturing the container.

Storage class Chemical 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

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

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.

PROPAN-2-OL (CAS: 67-63-0)

DNEL

Industry - Inhalation; Long term systemic effects: 500 mg/m³
Consumer - Dermal; Long term systemic effects: 319 mg/kg/day
Consumer - Oral; Long term systemic effects: 26 mg/kg/day
Consumer - Inhalation; Long term systemic effects: 89 mg/m³
Industry - Dermal; Long term systemic effects: 888 mg/kg/day

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PNEC
- Fresh water; 140.9 mg/l
- Marine water; 140.9 mg/l
- Intermittent release; 140.9 mg/l
- Sediment (Freshwater); 552 mg/kg
- Sediment (Marinewater); 552 mg/kg
- STP; 2251 mg/l
- Soil; 28 mg/kg

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

Ingredient comments Due to the hazardous nature of ingredients, exposure should be minimal.

DNEL
Industry - Dermal; Short term : 89 mg/kg/day
Industry - Inhalation; Short term : 246 mg/m³
Industry - Dermal; Long term : 75 mg/kg/day
Industry - Inhalation; Long term : 98 mg/m³
Consumer - Dermal; Short term : 44.5 mg/kg/day
Consumer - Inhalation; Short term : 123 mg/m³
Consumer - Oral; Short term : 13.4 mg/kg/day
Consumer - Dermal; Long term : 38 mg/kg/day
Consumer - Inhalation; Long term : 49 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

Alcohols, C12-C14, ethoxylated, sulfates, sodium salts (CAS: 68891-38-3)

Ingredient comments No exposure limits known for ingredient(s).

DNEL Professional - Oral; : 2750 mg/kg/day

PNEC - Fresh water; 0.240 mg/l

8.2. Exposure controls

Protective equipment

Appropriate engineering controls No specific ventilation requirements.

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: Chemical splash goggles.

Hand protection Chemical-resistant, impervious gloves complying with an approved standard should be worn if a risk assessment indicates skin contact is possible. To protect hands from chemicals, gloves should comply with European Standard EN374. It is recommended that gloves are made of the following material: Rubber (natural, latex). Neoprene. Polyvinyl chloride (PVC). Polyvinyl chloride (PVC). It should be noted that liquid may penetrate the gloves. Frequent changes are recommended. 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. The breakthrough time for any glove material may be different for different glove manufacturers. Use thin cotton gloves inside the rubber gloves if allergy risk.

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Other skin and body protection	Wear appropriate clothing to prevent repeated or prolonged skin contact. Provide eyewash station.
Hygiene measures	Provide eyewash station. Do not smoke in work area. Wash hands at the end of each work shift and before eating, smoking and using the toilet. Wash promptly if skin becomes contaminated. Promptly remove any clothing that becomes contaminated. Use appropriate skin cream to prevent drying of skin. When using do not eat, drink or smoke.
Respiratory protection	No specific recommendations. Respiratory protection must be used if the airborne contamination exceeds the recommended occupational exposure limit.

SECTION 9: Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

Appearance	Liquid.
Colour	Green.
Odour	Pleasant, agreeable.
Odour threshold	Not available. Not available.
pH	pH (concentrated solution): ~ 7.7 pH (diluted solution): ~ 6.0 @ 1%
Melting point	~ 0°C
Initial boiling point and range	~ 100 @°C @ 760 mm Hg
Flash point	>99°C Does not flash. Not applicable.
Evaporation rate	Not available.
Upper/lower flammability or explosive limits	Not applicable.
Vapour pressure	Not applicable.
Vapour density	Not applicable.
Relative density	0.984 @ (20°C)°C
Solubility(ies)	Soluble in water.
Partition coefficient	Not available.
Auto-ignition temperature	Not applicable.
Decomposition Temperature	Not available.
Viscosity	~ 1 cSt @ 20°C
Oxidising properties	Does not meet the criteria for classification as oxidising.
Comments	Information declared as "Not available" or "Not applicable" is not considered to be relevant to the implementation of the proper control measures.

9.2. Other information

Volatile organic compound	This product contains a maximum VOC content of 153 g/litre.

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity	There are no known reactivity hazards associated with this product.

10.2. Chemical stability

Glass Clear

Stability No particular stability concerns. Stable at normal ambient temperatures and when used as recommended.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions Not relevant. Will not polymerise.

10.4. Conditions to avoid

Conditions to avoid Avoid excessive heat for prolonged periods of time. Avoid freezing.

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 Fire creates: Carbon monoxide (CO). Carbon dioxide (CO_2).

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Other health effects There is no evidence that the product can cause cancer.

Acute toxicity - dermal

ATE dermal (mg/kg) 19,642.86

Acute toxicity - inhalation

ATE inhalation (vapours mg/l) 196.43

Skin corrosion/irritation

Human skin model test Scientifically unjustified.

Extreme pH Moderate pH (> 2 and < 11.5).

General information This product has low toxicity. Only large quantities are likely to have adverse effects on human health.

Inhalation No specific health hazards known.

Ingestion May cause discomfort if swallowed.

Skin contact May cause defatting of the skin but is not an irritant.

Eye contact Vapour or spray in the eyes may cause irritation and smarting.

Acute and chronic health hazards Because of the product's quantity and composition, the health hazard is regarded as low. No specific long-term effects known. No specific acute or chronic health impact noted, but this chemical may still have adverse impact on human health, either in general or on certain individuals with pre-existing or latent health problems.

Route of entry Ingestion.

Medical symptoms No specific symptoms noted, but this chemical may still have adverse health impact, either in general or on certain individuals.

Toxicological information on ingredients.

PROPAN-2-OL

Glass Clear

Other health effects	There is no evidence that the product can cause cancer.

Acute toxicity - oral

Acute toxicity oral (LD_{50} mg/kg)	5,840.0
Species	Rat

Acute toxicity - dermal

Acute toxicity dermal (LD_{50} mg/kg)	16.4
Species	Rabbit

Respiratory sensitisation

Respiratory sensitisation	Not sensitising.

Skin sensitisation

Skin sensitisation	Not sensitising.

Inhalation	Drowsiness, dizziness, disorientation, vertigo.
Ingestion	No specific health hazards known.
Skin contact	No specific health hazards known.
Eye contact	Irritating to eyes.

2-BUTOXYETHANOL

Acute toxicity - oral

Acute toxicity oral (LD_{50} mg/kg)	1,300.0
Species	Rat
ATE oral (mg/kg)	1,300.0

Acute toxicity - dermal

Acute toxicity dermal (LD_{50} mg/kg)	2,270.0
Species	Rat
ATE dermal (mg/kg)	1,100.0

Acute toxicity - inhalation

ATE inhalation (vapours mg/l)	11.0

Skin sensitisation

Skin sensitisation	Guinea pig maximization test (GPMT) - Guinea pig: Not sensitising.

Germ cell mutagenicity

Genotoxicity - in vitro	Gene mutation:: Negative. This substance has no evidence of mutagenic properties.

Reproductive toxicity

Reproductive toxicity - fertility	Fertility: - NOAEL 720 mg/kg, , Mouse
Reproductive toxicity - development	Developmental toxicity: - NOAEL: 100 mg/kg, , Rat

SECTION 12: Ecological Information

Ecotoxicity Not regarded as dangerous for the environment. The product components are not classified as environmentally hazardous. However, large or frequent spills may have hazardous effects on the environment. The product is not expected to be hazardous to wastewater treatment processes. The product does not contain organically bound halogen. The product does not contain organic complexing agents with a DOC level of degradation of < 80% after 28 days.

Ecological information on ingredients.

PROPAN-2-OL

Ecotoxicity	The product is not expected to be hazardous to the environment.

2-BUTOXYETHANOL

Ecotoxicity	Not regarded as dangerous for the environment.

12.1. Toxicity

Acute toxicity - fish	Not determined.
Acute toxicity - aquatic invertebrates	Not determined.
Acute toxicity - aquatic plants	Not determined.
Acute toxicity - microorganisms	Not determined.
Acute toxicity - terrestrial	Not determined.

Ecological information on ingredients.

PROPAN-2-OL

Acute toxicity - fish	LC50, 96 hours, 96 hours: ~ 9640 mg/l, Pimephales promelas (Fat-head Minnow)
Acute toxicity - aquatic invertebrates	EC_{50}, >: > 1000 mg/l, Daphnia magna
Acute toxicity - aquatic plants	EC_{50}, 72 hours, 72 hours: > 1000 mg/l, Scenedesmus subspicatus
Acute toxicity - microorganisms	EC_{50}, >: > 1000 mg/l, Activated sludge

2-BUTOXYETHANOL

Acute toxicity - fish	LC50, 96 hours, 96 hours: > 100 mg/l, Lepomis macrochirus (Bluegill)

Acute toxicity - aquatic invertebrates	EC_{50}, 48 hours, 48 hours: 1550 mg/l, Daphnia magna
Acute toxicity - aquatic plants	EC_{50}, >: > 100 mg/l,
Acute toxicity - microorganisms	EC_{50}, >: > 1000 mg/l,
Chronic toxicity - fish early life stage	NOEC, 21 days, 21 days: > 100 mg/l,
Chronic toxicity - aquatic invertebrates	NOEC, 21 days, 21 days: 100 mg/l, Daphnia magna

12.2. Persistence and degradability

Persistence and degradability The surfactant(s) contained in this product complies(comply) with the biodegradability criteria as laid down in Regulation (EC) No. 648/2004 on detergents. Data to support this assertion are held at the disposal of the competent authorities of the Member States and will be made available to them at their direct request, or at the request of a detergent manufacturer. The product is biodegradable but it must not be discharged into drains without permission from the authorities.

Ecological information on ingredients.

PROPAN-2-OL

Persistence and degradability	The product is expected to be biodegradable.
Biodegradation	Degradation (%) - 95: 21 days
Biological oxygen demand	~ 1171 g O_2/g substance
Chemical oxygen demand	~ 2294 g O_2/g substance

2-BUTOXYETHANOL

Persistence and degradability	The product is biodegradable.
Biodegradation	water - Degradation (%) 90.4: 28 days

12.3. Bioaccumulative potential

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

Partition coefficient Not available.

Ecological information on ingredients.

PROPAN-2-OL

Bioaccumulative potential	The product is not bioaccumulating.
Partition coefficient	log Pow: 0.05

2-BUTOXYETHANOL

Bioaccumulative potential The product is not bioaccumulating.

Partition coefficient : 0.81

12.4. Mobility in soil

Mobility The product is soluble in water.

Ecological information on ingredients.

PROPAN-2-OL

Mobility The product is soluble in water.

Adsorption/desorption coefficient Soil - Koc: ~ 1.1 @ °C

Henry's law constant 0.00000338 atm m3/mol @ 25°C

2-BUTOXYETHANOL

Mobility The product contains volatile organic compounds (VOCs) which will evaporate easily from all surfaces.

Adsorption/desorption coefficient Soil - Koc: ~ 67 @ °C

Henry's law constant 0.000016 atm m3/mol @ °C

Surface tension 65 mN/m @ °C

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.

Ecological information on ingredients.

PROPAN-2-OL

Results of PBT and vPvB assessment This substance is not classified as PBT or vPvB according to current EU criteria.

2-BUTOXYETHANOL

Results of PBT and vPvB assessment This substance is not classified as PBT or vPvB according to current EU criteria.

12.6. Other adverse effects

Other adverse effects Not applicable.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

General information The packaging must be empty (drop-free when inverted).

Disposal methods Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority. Packaging: Reuse or recycle products wherever possible.

SECTION 14: Transport information

Glass Clear

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)

Not applicable.

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

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not applicable.

SECTION 15: Regulatory information

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

EU legislation Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) (as amended).
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).

Water hazard classification WGK 1

15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

SECTION 16: Other information

General information This product has been manufactured under ISO 9001 and ISO 14001 Quality and Environmental Management Systems. Only trained personnel should use this material.

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

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Glass Clear

Revision date	29/10/2014
Revision	8
SDS status	Approved.
Risk phrases in full	Not classified. R11 Highly flammable. R20/21/22 Harmful by inhalation, in contact with skin and if swallowed. R36 Irritating to eyes. R36/38 Irritating to eyes and skin. R67 Vapours may cause drowsiness and dizziness.
Hazard statements in full	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.